

# Evidence Review:

# The Socio-Economic Impact of Covid-19 on Children in Scotland



# Acknowledgements

Authors: Alistair Brown, Rhiannon Sims and Emma Congreve, The Fraser of Allander Institute, University of Strathclyde.

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# Evidence Review: The socio-economic impact of Covid-19 on children in Scotland

## Introduction

The focus of this evidence review is the socio-economic impact on children due to measures to curtail the spread of Coronavirus over the first six months of the period of restrictions, with a particular focus on the restrictions that were brought in towards the end of March 2020 known as the ‘lockdown’ period, lasting approximately three months. Many restrictions remain and are likely to continue for some time and our review considers many of these. Our cut-off for evidence considered is end-September 2020.

We have taken a broad approach to defining ‘socio-economic’ disadvantage, going beyond present and future income and looking at factors such as health, wellbeing and educational attainment. Whilst many of these may ultimately be linked closely to income, some may be neither dependent on income or be a causal factor for future income. In the parlance of the Scottish Government’s National Performance Framework, we are focusing on the extent to which the pandemic restrictions have denied children the ‘opportunity to flourish’. In this review, we use both the terms ‘socio-economic impact’ and ‘quality of life’ interchangeably.

The ‘lockdown’ that began on the 23<sup>rd</sup> March 2020 led to the closure of non-essential workplaces and services (including schools) with all people asked to stay at home unless they were buying essential food, doing essential work, or exercising (initially just once a day).

This clearly will have had an impact on the quality of life of most people in Scotland. Many of the issues we have looked at impact on the whole population. Where the impact is largely related to adults, this impact can be transferred to children if those adults affected are parents or guardians. For example, many of the working age adults who are affected by changes in the job market are parents, meaning reductions in income and expenditure are likely to also affect the children in the family.

By children, we are referring mostly to dependent children – i.e. all those under 16 and those under 18 who are still living with their parents and in full-time education. This is the definition used in social security systems to determine whether there are eligible children living in a household. It means, therefore, that we are not looking at issues such as disruption to the Higher Education sector. We do make some exceptions to this – for example there is a section in this evidence review looking at career prospects and this may apply to some young people under the age of 18 who are not in full-time education as well as the age cohort below them. We also note that care leavers are a group who are more likely to live away from care settings once they reach 16, and we have some specific references to challenges faced by this group.

This review aims to ‘set the scene’ in order to help others understand the impact of the lockdown on children and where this may have consequences for quality of life. We have reviewed both academic and ‘grey’ literature, for example from think tanks and government. As this is a developing situation,



much more literature will become available over time. This review is meant as a snapshot, as of end September 2020, of the evidence available.

This review has helped to inform the other parts of this collaborative project: identifying data that may be useful for further research, as well as people in Scotland who are likely to be active in researching many of these issues.

We start by reviewing the evidence on particular aspects of the lockdown, and the potential for this to have adverse (and occasionally positive) impacts on children's quality of life. Secondly, we review recent literature to see if any studies have been produced which provides evidence on the impact of Covid-19.

We have principally grouped the review into three themes.

These are:

- Restrictions on non-essential jobs and services
- Closure of education and childcare facilities
- Home isolation

Whilst we have focussed our review on immediate impacts, many of the adverse socio-economic impacts may take years to manifest, for example the impact of disrupted education may not impact on quality of life until the young person reaches the labour market. This will be an important area of research for many years to come.

This does not mean that looking at immediate impacts is premature. Understanding the data that is currently available and emerging on Covid-19 provides crucial insights that can both inform research on longer term impacts as well as inform mitigation responses now.

The one area that we explicitly haven't included in this review is the direct health impacts of Covid-19 on children who are infected with the virus, although we do consider the impact on children if a family member had a severe coronavirus related illness or bereavement. This indirect impact of Covid-19 infections is the fourth theme of the review.

Figure 1 brings together the themes of this review with the subheadings that form the basis of the structure of the review. Figure 1 takes inspiration from a diagram produced by Douglas et al (2020) which looks at indirectly attributable morbidity and mortality of Covid-19 as a result of the pandemic.

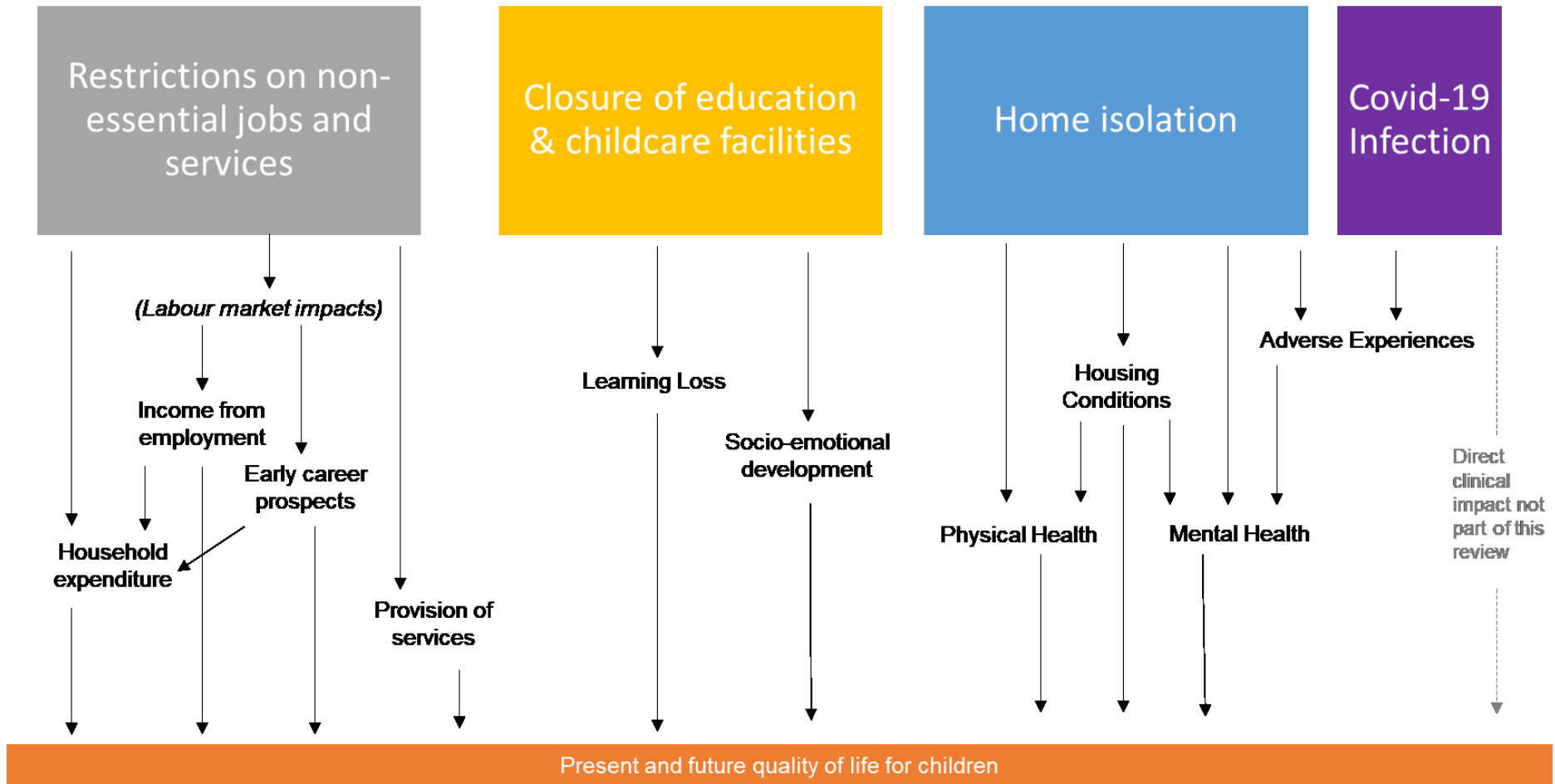


Figure 1: Identified socio-economic impacts of Covid-19 covered in this evidence review



## Summary

Here we summarise the key factors that we have considered in the evidence review to provide an overview of the situation. The evidence we have gathered which ascertains the scale of these impacts is subsequently explored in section 3 of this report.

### **Restrictions on Non-Essential Jobs and Services:**

- **Income from Employment and Social Security**

The direct impact of the shutdown has been the closure of many workplaces. For jobs that relied on face to face social interaction, many could not continue. Even for jobs that can be done from home, the slowdown in economic activity brought on by the lockdown will have translated to lower output across many sectors, with the expectation that redundancies will continue to rise as firms adjust to the new economic environment with lower demand for products and services.

Loss of employment is a key route into poverty, and child poverty is known to have a wide range of harmful effects including on short-term wellbeing and long term educational attainment and long-term health. The Coronavirus recession is likely to be one of, if not the, most severe on record, with a long slow recovery expected. The number of jobs expected to be lost is high.

Some groups are likely to be particularly affected including those who were on precarious contracts prior to the pandemic, those ineligible for support due to employment status and parents (particularly mothers) who may have struggled to care for children whilst continuing to work through the lockdown.

There have been efforts to mitigate the loss of employment and to prevent catastrophic impacts on household income. The first set of efforts are via the Coronavirus Job Retention Scheme (CRJS) for employees and the Self Employment Income Support Scheme (SEISS) for the self-employed. Both have sought to replace lost income from employment due to the coronavirus pandemic.

The second channel for mitigation has been via the social security system where various elements of support have been extended or modified to provide additional financial support. Whilst these will have definitely helped, they will not have prevented big falls in income for some households.

Some evidence is beginning to come through official data sources, but it will be some time before the full picture is known across the population.

- **Career Prospects**

Whilst relevant for all adults who may have lost employment, young people who start their career during a recession are on average known to suffer long lasting career impairment. Whilst periods of unemployment or underemployment are problematic for people of any ages, unemployment in early stages of careers can be particularly difficult to overcome due to the fact that this is usually a period



where key experience of the workplace is acquired and training in new skills is concentrated. It can be difficult to make up this time, particularly as new cohorts of career entrants come up behind and are competing for the same jobs.

This may be particularly acute during this recession due to the fact that many sectors where younger people predominantly start their careers, such as hospitality and leisure, have been particularly affected by the pandemic related restrictions. Long periods on furlough may also be problematic for future career development due to the loss of experience acquired on the job.

- **Household Expenditure**

Disruption to employment, if not mitigated by government schemes, will feed through to reductions in household income. In some cases, households will be able to mitigate the loss through use of savings, or debt (both these have implications for long term living standards). Of particular concern in the short term is where mitigation is not possible, and families were already on relatively low income. This implies that they will be reducing spending on essentials and be more likely to be experiencing material deprivation.

There is a wealth of literature that shows how material deprivation can have long lasting impacts on children's development, including on their health and educational attainment. Reduced essential expenditure can have other knock-on effects in the shorter term, for example on risk of eviction for households that have accumulated rent or mortgage arrears, risk of creditor action in response to rising debt, inability to save impacting on the financial security of households, and the stress of financial worries leading to other impacts such as poor mental health and disrupted family life.

Evidence suggests that this has indeed become the case with food bank activity increasing markedly and there is some evidence that families with children are more likely to be struggling compared to other types of households.

- **Provision of Services**

Some groups of children have faced specific challenges and have ongoing support needs that may have been reduced due to the lockdown. Groups such as disabled children, those with additional support needs, young carers, care experienced young people and those in contact with youth justice services have faced particular challenges.

Disruption of services is well documented, and there is some evidence on the impact this is having on children's emotional wellbeing and mental health which has been collated using surveys of particular groups of people. Longer term impacts are likely. Public services are a key way of trying to remove barriers faced by children due to circumstances outside their control. These barriers, if not removed, can lead to increased marginalisation, adversely affecting outcomes for the rest of children's lives.



## Closure of Education and Childcare Facilities:

- **Learning Loss**

The closure of schools and childcare settings for most children in Scotland lasted for approximately five months. Provision of home learning resources and support from teachers is likely to have varied significantly, as teachers and schools were largely unprepared for the sudden closure. Further, parental support for home learning is likely to have varied significantly.

The loss of skills and knowledge that would otherwise have been acquired could have long-term impacts on educational attainment and potential future income unless recouped. Learning loss is found over periods such as the summer school holidays, but is not universal, and varies by age, subject and socioeconomic background.

Evidence from the UK suggests that learning time was half what it would have been had the children been at school. Although schools have now returned in Scotland, there is likely to remain disruption for the foreseeable future, for example if children need to self-isolate. It will be some time before we know the extent to which this has affected learning.

The intersection of learning loss with socio-economic background is likely to lead to a widening in the poverty related attainment gap. Children in poorer households are less likely to have quiet and comfortable places to study and access to resources, especially those that rely on digital access.

- **Socio-emotional Development**

As well as the learning of academic related skills and knowledge, schools and childcare settings are also instrumental in the development of so called 'softer' skills such as social skills, discipline and self-motivation. Development of these skills are known to have long-term impacts on educational attainment, employment and health outcomes.

The closure of schools removed the main environment where these skills are required, and meant the home environment became the key determinant of their development over the five month period children were at home. Whether or not parents had time to spend with children, the type of environment at home, and digital access could all be factors. Again, we know these issues have a more acute effect on children who are already disadvantaged in other respects, such as those growing up in poverty.





## Home Isolation:

- **Physical Health**

The likelihood is that on average, the period of lockdown will have led to an increase in sedentary behaviours due to the additional time spent in the home and the reduction in available leisure activities. There are also concerns for low income families that the loss of free school meals provided at school may have led to poorer diets, despite efforts to provide alternative provision.

Poor health behaviours that start in childhood can have a range of adverse impacts on future health and wellbeing, with obesity and associated chronic illnesses being a particular risk. There is also evidence that healthier children have enhanced cognitive abilities.

Although on the whole studies have found that lockdown has had a negative impact on physical health, there are some studies which find both positive consumption and activity changes. Studies have suggested there may be urban/rural differences in behaviour as well as variation depending on size and income of household.

- **Mental Health**

There are several aspects of the pandemic that may have had serious impacts on mental health of children. This is partly due to the adverse experiences that the pandemic may have triggered, and the existence of the virus is enough to generate fear and anxiety. Isolation, time spent away from friends, loss of leisure activities, the change to routines and uncertainty over the future are all likely to have had an impact on the mental health of some children.

Poor mental health is detrimental to children's quality of life in and of itself. It can also affect length of life, quality of relationships, social participation and education, future job impacts and hence income. The stressors associated with low income can also contribute to poor mental health, and we know increased pressure on household finances is a key feature of this pandemic.

A range of studies have pointed to an increase in issues around children's mental health due to the lockdown. As with physical health, there are also some positive findings, for example due to more time being spent with parents and relief from the absence of stressors such as bullying at school.

- **Housing Conditions**

The quality of housing is an additional factor that impacts on children, including on their physical and mental health. Evidence tells us that children growing up in poor quality housing have a higher risk of severe ill-health and disability, including increased risk of meningitis, asthma, and slow growth, as well as lower educational attainment. Some of this is related to the fact that these children are likely to be living in low income households, with some aspects directly related to the condition of the home.



Children in homeless households are particularly exposed to poor health outcomes, or poor housing conditions, for example if they are temporarily housed in sub-optimal accommodation.

For those already living in crowded and unsafe conditions, the impact on health is likely to have been exacerbated by the lockdown restrictions. Evidence has also pointed to increased exposure to the virus due to poor quality housing, in particular where there is overcrowding.

### **Home isolation and Covid-19 Impacts:**

- **Adverse Experiences**

Adverse Childhood Experiences (ACEs) are recognised as a set of experiences that are thought to have long-term impacts on quality of life, including poorer health outcomes, as well as more immediate impacts on mental health. We have not limited our consideration just to those historically defined as ACEs, and have also looked at issues related to the pandemic that could well be seen as traumatic and have life-long impacts. There is evidence that the pandemic has increased the likelihood of these experiences occurring (e.g. loss of a parent to the virus), or the chances of these experiences being mitigated by timely intervention (e.g. domestic violence, child neglect).



## Review of Evidence and Available Literature

In this section, we look at the issues summarised in Section 2 in more detail. We seek to answer the following questions for each:

- i. Why is the issue related to Covid-19?
- ii. Why does this issue have a socio-economic impact on children?
- iii. What evidence is available on the socio-economic impact of Covid-19 so far?

As a recap, the issues we cover are:

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## 1 Household Income

### *i Why is this issue related to Covid-19?*

Lockdown entailed the closure of many businesses and places of work, and many sectors saw large declines in output. The scale of the fall in economic activity has been unprecedented, far larger than anything seen during the previous financial crisis and recession. This restriction in economic output has translated into lower demand for labour.

As well as the reduction in demand for labour, there are also workers who may have been forced to reduce hours or leave employment due to caring responsibilities, particularly in light of the closure of schools and childcare providers. Due to the higher number of hours of childcare that mothers are known to do relative to fathers, this is likely to have impacted women more than men and could lead to long-term scarring effects on parent's careers and future earnings.

The potential for significant loss of income due to earnings loss has been mitigated to a large extent for many people affected by the introduction of new government schemes. The UK Government's Coronavirus Job Retention Scheme (CJRS) and the Self-employment Income Support Scheme (SEISS) were introduced near the start of the lockdown. The CJRS covered up to 80% of furloughed employees' pay up to £2,500 a month for an initial three months, though this was subsequently modified and extended until the end of October 2020. Whilst some employers offered to top up furlough pay to 100%, around three quarters of furloughed workers saw some reduction in their income (Gardiner and Slaughter, 2020).

Not all affected workers have been able to access these schemes. For example, the Self-Employment Income Support Scheme is not available to those who are newly self-employed. Therefore, many households turned to Universal Credit. Amounts available through Universal Credit are designed to (financially) incentivise work and were therefore set relatively low.

Social security support was temporarily changed to provide more support at the start of the pandemic. On the whole, changes have led to either an increase in social security payments, or greater security of payments due to reductions in conditionality. However, the benefit cap and two-child limit remain in place, and no equivalent uplift has been made to legacy benefit rates including income related Jobseekers Allowance, Employment and Support Allowance and Income Support.

Even with the increase in support through the social security system, in many cases the social security system will not have been able to fully offset any loss of earnings, or provide as much support as would have been on offer if households were eligible for the new government support schemes.



However, for some previous recipients of Universal Credit, who have not seen an offsetting reduction in earnings, the increased generosity of the social security system will have increased income overall.

The Scottish Government also has devolved responsibility for some aspects of social security. In 2019, the Scottish Government announced the introduction of a new Scottish Child Payment, uplifting the weekly incomes of households with children in receipt of income-replacement benefits by £10 per week. The introduction of this benefit, having been brought forward for households with children under six by several months, was subsequently delayed due to the COVID-19 pandemic. Now, the first payments of the Scottish Child Payment are due to be made by the end of February 2021. There have additionally been delays to the transfer of certain devolved benefits (Scottish Government, 2020).

### *ii Why does this issue have a socio-economic impact on children?*

One of the factors in determining whether or not a household is below the poverty line is whether or not the adult(s) in the household are in employment or not: if a child lives in a household where neither parent is in paid work, they are much more likely to be in poverty. However, workless households are relatively uncommon and the majority of children in poverty are in working households. The number of hours worked and precarious types of work where hours are not guaranteed are also determinants of poverty (Treanor, 2020).

Estimates based on OBR forecasts suggest that the labour market impacts of the pandemic could mean that by the end of the year 2020, 200,000 more children in the UK could be below the pre-pandemic poverty line (Parkes and McNeil, 2020).

Related to the impact on living standards during the pandemic, international literature shows that job loss can impact on children's education outcomes (Dahl and Lochner, 2012) as well as their development and future earnings (Oreopoulos et al, 2008). Evidence on relative mobility in the UK suggests that on average, as much as 43% of a son's earnings can be predicted by looking at the earnings of his parents (Gregg et al, 2017). If parents experience reductions in earnings as a result of the pandemic, evidence from the last recession suggests it is likely to have an effect on earnings of children in the household when they enter the labour market (Mitchell, 2020).



### *iii What evidence is available on the socio-economic impact of Covid-19 so far?*

#### *Types of jobs most affected*

International evidence suggests there have been similar trends across countries with regards to the sectors most severely affected. Adams-Prassl et al (2020) find that the most important predictor of risk for occupations is the degree to which tasks can be done from home, a relationship which exists even when differences in occupation and industry are controlled for. Other analysis has noted the correlation between ability to work from home and higher earnings (Costa Dias et al, 2020).

IPPR Scotland analysis based on OBR forecasts estimates of 31,000 job losses in both the retail and wholesale and the accommodation and food services sectors in Scotland. These are sectors which have some of the lowest paying jobs, with accommodation and food services having 60% of Scottish workers on less than two thirds of the median income (Parkes, Stratham and Gunson, 2020).

Using survey data from 800 small to medium sized businesses in Scotland, the Federation of Small Businesses found that more businesses in Scotland had closed (53%) when surveyed in late March 2020 compared to those across the UK as a whole (41%), partly due to the higher density of SMEs in Scotland compared to the UK average (Federation of Small Businesses, 2020).

#### *Reduced incomes and reduced hours*

HMRC official data shows that, as of the end of August, 9.6 million jobs had been furloughed by 1.2 million employers in the UK, with broad consistency in the furlough rates across UK nations (HMRC, 2020). Data from the Self-Employment Income Support Scheme shows that 2.7 million claims had been made to tranche 1 (which closed on 13 July) and a further 296,850 claims to tranche 2, which closed on 17 August (HMRC, 2020).

There is some evidence on take-up of these schemes via data on reductions in hours worked. In the three months to the end of July, ONS data reported that total actual weekly hours worked in the UK decreased by 93.9 million (McIntyre and Roy, 2020). This will have been a mixture of those who have been furloughed (so recording zero hours worked) and those who have continued working but have seen their hours fall including the self-employed.

Analysis of the Understanding Society COVID-19 survey shows that by the end of April only 56% were working a positive number of hours compared to 80% in February. Over 43% of those who saw a decline in hours were furloughed under the CJRS. Those educated to less than degree level, those in lower income quintiles, and single parents, were all groups for



whom the reduction in hours was particularly acute between February and the end of April (Benzeval et al, 2020).

The number of people making new claims for Universal Credit increased dramatically. From 1 March to 23 June, the DWP received 3.4 million Universal Credit declarations (DWP, 2020b), and during the first two weeks of lockdown there were over 500,000 claims a week, nine times the usual level of claims made in a week prior to the pandemic.

Polling by Save the Children and the Joseph Rowntree Foundation reported that one in five parents surveyed in late May and early June on Universal Credit across the UK had not previously claimed an income-related benefit (Maddison, 2020). For families who previously had relatively high earnings, the income shock has been sudden and severe (CPAG and Church of England, 2020).

Analysis by the Joseph Rowntree Foundation in Scotland, which compared the mean reduction in income of those making a new Universal Credit claim to those on the original CJRS or claiming from the SEISS, found that whilst those being furloughed lost (up to) 20% of earnings, the average fall in household income for those making a new UC claim (while unemployed) was as much as 47% (McCormick and Hay, 2020).

### Redundancies, fewer vacancies and uncertainty about future employment prospects

It is difficult to predict the scale of redundancies while government schemes remain in place, but workers' expectations have not been optimistic. A UK-wide poll of workers in early May 2020 found that one-in-eight thought it likely they would lose their job in the following three months (Gardiner and Slaughter, 2020). The Labour Market Outlook survey of 2,000 employers reported that a third of organisations, and as much as 38% of private sector firms, expected to cut jobs in the third quarter of 2020, double the number who said they expected to when surveyed in the Spring (CIPD, 2020).

Various analyses of job posting websites have found that vacancies have reduced markedly, particularly in low paid sectors.

The Institute for Employment Studies in mid-May 2020 found that vacancies reduced the most for those earning between £15,000 and £24,999 (Williams et al. 2020) and the Institute for Fiscal Studies found that whilst the drop in vacancies by early May 2020 was similar across areas based on the Index of Multiple Deprivation, more affluent areas were seeing a faster recovery of vacancies, particularly in the health and social care sector (Costa Dias et al, 2020b).

Vacancies in Scotland reduced by 60% over lockdown to mid-May, more than in Wales, Northern Ireland and some regions of England, and were a fifth lower than at the same point in 2019 (SDS, 2020). A study looking at vacancy trends in the week ending 17<sup>th</sup> May 2020 looked at numbers of claimants of Universal Credit, compared with the number of vacancies. Based on this data Scotland had one of the highest unemployed claimant to vacancy ratios at



1:10, which is a 220% increase on the ratio at the same point the previous year (Williams et al. 2020).

### Impacts on particular groups of workers

Certain groups of workers have been more at risk of Covid-19 related disruption to their work.

**Precarious workers:** Analysis of the Understanding Society Covid-19 data shows that workers with no guaranteed minimum number of hours saw the largest reduction in hours worked, from 97% to 41% between February and the end of April 2020 (Benzeval et al., 2020). Resolution Foundation survey data from early May suggests a similar picture: almost a third (31%) of employees with variable hours and 28% of employees on zero hours contracts had lost their job or been furloughed, and a fifth (19%) of those on temporary contracts reported having lost their job (Gardiner and Slaughter, 2020). The impact on gig economy workers may also have gendered implications given that, in 2017, 75% of female gig economy workers earned less than the taxable threshold (Balaram, Warden and Wallace-Stephens, 2020).

**Self-employed workers ineligible for support:** HMRC data shows that, of the 1.6 million people that did not meet the SEISS criteria, a third were ineligible for support because their trading profits for the relevant tax years were £0 or they made a loss. (HMRC, 2020b). Compared to employees, the self-employed are concentrated at both the upper *and* lower ends of the income distribution, with 23% in households with equivalised incomes below £400 per week, compared to 15% of employees (Adam, Miller and Waters, 2020).

**Nationality and ethnicity:** IPPR analysis of Labour Force Survey data across the UK shows that a higher proportion of EU workers are self-employed or employed in food and accommodation services than UK workers, putting migrants at higher risk of losing work (Morris, 2020). Black, Asian and minority ethnic (BAME) individuals were 14 percentage points less likely to be furloughed and 13 percentage points more likely to be unemployed than non-BAME individuals, as of the end of April 2020 (Benzeval et al, 2020).

**Parents:** childcare restrictions and school closures impacted on parents' ability to continue working as normal, maintain employment or find new jobs when out of work. This is a theme that emerged from in-depth interviews with low income parents carried out over the summer in England, who reported the impact this was having on ability to pay for bills and manage financially (Howes et al. 2020).

Andrew et al. (2020) found a reduction of about half in the number of parents who were in work in February 2020 and still doing their job in May 2020. Even with the income protection, a third of parents reported that their monthly earnings had fallen.

**Mothers in opposite sex couples:** Closure of school and childcare settings have impacted disproportionately on the earnings of mothers compared to fathers. Based on a time-use survey of two-parent opposite-sex households undertaken during April and May, Andrew et





al. (2020) found that of those who were in paid work prior to the pandemic, mothers were 1.5 times more likely to have lost or quit their job than fathers, and also more likely to have been furloughed. The fact that women were disproportionately represented in sectors that were shut down or reduced trading is also likely to exacerbate the gendered nature of the long-term labour market impacts of the pandemic (Hupkau and Petrongolo, 2020).

**Single parents:** While the coronavirus crisis impacts many working parents, One Parent Families Scotland has reported particular challenges faced by single parents who say school and nursery closures disrupted the “delicate balancing act of being able to earn and raise their children” (OPFS, 2020).

Lone parents were more likely to work for sectors that have been shut down particularly those with low qualifications. In the UK, almost 40 per cent of working single mothers with the lowest level of qualifications were employed in shut down sectors prior to the crisis (Blundell et al, 2020).

Some families have not benefitted from the uplift in Universal Credit because the benefit cap and two child limit remain in place. In February 2020, just prior to the Covid-19 outbreak, 79,000 households had their benefits capped, of which 72 per cent were single-parent families (DWP, 2020). The number of households affected by the benefit cap is likely to double as a result of the pandemic, both due to the increase in the UC standard allowance tipping households over the threshold, and the influx of new claims (CPAG, 2020).



## 2 Early Career Prospects

### *i Why is this issue related to Covid-19?*

At the time of writing, the UK was in recession (ONS, 2020), and forecasts suggest it could take many years for GDP to reach pre-pandemic levels (OBR, 2020). It has been well established that young people who leave education during a recession can suffer negative labour market impacts, including periods of unemployment, lower pay and fewer opportunities to progress. The recession resulting from the Covid-19 lockdown is likely to be particularly hard on young people entering the labour market due to high unemployment projections and the particularly acute impact on sectors with high proportions of young workers (Joyce and Xu, 2020). The continuation of social distancing measures could also disrupt the activities young people are able to engage in to acquire skills and experience, such as volunteering and extra-curricular activities, potentially leading to gaps in experience compared to other cohorts when leaving education.

Each recession is different, and the Covid-19 recession has had very uneven impacts on sectors, meaning the impact on job mobility for higher and lower skilled workers may be different, potentially further exacerbating existing labour market inequalities.

### *ii Why does this issue have a socio-economic impact on children?*

Young people who leave school and enter the job market during a downturn can experience periods of unemployment or underemployment that have been found to have lasting effects on their careers and earnings prospects. Existing inequality in educational attainment means that children from lower income backgrounds are more likely to be entering the labour market rather than continuing on to higher education.

Findings for the US based on census data suggest that this scarring effect can persist for up to ten years, and that less advantaged and less educated workers experience worse outcomes (Schwandt and von Wachter, 2019; Speer, 2016). There is evidence to suggest that those from wealthier households recover more quickly by moving more frequently between progressively better paying jobs (Oreopoulos et al. 2012).

Evidence from the last recession provides a valuable and recent insight into the lasting effects of entering the job market during a downturn. Cockx (2016) compares evidence of youth earnings from several European countries following the 2008 global financial crash, and also finds the impact on earnings to be persistent, but that it varies depending on education of



labour market entrants and the rigidity/flexibility of the job market. For the UK, the 'crisis cohort' experienced a reduction in pay of around 6% compared to the pre-crisis cohort, and took seven years to recover (Clarke, 2019).

Evidence from the last recession also shows the impact on job mobility. Moving from job to job is an important way in which labour market entrants progress to higher paid jobs, and if recessions reduce job moves, as the last recession did (Haltiwanger et al. 2018), it can impact long term career progression as well as depress pay.

### *iii What evidence is available on the socio-economic impact of Covid-19 so far?*

Recent studies have focussed on the demographics of the workforce in the sectors worse affected (including age), and using economic modelling to estimate the future effects of unemployment forecasts on the careers of young people.

A recent survey of young people in Scotland found that more than a third (36%) were moderately or extremely concerned about their employment situation, slightly less said they were moderately or extremely concerned about their financial situation and as much as 61% said they were concerned about the impact of Covid-19 on their future (Scottish Youth Parliament, YouthLink Scotland and Young Scot, 2020)

Based on 2019 Labour Force Survey data, Joyce and Xu (2020) found that young people under 25 in the UK are two and a half times more likely to work in sectors that were shut down to prevent the spread of the virus. Sectors that were worst affected, such as food and hospitality, employed 30% of all those under 25 compared to one in eight for those over 25. The figures were higher for women at 36% of under 25s employed in the UK in these sectors. (Joyce and Xu, 2020).

A survey in mid-March 2020 showed that graduate recruitment in the UK had already altered dramatically with companies cancelling recruitment activities, some stopping recruitment altogether and others switching to online assessment centres and interviews (Hooley, 2020). In the longer term, 27% of those surveyed said that they planned to recruit fewer graduates. Survey data from graduate recruiters in fifteen countries, published in July 2020, shows they expect the volume of recruitments to continue to decline over the next year (Institute of Student Employers, 2020).

In a report published in May, Henehan (2020) applied unemployment projections from the Office for Budget Responsibility to a model based on previous Labour Force Survey data to estimate the effect of the current recession on average wages and employment prospects of young people leaving education this year in the UK. The estimates suggest the crisis could



impact the future employment rates of lower skilled young workers by more than a third compared to the scenario with no pandemic, and that average hourly pay could be 7% lower for all education leavers, and as much as 19% lower for those with lower-level qualifications (Henehan, 2020).

Using a similar methodology based on OBR forecasts of unemployment - and assuming that Scotland's youth unemployment will be 8.5% of the total youth unemployment across the UK -IPPR Scotland estimated the impacts on youth unemployment in Scotland for three different scenarios in an August 2020 report. The estimates for the worst-case scenario suggested 140,000 young people could be unemployed in Scotland, but even the central scenario suggests one in three (100,000) young people unemployed at its peak (Gunson, Stratham and Parkes, 2020). These estimates were based on policy and planned policy as it was known at the time.



### 3 Household Expenditure

#### *i Why is this issue relevant to Covid-19?*

When the UK went into lockdown on 23<sup>rd</sup> March 2020 a number of factors impacted on the ability of people to consume as normal. These factors include available income which is related to the issues covered in section 3.1, as well as limits due to closure of non-essential shops for at time.

In the weeks preceding lockdown, widespread stockpiling of certain goods and disruption to supply chains affected access to necessities in some areas (though this was short lived).

During lockdown, as families were forced to stay indoors, there are reasons to assume that some items of household expenditure would go up – for example, higher heating and food bills, especially for those who normally received free school meals.

In the weeks that followed lockdown, a number of policy changes were ushered in by the UK Government (which applied also to households in Scotland) to help families who may be struggling due to increased expenditure and measures were also brought in to manage existing debt. For a temporary period starting at the beginning of April 2020, direct deductions from benefits to repay third party debts and overpayments were suspended, although advance payments of Universal Credit remained repayable (DWP, 2020). Beyond the benefits system, regulators issued guidance to the financial services industry to offer customers a temporary payment freeze on loans and credit cards for up to three months and zero interest overdrafts (FCA, 2020) and to the energy industry, instructing providers to support any customers in financial distress through, for example, reducing debt repayments (DBEIS, 2020). To support with housing costs, Local Housing Allowance rates (the maximum amount that can be claimed for help with rent) were made more generous and set at the 30th percentile of rents in each broad rental market area for a year as of April 2020 (Shelter, 2020).

The Scottish Parliament introduced an evictions moratorium and pre-action requirements on private rented sector landlords wishing to evict on the grounds of rent arrears, both of which have been extended until 2021. This offers protection to tenants in the short term, but the impact of loss of income on rent arrears is likely to impact on tenancy sustainment over the coming months.

It is worth noting that many households have seen a reduction in expenditure on, for example, commuting costs, but little or no change to their incomes. The impacts of the virus on expenditure will have been heterogenous.

In addition, those on low incomes spend relatively more of their income on necessities such as rent, bills and food (Rahman, 2020), meaning that any reduction in income will eat into this



essential budget, whereas middle- and high-income households spend a much greater proportion on discretionary expenses such as restaurants and leisure (Crawford et al. 2020).

Inability to cover essential bills may have longer-term impacts, for example on the risk of eviction for households that have accumulated rent or mortgage arrears, risk of creditor action in response to rising debt, inability to save (or running down savings) impacting on the future financial security of households, and the stress of financial worries leading to other impacts such as poor mental health and disrupted family life.

The determining factor as to whether reduced income will lead to reduced expenditure – and impact negatively on living standards – is the ability of households to mitigate loss of earnings through use of savings, borrowing, social security benefits or transfers from friends and family.

### *ii Why does this issue have a socio-economic impact on children?*

Reduction in expenditure can have direct impacts on living standards. Where households are unable to maintain expenditure at pre-pandemic levels they may be at risk of material deprivation: lacking the ability to afford goods and engage in activities that are typical in the UK (Townsend, 1979). Material deprivation has serious and far-reaching consequences on the life chances of children, including impacting on: “participation in peer social and leisure activities, participation in family and cultural celebrations, in school life, ... in transitions to adolescence and adulthood, in access to post-school education and employment” (Treanor, 2020).

There is a growing body of literature which suggests that growing up in poverty can disadvantage children through both material deprivation and the “double disadvantage” caused by income inequality, in which the existence of the gap between children in poverty and their more affluent peers has its own adverse effects (Odgers, 2015, Crosnoe, 2009).

There is a wealth of evidence demonstrating the role that deprivation plays in causing poor health outcomes (Tøge and Bell, 2016) education outcomes, and behavioural problems (Schenck-Fontaine and Panico, 2019). For example, research in England has found that children’s subjective wellbeing declines as material deprivation increases, independent of household income status (Main and Bradshaw, 2012). In Sweden, Mood and Jonsson (2015) find that material deprivation has the most severe impact on social life for children, over and above metrics based on relative or absolute poverty.



### *iii What evidence is available on the socio-economic impact of Covid-19 so far?*

#### General impact on consumption

Official statistics on consumption, such as the Family Spending in the UK survey comes with a lag, and won't be available until at least 2021, but there is a small but growing academic literature which makes use of transaction data collected by financial technology companies. For example, Chronopoulos, Lukas and Wilson (2020) examine the change in household spending in the UK using high-frequency data, and found that discretionary spending fell during the lockdown period (and in the weeks leading up to it in March 2020 although there was a strong increase in grocery spending in the two weeks following the World Health Organisation announcement of the pandemic). O'Connell, de Paula and Smith (2020) found a large spike in spending for storable products in the days before lockdown.

Hacioglu, Känzig and Surico (2020) use UK transaction data from one of the UK's largest apps for managing personal finances, Money Dashboard. In a paper published in April 2020 they reported declines in services and non-durable goods (40% to 50%), but little change for durable goods. They found that consumption inequality had increased significantly, and that the percentage fall in consumption was much more pronounced among the bottom percentiles of the income distribution.

International literature includes Andersen, Hansen, Johannesen and Sheridan (2020) who used transaction level consumer data to explore the response of consumer spending in Denmark, and Chen, Qian and Wen (2020) who studied the response of households in China using daily transaction data.

It is worth noting that use of transactional data alone can mask the reasoning behind a reduction in spending. As has been discussed elsewhere, consumer sentiment remains low, with as much as 58% of Scottish consumers reporting in August that they would only visit a shop if absolutely necessary (Scottish Retail Consortium, 2020).

#### Ability to mitigate loss of income

Benzeval et al. (2020) analysed the mitigation strategies of UK households based on income, household type, age and other characteristics between the end of February and the end of April 2020. They found that more than a quarter of households had drawn on their savings, but this was more common amongst multiple adult households than single parents, who are more likely to borrow, and BAME individuals who are more than twice as likely to have resorted to borrowing than non-BAME individuals. Those in the bottom quintiles, young households and single parents relied more heavily on gifts and borrowing from friends and family. Finally, of the households who saw a reduction in income of above 5%, more than two



thirds reduced their expenditure, which the authors attributed to an inability to mitigate loss of income through any of the mechanisms discussed.

Not long after lockdown was announced, UK debt charities reported an unprecedented surge in advice need, with callers particularly concerned about meeting rent and council tax payments (StepChange, 2020).

In terms of the socioeconomic impact on children the most important areas of household expenditure mentioned in the literature are: food, housing and utilities.

### Food

Loopstra (2020) used survey data from early April 2020 and estimated that the number of food insecure adults to have quadrupled in Britain under the lockdown. Lack of food in shops was a major contributing factor, explaining up to 40% of this rise, and households with children were found to be particularly at risk, but income losses arising from the Covid-19 crisis also had an immediate impact on food insecurity.

Analysis using scanner data (where people scan all items that they bring into their home) found that there was a significant and widespread spike in inflation for groceries at the beginning of lockdown in the UK (Jaravel and O'Connell, 2020).

Statistics published by the Trussell Trust has also shown a major increase in the number of people provided with emergency food parcels in the UK, of which 43% were referred due to low income, more than double the proportion at the same period the previous year. The data from April 2020 shows a 95% increase in the number of families with children that received a parcel from a food bank from April 2019 (Trussell Trust, 2020).

In Scotland, various charities have reported an increase in advice need regarding food bank referrals. For example, in April Citizens Advice Scotland reported that food bank related advice made up more than 50% of all charitable support related advice (CAS, 2020). One Parent Families Scotland has published reports capturing the challenges faced by their clients including the cost of food, especially for those ordering online and needing to use more expensive supermarkets, or needing to shop locally meaning they are spending more (OPFS, 2020).

### Housing

Bringing Local Housing Allowance rates in line with the 30<sup>th</sup> percentile of local rents has been important in helping low income households to manage housing costs. However, this change will not be make up the shortfall for everyone. To give a sense of what the shortfall could look like between rents at the 30<sup>th</sup> percentile and rents at the median: a family living in a three-bedroom property in Stirling at the median rent, for example, will need to find an additional £140 a month on top of Housing Benefit to cover their rent (Judge and Pacitti, 2020).





Some literature has focused on the vulnerability of social rented tenants to keep up with housing costs (Judge and Pacitti, 2020), and early evidence from a HouseMark survey found that 16 per cent of the UK social landlords surveyed - 800,000 tenancies – were at risk of falling into arrears due to financial insecurity linked to the pandemic (Housemark, 2020). Others have focused on the vulnerability of private renters (Beswick et al. 2020). Just three weeks after the lockdown, results of an Opinium survey published in the Guardian suggested that a fifth of UK renters were needing to choose between paying for food and bills or paying rent (Gayle, 2020). Similar research by Shelter found that a fifth of private renters in the UK believed they were likely to lose their jobs within three months of the lockdown, leaving many worried about being able to pay rent (Shelter, 2020b).

### Fuel poverty

The latest fuel poverty statistics from the Scottish House Condition Survey 2018 report, published January 2020, show that 619,000 households or 25% of households are in fuel poverty, and 11% are in extreme fuel poverty (currently defined as requiring more than 20% of income to pay for domestic fuel) (Scottish Government, 2020).

Some early evidence suggests that loss of income associated with lockdown may be causing households to struggle with gas and electricity payments. Citizens Advice Scotland (2020b) has reported an increase in advice in relation to fuel debt which increased 11% between February and June 2020, and GB-level data from the Extra Help Unit shows a surge in demand during March and April which was largely driven by priority referrals for consumers who had self-disconnected from their prepayment gas and/or electricity supplies. Energy Action Scotland (2020) estimates that 30% of those who face unemployment in Scotland in May alone will add another 9,000 people to the 25% of Scottish households currently living in fuel poverty.

### Debt and access to credit

Not long after lockdown was announced, debt charities reported an unprecedented surge in advice need, with callers particularly concerned about meeting rent and council tax payments (Money Advice Trust, 2020). A public poll of more than 5,000 adults in Scotland by Stepchange debt charity found that 6% were in severe problem debt, and 4% were falling behind on essential household bills such as rent, mortgage, energy bills and Council Tax. Based on this, the charity estimates that 1.1 million adults in Scotland were experiencing some kind of financial distress prior to the pandemic (Morgan-Klein 2020).

Aside from falling behind on bills, some evidence suggests households may be struggling to access affordable credit. Advice agencies reported an increase in advice given on topics like payday loans in June, and saw a 50% increase in demand for dealing with debt on their public advice site (CAS, 2020b). Research by Carnegie UK Trust shows a 70% year-on-year reduction in lending by credit unions, not-for-profit companies and Community Development Finance Institutions, who provide important financial services to low income households. Not only does this suggest that people are not accessing affordable credit, but it also could have a



knock-on impact for that sector, reducing the availability of affordable credit in the longer term (Carnegie UK Trust and Community Finance Solutions, 2020).

### Impact on households with children

Evidence suggests that reduced consumption and inability to pay for household essentials is particularly pronounced for households with children, particularly single parents.

Benzeval et al. (2020) found that on average there had been an increase of two percentage points for households behind on bill payments in the UK by the end of April 2020. However, for single parents, this increase has been as much as five percentage points, and similarly for those on the lowest incomes, those with fewer educational qualifications and BAME individuals.

IPPR Scotland's analysis, published in May 2020, of the Standard Life Foundation's financial impact tracker survey data found that 49% of respondents with dependent children in Scotland reported that they were in 'serious financial difficulty' or 'struggling to make ends meet' compared to 30% of all households. Extrapolating from these findings, the authors suggest this amounts to 300,000 households in Scotland. Furthermore, they found that 20% of households with dependent children in Scotland (equivalent to 100,000 households) were in the most severe financial difficulty – likely to be struggling to pay for food or essential items – compared to 12% of all households in Scotland (Gunson and Stratham, 2020).

Child Poverty Action Group analysis in May 2020 of UK-wide ONS data and YouGov poll data found that 39% of parents reported having their household finances affected by lockdown, compared to 22% of non-parents and the YouGov data shows that almost a quarter of families (24%) were struggling to make ends meet compared to 15% of other households. CPAG suggested the reason families with children were worse hit was: 1) there was nothing family-focussed in the COVID-19 policy response; 2) Parents work differently from non-parents, needing to juggle care and non-care; 3) The lasting impact of austerity (CPAG, 2020).



## 4 Service Provision

### *i Why is this issue relevant to Covid-19?*

The general health and educational impacts of lockdown are covered in later sections of this evidence review. This section looks at groups of children who have faced specific challenges due to the lockdown.

Social distancing has impacted on public and third sector service delivery, particularly on the ability to have face-to-face contact, and redeployment of key workers into the Covid-19-response has in some cases affected provision of some essential services. This has led to experiences of isolation for the children and families who use these services.

Of particular concern is where reduction in services may have made it more difficult to diagnose and treat conditions, or identify when families need additional support. Given that many health, social care and social work services are now been delivered over the phone and online, this presents a barrier for families who face digital exclusion either due to lack of access or lack of digital skills.

For some children, the lockdown period may have reduced difficult external pressures and may have been beneficial for some.

### *ii Why does this issue have a socio-economic impact on children?*

It is well evidenced that certain characteristics or experiences at a young age increase the risk of having worse socio-economic outcomes in adulthood, compared to peers.

Structural discrimination based on characteristics such as disability and ethnicity can contribute to greater risks of poverty and worse socio-economic outcomes, and we know that children in single parent families, households where someone has a disability, large families and social rented housing are more likely to grow up in poverty than their peers (Scottish Government, 2020). But there are other experiences and circumstances that can leave certain groups at greater risk of poverty in adulthood. These groups include young carers (Watt et al, 2017), refugee and asylum seeker children (Hands et al, 2016), looked after or care experienced children (Bywaters et al, 2018), and children in contact with the youth justice system.

Adverse childhood experiences (ACEs) such as trauma, abuse, and exposure to parental mental illness also increase the risk of poverty in adulthood (Marryat and Frank, 2019) and in some cases, these experiences act as routes into further 'severe and multiple disadvantage' in adulthood such as homelessness, offending or substance abuse (Fitzpatrick and Bramley, 2019). However, whilst useful for identifying at-risk groups, ACEs as a conceptual framework



is in danger of being overly deterministic; and it is important to recognise that poverty increases the risk of adverse experiences in childhood, as well as the other way around (Marryat and Frank, 2019). Adverse experiences related to the pandemic and the restrictions are covered in more detail in section 10.

Importantly, it is access to support services that has the potential to prevent adverse experiences from determining worse socio-economic outcomes in adulthood. As Treanor writes: “it is important that [children] are not defined by what happened to them but that dedicated services are put in place that will support them to understand their experiences and recover from them” (Treanor, 2020, page 177). In this section we consider the effect of the pandemic on children’s services, particularly those targeted at the at-risk groups mentioned above.

### *iii What evidence is available on the socio-economic impact of Covid-19 so far?*

The Scottish Government has published a review of the impact on vulnerable groups and services, which has informed much of the content presented below (Scottish Government, 2020c).

**Social care and social work services:** Membership bodies of independent care providers in Scotland have reported an overall reduction in the numbers of hours of homecare provided to service users across Scotland as a result of COVID-19, and a number of changes to care packages (Scottish Care, 2020 and Inclusion Scotland, 2020b).

There is a growing literature concerning the effect of the pandemic on the social care workforce, including worsening mental health, burnout and moral injury (for a review of this literature, see Sanders, 2020). For example, a GMB union survey of social care workers in Scotland found that four out of five said their mental health had been affected by work, and that they had not received mental health support from their employer (ITV News, 2020).

Social Work Scotland expects to see an increase in referrals as other services gradually get back to normal ways of operating, and during August and September 2020, child protection interagency referral discussions have been significantly above the average for these months (Social Work Scotland, 2020). However, it is concerning that during the first half of the year Social Work saw a reduction in referrals, despite families clearly experiencing difficulties as highlighted elsewhere in this report. This is likely to be due to the reduction in contact with school and health services that would have led to social work referrals (Scottish Government and SOLACE, 2020).

**Child protection services:** Scottish Government and SOLACE produce a weekly report on vulnerable children, based on data provided by local authorities and Police Scotland. Registrations to the child protection register peaked in June, with 120 registrations in one week. There was another peak in mid-July, but registrations have generally been declining



since. The number of domestic abuse related registrations was lowest during lockdown (17 registrations), and peaked in the week beginning 25 June (58 registrations). There were also peaks in the number of children starting to be looked after in May and July of 2020.

The number of weekly Police Scotland Child Concern Reports has, since June, remained higher than the same period in 2019. However, there have been far fewer Police Scotland missing person investigations for children and young people in 2020 compared to 2019.

**Children with a disability and others with Additional Support Needs:** Disabled children, those with learning disabilities and those with other additional support needs experienced a reduction in formal contact with schools and allied health professionals which could have serious consequences for the physical, social and emotional development of these young people (Health and Social Care Alliance, 2020). There is evidence that the mental health of disabled children and their parents and carers is being effected as a result (Family Fund, 2020). Enquire, which offers a helpline to parents and carers, has reported that callers are struggling to access support services through school, local authorities, social work or Child and Adolescent Mental Health Services.

For some groups, the loss of routine is a major issue. Includem (2020) has raised concerns about the children it supports disengaging from learning entirely, in part due to disruption of routine, and that these children may struggle with the return to formal education. Similarly, the National Autistic Society (2020) has reported that 68% of respondents to a survey said their autistic child was anxious about the loss of routine.

A number of publications highlight concerns around the ability of parents to provide the learning and support at home that these children need. For example, two consecutive surveys of parents of disabled children by Family Fund (2020) found that their biggest concerns were educating their child at home and meeting the emotional and behavioural needs of their children.

Recent research has found that premature mortality is twelve times higher for children and young people with learning disabilities, with the most common causes of death being treatable and preventable conditions such as epilepsy, respiratory infection and digestive conditions (Smith et al. 2020). As well as premature mortality, this also relates to less severe illness that nonetheless still lead to a deterioration in quality of life. This raises questions around whether the reduction in contact with healthcare professionals that the pandemic has entailed could further reduce the timely diagnosis and treatment of conditions for this group.

**Children with experience of the care system:** It is widely evidenced that the 14,000 looked after children in Scotland are more exposed to a wide range of adverse experiences during childhood, and as a result are at risk of poorer education, health and occupational outcomes (Bywaters et al. 2020). Care experienced children and young people are at greater risk of poverty, and there are reports that the pandemic has worsened financial challenges and impacted on access to essential services for many care experienced children and young people.



For children and young people who are looked after in residential settings, isolation and limited contact with friends has for some contributed to worsening mental health, and the impact of social distancing measures has led to challenges for care staff, for example in trying to maintain a supportive household whilst also protecting children and workers from infection. There are some reports of an increase in self-harming and hospital admissions due to lack of preventative support (WhoCares? Scotland, 2020). However, other evidence suggests that some children in residential care settings and foster care have felt happier and more settled during lockdown, and able to build better relationships with staff and guardians (Cameron, 2020).

CELCIS (2020) has warned that the pandemic will have a particularly disruptive impact on the education journeys and employment outcomes of care experienced children and young people. A survey of over 1,000 young people, 56% of whom had experience of the care system said that during lockdown 68% did not make use of learning materials provided by school, predominantly because they found them too difficult to understand or felt too stressed and anxious to engage in home learning (MCR Pathways, 2020).

The transition from the care system to adulthood and living independently can be a difficult one, and the support provided to young people at this time can determine future life chances. Focus groups carried out by the Scottish Throughcare and Aftercare Forum found that, despite efforts on the part of service providers to adjust to the new context, social distancing measures have exacerbated the loneliness and isolation that many care leavers experience, as face-to-face contact and social activities have been reduced (STAF, 2020). The most recent data from local authorities shows that in the twelve weeks to 18 September, 63% of all young people eligible for aftercare had been contacted by a professional.

**Children and young people in contact with the youth justice system:** The Centre for Youth and Criminal Justice gathered the experiences of children and young people who are currently, or had previously been, in contact with youth justice services, including those in secure care. The main concerns of young people were feelings of isolation and lack of social contact, as well as concerns around delays in the youth justice system such as court and Children's Hearings. Generally, the survey found that young people had avoided contact with the police during this period, though those who had interacted with police reported mixed experiences, some viewed as proportionate to the offence and others viewed more adversarial or feeling targeted by the police (Nolan, 2020).

During lockdown, Children's Hearings continued to take place virtually (approximately 1,400 during May and June), at around 30% of normal capacity, but as of July, face to face hearings were gradually re-introduced (Scottish Children's Reporter Administration, 2020). Experiences of virtual Children's Hearings have been mixed; a consultation found that whilst some had positive experiences, others reported difficulties around confidentiality and use of digital technology (Porter et al. 2020).

**Young carers:** Scotland has over 30,000 young carers who support family members or friends to carry out daily tasks such as cooking, cleaning and personal care, who without their support



would not be able to manage (Scottish Government, 2017). Carers Trust Scotland (2020) surveyed 214 young carers in June about the impact of the pandemic and found that many were caring for more hours, and that their caring role had become more pronounced, impacting on their ability to focus on education. Almost half of young carers (45%) said their mental health was worse than it was before the pandemic, and 40% said they felt overwhelmed by pressures. Despite this, the survey suggests that young carers have struggled to access the emotional support they need during this time, and a fifth of young adult carers said they were drinking more alcohol to help them cope.

**Children in households where someone is shielding:** People perceived as clinically highest risk of severe impacts of the virus received advice from the Chief Medical Officer encouraging them to ‘shield’ – avoid going outdoors or have contact with those outside their household – for a period of over three months in Scotland. Those at higher risk of severe impacts of the virus included those with conditions such as cancer, asthma, COPD, multiple sclerosis, fibromyalgia, kidney disease, cerebral palsy. People who were shielding during this period have reported mental and physical health impacts, as well as difficulties accessing some essential services, food and medicine (for example, where there were no online shopping delivery slots available). There is limited evidence of the impact on children in households where someone was shielding, but surveys by disabled people’s organisations suggest they may have been more at risk of material deprivation and social isolation (Inclusion Scotland 2020; MS Society, 2020).

**Refugee and asylum seeker children:** A survey of asylum seekers and refugees in Scotland (the majority of whom (72%) lived in households with children), found that the main impacts of COVID-19 on this group were isolation, mental and physical health, and issues around children’s education and finance. Whilst those with settled status felt confident they knew how to access support, those without refugee status were much less so, with uncertainty about future immigration status cited as a major stressor (Christie and Baillot, 2020). Based on the concerns expressed by community organisations in Scotland, the Poverty Alliance (2020) reports that increasing numbers of people with no recourse to public funds are facing destitution, and that women in this group seeking to leave abusive partners are particularly at risk; a situation that the pandemic has exacerbated.

**LGBTQI young people:** LGBTQI young people are at greater risk of bullying and harassment, mental health issues, and homelessness. In some instances, the pandemic may have exacerbated these experiences, and also given rise to new problems. Being limited to one local area can cut LGBTQI people off from their networks and give rise to feelings of isolation: homophobia is viewed as a problem in their local area by 71% of LGBT young people, and transphobia viewed as a problem by 79% (LGBT Youth Scotland, 2020). A quarter of LGBT young people experience abuse (The Albert Kennedy Trust, 2015), which is a greater risk when forced to stay home.

**Gypsy and traveller children:** Existing inequalities that Gypsy, Roma and Traveller communities face may mean children from these communities fall further behind in their schooling as a result of school closures. Based on the Race Disparity Audit, the Gypsy/Roma and Irish Traveller ethnic groups had the lowest average score in GCSEs of any ethnic group

## Restrictions on Non-Essential Jobs and Services



in 2016/17 (UK Government, 2018). Existing educational inequalities, literacy levels, digital exclusion, issues around relationships with schools and overcrowded learning environments could lead to pupils suffering greater learning loss than other children (Gilmore et al. 2020).





## 5 Learning Loss

### *i Why is this issue relevant to Covid-19?*

Schools in Scotland closed to most students on March 20<sup>th</sup> as part of efforts to control the Covid-19 pandemic. Some schools remained open on a limited basis for ‘vulnerable’ children and children of key workers, though attendance never exceeded 1.7% of all schoolchildren. Schools reopened from August 11<sup>th</sup>, meaning that the vast majority of school-aged children in Scotland were absent from school for at least five months.

During the school closure period, schools attempted to mitigate the learning losses by providing resources for children to learn at home. However, provision of home learning resources and support from teachers is likely to have varied significantly, as teachers and schools were largely unprepared for the sudden closure. Further, parental support for home learning is likely to have varied significantly.

### *ii Why does this issue have a socio-economic impact on children?*

School attendance fosters the development of cognitive skills such as logic and reasoning. Students also learn specific knowledge as part of the curriculum. Absence from school means skills and knowledge are not acquired to the same extent. Evidence from teacher strikes in Belgium (Belot and Webbink, 2010) and Argentina (Jaume and Willén, 2017) shows that lost skills from missed school have long-term effects on educational attainment and income potential.

Further, prolonged absence from school, as is usual over a summer holiday period, results in a stagnation or decline in skills. A meta-analysis of North American studies conservatively estimated up to a month’s worth of potential learning is lost over a 12-week summer holiday (Cooper et al., 1996). Summer learning loss has also been observed in the UK, including in Scotland, where summer holidays last 6-7 weeks (Shinwell and Defeyter, 2017).

This extended school absence could have a long-term detrimental impact on educational achievements, income potential and quality of life for the present school-aged generation compared to preceding or following generations (Burgess, 2020).

The extent of learning loss is not universal: it varies by age, subject, and socioeconomic background. There is also the possibility that some children may have regressed in their learning during lockdown. Learning loss is consistently seen in maths more than reading skills, has more impact on older children, and has more impact on children from a lower



socioeconomic background (Quinn and Polikoff, 2017). Therefore, a particularly long period out of school for children is expected to widen the attainment gap between children of different socioeconomic backgrounds. As “skill begets skill through a multiplier process” (Cunha et al., 2006), this additional widening of the attainment gap could have lifelong implications for inequalities.

For individual children, these losses may be mitigated somewhat by home learning, but to greatly varying extents. Online learning outcomes are significantly influenced by factors such as the resource provided, learner age, time spent learning, the learning environment, and availability of collaboration or feedback (Di Pietro et al., 2020). Children of higher socioeconomic background are more able to learn at home than children of lower socioeconomic background, further widening the attainment gap. This is because they may have more access to material, spatial and supportive resources, such as a computer with a fast and reliable internet connection, a quiet and comfortable place to study, sufficient food to eat, and academic help from parents (Di Pietro et al., 2020).

Younger students, boys, and lower ability students underachieve with online instruction (Xu and Jaggars, 2013). For older students, the cancellation of exams this year will have eliminated an important extrinsic motivation to spend more time learning (Elikai and Schuhmann, 2010). Overall, home learning is likely to be insufficient for all but the most intrinsically motivated and extrinsically supported children.

### *iii What evidence is available on the socio-economic impact of Covid-19 so far?*

The OECD (2020) used data from the 2018 iteration of their Programme for International Student Assessment (PISA) to assess how students in OECD countries would be prepared for a sudden switch to home learning, including an analysis of how much access to resources students would have, and analysis of the preparedness of teachers and educational systems.

Eivers et al. (2020) used data from Understanding Society’s first COVID survey in April to find that almost half of exam-year pupils in Years 11 and 13 in England and Wales received no work from their school for home learning. Further, half of all pupils never or only rarely had live, real-time lessons. These findings highlight the logistical challenges schools and teachers faced regarding curricula and technology after these unanticipated closures.

Andrew et al. (2020) conducted an online survey at the end of April to find that UK children were learning or reading for an average of 5 hours per day. However, as the authors conceded, this is likely to overestimate the time children actually spent on these activities as, for example, ten minutes reading between 9-10am would count as an hour.

Therefore, results from Pensiero et al. (2020) appear to be more useful. They used data from Understanding Society to find that UK primary school children were spending an average of 2.4 hours per day on schoolwork, plus receiving 2 hours per day of support from adults, while



secondary school children were spending an average of 3 hours per day on schoolwork, receiving 0.9 hours per day of adult support. This was projected to result in educational losses of between 24-31% of a standard deviation for primary school children, and 14-28% of a standard deviation for secondary school children, depending on family socioeconomic differences.

Green (2020) also used April data from Understanding Society to find that children were spending an average of 2.5 hours per day doing schoolwork. The author notes that this is much less than half the average duration of a school day in the UK. Further, one-fifth of pupils (over two million children) did no schoolwork at home at all, or less than an hour a day on average, while only 17% studied for more than four hours per day. Almost all (97%) private school children had access to a computer at home, one-in-five children eligible for free school meals did not.

A parental study conducted in France found that children were engaged in learning activities for an average of 3.2 hours per day when schools were closed (Di Pietro et al, 2020). Skuola.net conducted a similar survey in Italy to find an average of 3.84 hours for secondary-aged children. The Schul-Barometer survey of German, Austrian and Swiss secondary students estimated a reduction in weekly learning time of 4-8 hours. These surveys were translated and reported by Di Pietro et al (2020), who also note that estimates of learning loss based only on lost learning time are likely to be conservative. This is because other factors such as unsuitable learning environments, reduced access to feedback, and additional distractions of the pandemic situation are also likely to impact learning.

Kuhfeld et al. (2020) used a sample of assessment data from five million US students in grades 3-8 to model the impact of COVID school closures if there is either a slowdown (stagnation) or slide (decline) in skills similar to those observed for summer learning loss. Slide estimates showed that students could return in late 2020 with 63-68% of the learning gains they should have had in reading, less than 50% of the expected gains in maths, and some older students could return almost a full academic year behind.

A series of surveys of parents, teachers and students in the US were described by Barnum & Bryan (2020). They note that two surveys found that only around 60% of students were regularly participating in distance learning.

Burgess and Sievertsen (2020) extrapolated the results of two pre-Covid-19 papers estimating the education loss from school closures to arrive, in both cases, at an estimated loss of around 6% of a standard deviation for 12-weeks' lost schooling. This is optimistic in comparison to Di Pietro et al. (2020), who extrapolate the European results described above to estimate an expected learning loss of between 0.82-2.3% of a standard deviation per week of school closure.

Scotland's schools were closed for approximately 20 weeks in total, though that includes Easter and summer holiday periods when they would have been closed for 7-8 weeks in total. Therefore, the vast majority of Scottish children lost around 12 weeks of active school learning time, plus had 7-8 weeks of non-learning time as usual.



It is unclear if many children continued home learning during the periods that would have been their Easter or summer holidays. It is also unclear over how long the reported 2.4-3 hours per day of home learning in UK settings was sustained. In both cases, it seems unlikely that high levels of home learning would be sustainable over the course of months, but upcoming research may shed more light on that.

There are a number of studies that looked at the impact of prior socio-economic status on learning loss (other than those already noted). The Education Endowment Foundation (2020) calculated an expected median widening of the attainment gap in the UK of 36%, though plausible estimates ranged from 11% to 75%. This was based on existing summer learning gap literature, but summer holidays may be both qualitatively and quantitatively different from the Covid-19 pandemic situation which has additional stresses and complications.

At least four studies used data collected in April by Understanding Society to investigate the potential for inequalities in education to widen. Eivers et al. (2020) found that children whose parents were higher-earning or higher-educated spent the most time learning at home, particularly at secondary school level. On the other hand, parents from the lowest-income households spent the most amount of time supporting their child with schoolwork. Bayrakdar and Guveli (2020) found that UK children who received school meals, from lower-educated or single-parent families, or from Pakistani or Bangladeshi backgrounds, were devoting significantly less time to schoolwork at home than other children.

Pensiero et al. (2020) found that UK children will all lose learning, but some will lose more learning than others. Primary school children in the most disadvantaged families will have lost on average 31% of a standard deviation across subjects by the time schools reopen, compared to primary school children in the most advantaged families who will lose on average 24% of a standard deviation across subjects. For secondary school children the average loss will be 28% of a standard deviation in the former group, and 14% in the latter group.

Finally, Green (2020) also used Understanding Society data from April to find several regional and social group inequalities in the amount of schoolwork being done at home. Children in the North-East of England received less homework than children in the South-East; girls were more likely to do more than 4 hours of homework per day than boys; and while almost all (97%) private school children had access to a computer at home, one-in-five children eligible for free school meals did not.

Bol (2020) looked at similar national data from the Netherlands to find that parents with higher educational backgrounds provided more academic help and more material resources to their children, particularly parents of secondary school children. Parents were also more likely to support daughters than sons.

Andrew et al. (2020) conducted an online survey of parents at the end of April to find that children from better-off families were spending 30% more time on home learning than those from poorer families, broadly agreeing with Eivers et al. (2020).

In Australia, Flack et al. (2020) also conducted an online survey in April, but of teachers. It found that teachers in schools of lower socio-educational advantage were much more likely



to be concerned about their students' ability to access home learning technology, receive support from parents, or to have their basic needs met.

Jaeger and Blaabaek (2020) looked at digital library data in Denmark to find that socioeconomic inequalities in library usage before COVID increased during the lockdown, as parents with higher education or income took out more children's books than parents with less education or income.

Bacher-Hicks et al. (2020) combined Google Trends data and local population demographic data in the US to find a positive association between search intensity for online learning resources and area socioeconomic status.

Kuhfeld et al. (2020) used a sample of assessment data from five million US students in grades 3-8 to model the impact of COVID school closures. They found that while most students will start the new school year significantly behind where they should be, the top third of reading students may have continued to gain reading skills during lockdown.

Barnum and Bryan (2020) note the recurring findings of inequalities in a series of US-based parent, teacher and student surveys, with low-income students and students of colour engaging much less with distance learning.



## 6 Socio-Emotional Development

### *i Why is this issue relevant to Covid-19?*

Nursery and school attendance play key roles in the socio-emotional development of infants and children. Nurseries and schools in Scotland closed to most students on March 20<sup>th</sup> as part of efforts to control the Covid-19 pandemic. Although some schools remained open on a limited basis for vulnerable children and children of key workers, attendance never exceeded 1.7% of all schoolchildren. All schools reopened to all students from August 11<sup>th</sup>, meaning that the vast majority of children in Scotland were absent from nursery or school for almost five months.

### *ii Why does this issue have a socio-economic impact on children?*

In addition to fostering cognitive learning, nursery and school settings are important for the development of a constellation of socio-emotional skills, including social skills relating to interactions with others, and internalising skills such as resilience, discipline and self-motivation. Development of these socio-emotional skills benefit personal growth and life satisfaction (Durlak et al., 2010), as well as having an array of measurable long-term consequences in education, employment and health (Carneiro et al, 2007). This is summarised well in Heckman & Kautz (2012) where they stress the importance of soft skills in predicting 'success in life'.

For example, Segal (2013) finds that behaviour in eighth grade (early secondary school equivalent in Scotland) is more predictive of future earnings than test results at the same age. Multiple papers find positive associations between different measures of socio-emotional skills in childhood and beneficial long-term health behaviours (Chiteji, 2010; Conti et al., 2010; Cobb-Clark et al., 2014, Attanasio et al., 2020a). Layard et al. (2014) report that the emotional health of a child at age 5, 10 or 16 is the best predictor of life satisfaction as an adult and of life course success.

Socio-emotional skills are developed both in nursery/school settings and at home. School closures incur the opportunity cost of missed socio-emotional skill building practices (Durlak et al, 2011).

Time at home instead may have benefited some children who have been able to spend more quality time with their parents, as parental time investment is particularly important for the development of socio-emotional skills at home (Attanasio et al., 2020b).



Family background has been shown to be an important determinant in the acquisition of non-cognitive skills (Carneiro et al., 2007) and studies have found that inequality in development of these skills has widened, especially for boys, at the bottom of the income distribution (Attanasio et al, 2020a). Parental styles can also affect the development of these skills. There is some evidence that factors, such as living in areas with high income inequality can push parents into a more restrictive, authoritarian style. (Bradshaw et al., 2013). As noted in Congreve & Norris (2020):

“To be clear, this does not mean restrictions are strictly a poor form of parenting. Indeed, the reason parents in poor circumstances may choose them is because they are needed to prevent worse outcomes; however, the implication we are highlighting is that this need can come in hand with a loss of skill building investments”.

### *iii What evidence is available on the socio-economic impact of Covid-19 so far?*

Following previous analysis which identified three parental inputs that have the highest degree of correlation with the development of socio-emotional skills (Moroni et al. 2019), Moroni et al (2020) discuss how these three pathways are likely to have influenced children’s socio-emotional skills development during coronavirus restrictions: where mothers were struggling with their mental health; where stresses resulted in less time being spent with children; or where parenting styles may have exacerbated emotional difficulties.

Related to the first pathway identified by Moroni et al (2020), evidence from the UK-wide Understanding Society panel (Etheridge and Spantig, 2020) finds that adult women’s mental health has suffered twice as badly as men’s during the lockdown restrictions. Further, the Covid-19 Social Study (Fancourt et al., 2020) finds that, while depression and anxiety have been decreasing over the course of the lockdown, as of August they remained at much higher levels than before the pandemic, and were higher for people living with children.

Mangiavacchi et al. (2020) focused on fathers with a survey of over 3,000 families conducted during the strictest period of Italian national lockdown. They find that fathers spent more time with their children during lockdown. This follows from UK evidence that the gender division of childcare became more equal during the lockdown (Sevilla and Smith, 2020), so children who were more able to spend time with both parents may have benefited.

Whilst the closure of schools meant that children were spending more time at home, the amount of quality time that parents could spend with children depends on a variety of factors. One indicator of this may be the time that parents felt they could spend with their children to support their learning. Andrew et al. (2020a) found that “almost 60% of the parents of primary school children and almost half of the parents of secondary school children report that they are finding it quite or very hard to support their children’s learning at home”. In terms of socio-economic status, it was parents in the middle of the income distribution who



were finding it hardest to support learning at home. One reason given for this is that parents in this income group are more likely to be working more hours than those in the lower income deciles, yet not have the same resources to help support their children as those in the higher income deciles.

Andrew et al (2020b) looked at time use data for parents in the UK. Both mothers and fathers reported spending around four additional hours each day on childcare, and much less in the way of leisure time, risking parental wellbeing and hence negatively impacting on children. The authors also considered the fact that parents in lower income families are more likely to face stress from the pandemic due to already strained finances, and the loss of the 'equalising' environment at school would magnify the exposure to these stressors at home, leading to further exacerbation of inequalities in children's outcomes.

Public Health Scotland's (2020) COVID-19 Early years resilience and impact survey used the Strengths and Difficulties Questionnaire (SDQ) to assess children's behaviour and emotions and found that around half of children were experiencing some or a lot of difficulty with their behaviour and emotions compared to what is typical at that age, although the effects were slightly less for older children.





## 7 Physical Health

### *i Why is this issue relevant to Covid-19?*

Lockdown restrictions drastically reduced the day-to-day physical activity necessary for children going to and from school or nursery, moving around school or nursery, and participating in leisure activities and hobbies in evenings and weekends. Sporting activity all but ceased. Home-based sedentary behaviours such as watching TV, playing video games and using the internet are all likely to have increased. As well as replacing active behaviours, sedentary behaviours are associated with poor dietary habits and obesity.

School closures also meant school meals were no longer provided. For children living in food poverty, school lunches are an important source of a regular healthy meal. While local authorities, community groups and food banks endeavoured to continue provision, this was likely to have varied in quality and reach. Therefore, some families may have struggled to eat adequately, especially if other aspects of the pandemic led to further financial difficulties. Some children may have suffered from ‘holiday hunger’ for much of the five-month school closure period.

### *ii Why does this issue have a socio-economic impact on children?*

Physical inactivity and sedentary behaviours in children are associated with a wide range of adverse long-term outcomes. A systematic review of 235 studies found that screen time was associated with unfavourable body composition, clustered cardiometabolic risk factors, lower fitness, unfavourable behavioural conduct and lower self-esteem in children (Carson et al., 2016). Another systematic review found associations between screen time and lower mental well-being, self-esteem and quality of life in children and adolescents (Suchert et al., 2015).

Sedentary behaviours are strongly associated with poor diet quality in children (Avery et al., 2016). Experimental evidence shows that food intake can increase in children when sedentary time is increased (Epstein et al., 2002) and this is also seen in observational data (Delfino et al., 2018).

The physical activity behaviours of pre-schoolers tend to continue through their childhood years (Pate et al., 1996). Similarly, “mere exposure” increases liking for food in children (Cooke, 2007), therefore unhealthy food consumption during lockdown may be habit-forming. Sedentary habits that continue into adulthood have been causally associated with increased mortality (Biddle et al., 2016).



Overwhelming evidence shows that physical activity has multiple physical and mental health benefits for children and young people. The benefits of physical activity follow a dose-response relation, meaning that while vigorous exercise confers the greatest benefits, even moderate physical activity has huge benefits over sedentariness (Janssen and LeBlanc, 2010). This is particularly important when considering that lockdown reduced even the basic movements necessary for day-to-day life activities, as well as play and sports opportunities.

Physical activity and higher degrees of physical fitness also boost cognitive function and academic achievement (Donnelly et al., 2016), which can be expected to lead to higher long-term earnings and life course success.

Food poverty tends to lead to poorer overall dietary habits as parents are forced to focus on a narrower range of familiar, calorie-dense foods that tend to be nutritionally poor (Seligman and Schillinger, 2010). Paradoxically, this can increase risks of obesity (Burns, 2004). Poorer children are known to be more at risk of obesity (Goisis et al, 2016)

To summarise, sedentary behaviours, physical inactivity and food poverty all increase risks of obesity, which is thought to be causally detrimental to several socioeconomic outcomes, including income potential, educational achievement and skilled job acquisition (Harrison et al., 2020).

### *iii What evidence is available on the socio-economic impact of Covid-19 so far?*

Xiang et al. (2020) conducted the first known Covid-specific research on this topic by carrying out surveys in five schools in Shanghai, China, during lockdowns in January and March. Reporting almost 2,500 responses from children and adolescents, the authors found a drastic decrease in median physical activity, from 540 minutes per week to 105 minutes per week, and a huge increase in average weekly screen time of 1,730 minutes, almost 29 hours. Although these results broadly match expectations, this study is only partially reported in a letter to a journal, so the methods are not explained in detail, and the research has not been peer-reviewed.

Nevertheless, further evidence generally supports Xiang et al.'s findings. Moore et al. (2020) conducted a parent survey in Canada to find that children and adolescents had had lower levels of physical activity, spent less time outside and spent more time sedentary (including more screen time) during pandemic restrictions. As much as 81.8% of children and young people were not meeting guideline amounts of physical activity. Children were more likely to have moved more if their parents were encouraging or physically active, or when there was a dog in the family.

Similarly, online survey data from Brazil, Colombia, Chile, Spain and Italy suggested that 79.5% of adolescents were physically inactive during national lockdowns, an increase from 73%



before restrictions began (Ruíz-Roso et al., 2020). The most striking change found was in Brazil, where 93% of adolescents were physically inactive during lockdown, an increase from 40.9% beforehand.

Pietrobelli et al. (2020) surveyed 41 children and adolescents with obesity in Verona three weeks into the Italian national lockdown and found that time spent in sporting activities had decreased by 2.3 hours (138 minutes) per week, and screen time increased by 4.85 hours per day (34 hours per week). The former estimate is notably less than found in Shanghai by Xiang et al, whereas the latter estimate is higher. Note the very small sample size and specific population of this study, so its specific estimates and generalisability should be considered with caution.

Zenic et al. (2020) found decreased physical activity levels in adolescents during lockdown in Croatia, particularly for those in urban settings as opposed to rural settings. The difference may in part reflect that adolescents in cities are likely to have less access to outdoor spaces to exercise or play sport.

Technology analytics firms reported historic surges in demand for online gaming and livestreaming services, which are primarily used by adolescents and young adults, when lockdown restrictions began globally in March (Geekwire, 2020). These may be considered proxy indicators of sedentariness or physical inactivity.

As has been covered elsewhere, UK food bank network The Trussell Trust (2020) reported an 89% increase in food parcel distribution in April 2020, during the most stringent lockdown restrictions, compared to April 2019. The increase included a 107% rise in parcels given to children and a 95% increase in parcels going to families with children. A Food Foundation survey in August (2020) found that 14% of adults living with children had experienced food insecurity in the preceding six months, up from 11.5% pre-pandemic. Around 2.3 million children live in the households affected.

An (2020) used data from a longitudinal study of 15,000 children to simulate childhood obesity trends in different school closure scenarios due to reduced energy expenditures only. The models found increases in childhood obesity prevalence of between 0.6% and 2.4%, depending on the duration of closures. This modelling should be regarded with care as the projected reduction in physical activity levels it used as a key input was chosen somewhat arbitrarily, and it accounted for no changes in consumption levels.

Research in adults also shows that a sizeable minority, but nevertheless concerning, have seen a worsening of health behaviours. Ingram et al's. (2020) questionnaire data from 399 Scottish adults found large minorities whose physical activity, dietary and alcohol habits were suffering during lockdown, and that poorer diet and less physical activity were both associated with negative mood. Ammar et al. (2020) received survey responses from 1,047 adults in Asia, Africa and Europe to conclude that Covid-19-related restrictions had a negative effect on physical activity at all intensity levels, increased daily sitting time by an average of 3 hours per day, and led to unhealthy food consumption patterns. Tison et al. (2020) used step-count data from 455,000 global users of a smartphone fitness app to find a 27% decrease in mean daily steps 30 days after the pandemic was declared on March 11<sup>th</sup>. Similarly, the fitness



tracking company Fitbit blogged about their own global data, including step counts, resting heart rates, active minutes per day and bedtime variability (Fitbit, 2020). Smartphone and Fitbit users are most likely to be adults but may also include older children. Scarmozzino and Visioli (2020) used questionnaire data to find that 46.1% of Italian respondents ate more during lockdown than previously, and 19.5% reported gaining weight. 10.1% also reported increased alcohol consumption.

Interestingly, some respondents in Scarmozzino and Visioli (2020) reported positive consumption changes: 36.8% reported consuming less alcohol and 21.2% reported increasing their fruit and vegetable consumption. Alcohol binge drinking was also decreased in Ammar et al.'s (2020) findings. Similarly, those previously participating least in exercise reported an increase during Austria's lockdown in a survey conducted by Schnitzer et al. (2020), although overall levels of physical activity decreased, in line with other studies. So, while overall trends show decreases in physical activity levels and increases in unhealthy consumption habits, some respondents have engaged in healthier habits.

This was described in relation to children and adolescents in Mitra et al. (2020), who identified two clusters in their dataset of Canadian survey respondents: those who increased outdoor activities during lockdown, such as walking and cycling, and those who did not, whose overall physical activity levels were substantially lower. The authors found that the former tendency was found more in younger children and those in multi-child households, and the latter tendency was more common in low-income households. Mitra et al. (2020) also found that children living in houses or far from a major road were more likely to have increased their outdoor activity levels compared to children living in apartments, near major roads or in high-density neighbourhoods, which recalls the urban/rural findings of Zenic et al. (2020) above.

The COVID-19 Early Years Resilience and Impact Survey (CEYRIS) shows similar findings for Scotland: 24% of children's parents reported that they did more physical activity during lockdown, and 47% reported that their children did less physical activity (Public Health Scotland, 2020).



## 8 Mental Health

### *i Why is this issue relevant to Covid-19?*

Several aspects of the Covid-19 pandemic present challenges to the mental health and wellbeing of children and young people.

Lockdown restrictions that disrupted children's routines and isolated them from friends and extended family networks likely contributed to increased feelings of isolation and loneliness.

Fears and uncertainties about the virus itself and its possible effects on individuals, and about the response to the virus, including school closures and other lockdown restrictions, are all likely to contribute to increases in anxiety and depression.

Confinement to the home may have strained family relationships in some households. The cancellation of leisure activities and the closure of playgrounds led to significant decreases in physical activity, play and socialising with friends, which all otherwise promote good mental health and wellbeing in children.

Meanwhile, the uncertainties surrounding the post-pandemic future make adapting to the situation more difficult, particularly for older children who may be entering a transition phase into employment or further education.

### *ii Why does this issue have a socio-economic impact on children?*

Mental health is a central component of overall health. It is deeply entwined with physical health and other core aims of human life such as wellbeing and happiness. Mental health problems tend to begin at a much younger age than physical health problems, so often have lifelong burdens on individuals (Caspi et al., 2020). Recent ONS data found that 12.9% of 5-19-year olds in England, as well as 5.5% of 2-4 year olds, had at least one mental health disorder, most commonly anxiety or depression (Sadler et al., 2018). As well as their effects on quality and length of life, mental health problems can have adverse effects on social participation, personal relationships, educational achievements, employment prospects and income potential (WHO, 2009).

There is bidirectional causality between socioeconomic conditions and mental health. In a systematic review of 55 studies from 23 countries, 52 studies found an association between a marker of socioeconomic status and mental health problems in children or adolescents (Reiss, 2013). Socioeconomic disadvantage was more strongly associated with mental health



problems in children under 12 than in older children. Low household income and low parental education had the strongest impacts on children and adolescents' mental health. In the other direction, Biasi et al. (2019) identified "Immense earnings penalties" for people with mental health disorders, and Harrison et al. (2020) found causal relationships from depression and mental health-related risk behaviours towards lower educational achievement, income potential and skilled job acquisition.

Adolescents are particularly vulnerable to mental health issues due to the variety of physiological and psychosocial developmental processes occurring simultaneously while they transition from dependent childhood to independent adulthood (Irwin et al., 2002). Inappropriate coping strategies adopted to deal with some of these developmental challenges include a wide range of risk behaviours, such as petty criminality, violence or bullying, the use of harmful substances such as tobacco, alcohol or prohibited drugs (Hurrelman and Richter, 2006), and "internalised risk behaviours" such as social disengagement or depression, acts of self-harm, and eating disorders (Jessor, 1998). Adolescence is a highly formative period, so not only are depressive episodes in adolescence linked with greater risks of depression in adulthood (Momen et al, 2020; Thapar et al, 2012), but they can also lead to worse economic outcomes due to lower educational attainment (Cornaglia et al, 2015; Fletcher, 2010), which has a knock-on effect on employment (Ettner et al, 1997) and earnings (Biasi et al, 2019).

### *iii What evidence is available on the socio-economic impact of Covid-19 so far?*

Numerous academic and third sector organisations have undertaken online surveys during the lockdown period to find out how children and young people have been coping.

**Scottish research** - In Scotland, the Children's Parliament's (2020) How Are You Doing? survey of 8-14-year old children found that participants were increasingly feeling lonely and less resilient, and more worried about a range of things. Young Scot's (2020) Lockdown Lowdown survey of 2,500 11-25-year-old Scots – three-quarters of whom were under 18 – found around two-fifths reporting that they were moderately or extremely concerned about their own mental wellbeing, and slightly more were concerned about the wellbeing of others. A Place in Childhood's (2020) participatory research with twenty-five Scots of 10-16-years old found that face-to-face interaction was strongly missed, the increasing stress on their families was noticeable, and that children felt overloaded with screen time while missing outdoor play. According to a Carers Trust Scotland's (2020) survey, 45% of young carers in Scotland feel their mental health has suffered as a result of the pandemic, and many have seen significant increases in the time they spend caring. The COVID-19 Early years resilience and impact survey (CEYRIS) found that 47% of parents reported that their child's mood had worsened compared to prior to the lockdown, and a similar proportion said behaviour had worsened.



This compares to 45% who said their mood and behaviour was the same and 8% who said it was better (Public Health Scotland, 2020).

**Isolation and Loneliness** - A rapid systematic review by Loades et al (2020), initiated in the wake of the crisis, found 80 studies on the impact of social isolation and loneliness on children's mental health. It found that social isolation and loneliness increased the risk of depression, and possibly anxiety, both at the time of loneliness and for up to nine years thereafter. Unfortunately, social isolation and loneliness among children and young people during lockdown is a universal finding of the research cited here. Adolescents in particular repeatedly cited isolation from friends as a central concern. For example, UK charity Young Minds (2020) found that 81% of its 2,000 survey respondents with histories of mental health needs reported worse mental health due to the pandemic, with 87% of them attributing that to feeling lonely or isolated. Not being able to spend time with friends was similarly cited as the number one issue with lockdown in a very large survey by the Children's Commissioner for Wales (2020), among young people in low-income neighbourhoods of England and Wales (Street Games, 2020), and in research by Essex-based youth organisation ECVYS (2020), which collected qualitative findings from Zoom calls during lockdown.

**Anxiety and Depression** - Save The Children (2020) reported that 1-in-4 children living in lockdown were dealing with feelings of anxiety and many were at risk of depression, based on surveys with around 6,000 children and their parents in the US, Germany, Finland, Spain and UK. Barnardo's (2020) found that 69% of its frontline youth workers were helping young people with deteriorating mental health due to the pandemic, mostly due to anxiety, sleep dysregulation, stress and depression. NSPCC's Childline (2020) helpline service reported receiving a surge in calls in March, mostly about increasing feelings of depression and anxiety, panic attacks, trouble sleeping, and feeling lonely and isolated. Preliminary evidence from a University of Sheffield survey (Levita et al., 2020) found that 40-50% of young respondents were significantly more anxious than they had been pre-pandemic, particularly girls, children of keyworkers, and black and ethnic minority respondents.

**Eating disorders, self-harm, and suicidality** – Inappropriate coping strategies for anxiety and depression can include internalised risk behaviours such as eating disorders, self-harm and suicidal thoughts or actions. Young Minds' (2020) survey found that some respondents with a history of eating disorders had relapsed, and others with a history of self-harm had also resumed self-harming. Pascual-Sanchez et al. (2020) also found that a third of survey respondents who had self-harmed ever before had self-harmed during the pandemic. Barnardo's (2020) practitioners also reported that mental health strains were leading to self-harm and suicidality in some young people.

**Girls and young women** - Many surveys have found that the mental health of girls has suffered particularly badly during lockdown. Girl Guiding UK's (2020) survey of 7,000 4-18-year-old girls found that over half of girls aged 15-18 felt lockdown has had a negative impact on their mental health, and a third of girls aged 4-10 said they felt sad most of the time. The aforementioned Children's Parliament (2020) survey found that 12-14 year old girls were having the toughest time of all groups across a range of measures. Levita et al. (2020) found worse levels of mental health for girls than boys in almost all measures: for example, 14% of



girls aged 13-18 had very high levels of somatic symptoms, compared with 9% of boys the same age. The Lockdown Lowdown Survey also found that girls were more concerned about mental health than boys, with 45% female respondents reporting that they were moderately or extremely concerned about their mental wellbeing, compared to 26% of males (Young Scot, 2020). This tendency is seen in adults too: adult women's mental health has suffered twice as much as men's, particularly so for younger women, according to longitudinal data from the UK (Etheridge and Spantig, 2020).

**Positive findings** – Some surveys report more positive findings. For example, the Happen at Home (2020) survey of 1,000 primary-school-aged children in Wales concluded that most children were happier with life in lockdown compared to before, were eating more fruit and vegetables and fewer takeaways, and more children were getting the recommended amount of sleep. In the much larger Children's Commissioner for Wales (2020) survey, many children commented on positive aspects of lockdown, including spending more time with family, learning new skills, enjoying gardens and outdoor exercise, and also that they felt relief from previous sources of stress, such as bullying. Buzzi et al. (2020) commented on the "remarkable... emotional balance of the new generation" after surveying around 2,000 adolescents in Italy, due to the way they had adapted to and normalised their new situation.





## 9 Housing Conditions

### *i Why is this issue relevant to Covid-19?*

During lockdown children spent substantially more time at home than they ordinarily would have. The UK and Scottish Governments encouraged daily exercise, but access to green, safe outdoor space to play will not have been possible for many. More spacious homes allow for separate space to work, home-school children, exercise and relax. For those already living in crowded and unsafe conditions, the impact on health is likely to have been exacerbated by the lockdown restrictions (Claire, 2020).

### *ii Why does this issue have a socio-economic impact on children?*

Housing conditions are often correlated with a range of factors, including income, which are known to have impacts on health and wellbeing. However, it is also the case that poor housing can be a determinant of this on its own.

Children can be exposed to a number of health hazards in their own homes, including crowding, cold, dampness and mould growth, pests and refuse, exposure to pollutants, and fall hazards (Ormandy, 2013). The connection between housing conditions and health outcomes later in life has long been recognised (Marsh, 1999; Tunstall, 2013). For example, data from a historic longitudinal study analysed by Dedman et al. (2001) showed that growing up in housing with poor ventilation was associated with increased adult mortality. Children growing up in poor quality housing have a 25% higher risk of severe ill-health and disability, including increased risk of meningitis, asthma, and slow growth, and lower educational attainment (Harker, 2006).

In Scotland, 2% of dwellings were below the Tolerable Standard in 2018 (Scottish Government, 2020b). The Scottish Housing Quality Standard (SHQS) assesses serious disrepair, energy efficiency, lack of modern facilities and whether the accommodation is healthy, safe and secure. Two fifths of dwellings (41%) failed to meet the SHQS in 2018, with the highest failures with respect to 'energy efficiency' and 'healthy, safe and secure' properties (which 30% and 12% of properties failed to meet, respectively).

Children in homeless households are particularly exposed to poor health outcomes, or poor housing conditions, for example if they are temporarily housed in sub-optimal accommodation. 'Core homelessness' (Bramley, 2017) includes rough sleeping, staying in hostels, refuges and shelters, staying in unsuitable temporary accommodation, 'sofa-surfing', and staying in overcrowded conditions. Pre-pandemic, just over a fifth of 'core homeless' in



Scotland were aged under 25 (Fitzpatrick et al, 2019), and families with children are more likely than other household types to live in crowded accommodation, especially in the social rented sector (Quilgars, 2016).

The most recent homelessness statistics show that there were more than 11,600 households in temporary accommodation in Scotland at the end of March this year, including 7,280 children, however real-time data from the Scottish Housing Regulator suggests that the number of households in temporary or emergency accommodation is higher than ever before, at 14,000 (Scottish Housing Regulator, 2020). Households with children spend on average over 200 days in temporary accommodation, although it should be noted that very few are placed in the most unsuitable accommodation such as B&Bs or hostels (Scottish Government, 2020).

### *iii What evidence is available on the socio-economic impact of Covid-19 so far?*

Some studies have explored the relationship between overcrowding, housing conditions and the spread of the virus itself. Analysis of ONS data found a correlation between the level of overcrowding in councils in England and Wales and their Covid-19 death rate, though a causal relationship is not clear (Barker, 2020). Following this, the Brent Poverty Commission named overcrowded living conditions as one of the reasons the London borough became a Covid-19 hotspot, with one of the highest Covid-19 death rates in Britain (Brent Poverty Commission, 2020). Overcrowding has also been associated with the higher prevalence of the virus amongst certain groups, for example Haque, Becares and Treloar (2020) identifies multi-generational households and crowding as contributing to the higher prevalence of Covid-19 amongst BAME communities.

An online survey of more than 4,000 adults in England and Wales by the National Housing Association found that nearly a third (31%) had experienced a negative health-related impact during lockdown as a result of lack of space at home or the condition of their housing (National Housing Federation, 2020). The figures are not disaggregated by household type, but it is fair to assume that children in these households are also at risk of adverse effects.

Rosenthal et al (2020) has outlined the specific risks to children in temporary accommodation, including inadequate space to play, increased risks to parental mental health, and the impact on wider housing services meaning households in unsuitable accommodation may be forced to stay there for longer, and/or miss out on other health, advice and support services.



## 10 Adverse Experiences

### *i Why is this issue relevant to Covid-19?*

Lockdown policies that confined children to the home may have strained relationships and created or exacerbated mental health problems, particularly in vulnerable families. This may have increased risks of domestic violence or substance misuse, or of the abuse, exploitation, or neglect of children. Due to social distancing policies, children and adolescents may have been less able to escape from unsafe situations. Further, school closures and impacts on social services may have limited the ability of school staff and community members to detect domestic problems and intervene.

The direct impact of Covid-19 infection on individuals has been, in the worst cases, serious illness and death. As of early September, no children in Scotland have died of Covid-19, but serious illness may have occurred, and loved ones may have died, including parents or other primary caregivers.

### *ii Why does this issue have a socio-economic impact on children?*

Adverse experiences in childhood have long been known to have significant long-term impacts, though defining trauma and establishing causal pathways has always been a challenge (Terr, 1995). Felitti et al. (1998) used a list of seven types of abuse or household dysfunction, known as adverse childhood experiences (ACEs), to attempt to quantify increased risks for adults exposed to more childhood adversity. The original list of seven ACEs included three types of childhood abuse - psychological, physical and sexual - and four types of household dysfunction: exposure to substance abuse, mental illness, domestic violence, or criminal behaviour. Felitti et al. (1998) found very strong associations between experiencing these childhood adversities and the risk of developing physical and mental health problems in later life. While subsequent ACEs literature discussed other potential adversities for inclusion, most studies used an adapted form of the original selection to ensure consistency.

Felitti et al.'s (1998) results were replicated in various settings. A systematic review of the subsequent literature on ACEs (Hughes et al., 2017) found that adults with at least four ACEs were at higher risk of at least 23 different negative health outcomes compared to adults with no ACEs. The risks are particularly high for mental ill health and problematic health behaviours such as drug and alcohol misuse and violence, but adversities in childhood also increase lifelong risks for apparently physical illnesses, such as cancer, heart disease and diabetes.



Although childhood bereavement is rarely considered in ACEs literature (Vaswani, 2018), the death of a parent or primary caregiver is known to be highly traumatic for children (McClatchey et al, 2009). Additional support from surviving parents and family members is necessary to help children through the grieving process (Kirwin and Hamrin, 2005). Unfortunately, a significant minority of bereaved children have additional difficulties with grieving and go on to develop anxiety and social problems as well as lower self-esteem and self-efficacy (Worden and Silverman, 1996).

Because ACEs and other childhood traumas can often lead to ill-health and adverse behaviours in adults, these issues in parents can lead to adversities for their children too (Thornberry and Henry, 2013). Further, a systematic review of the relationship between socioeconomic position and adversities in childhood found a clear relationship that persisted across countries, socioeconomic measures, adversity type and age (Walsh et al., 2019). Therefore, traumatic experiences in children are socioeconomically distributed, and their consequences can persist through generations. Where childhood trauma, poverty and violence combine, the adults who emerge can face severe and multiple disadvantages that severely limit their quality and length of life (Bramley et al., 2018).

### *iii What evidence is available on the socio-economic impact of Covid-19 so far?*

Reports of violence in the home increasing during lockdown have emerged from around the world. Graham-Harrison et al. (2020) in The Guardian report that domestic violence tripled in Hubei province, China, during its lockdown in February, while a Brazilian expert claimed an expected increase in Rio de Janeiro of 40-50%, and helplines in Catalonia and Cyprus recorded huge increases in calls. UK charity Refuge (2020) reported a 25% increase in calls to its domestic abuse hotline during the final week in March, shortly after lockdown had started. Usher et al. (2020) summarise further international news reports of increases in domestic violence, including in Australia, the United States, China and France. In the UK, the NSPCC's Childline (2020a) reported an increase in counselling sessions about domestic abuse, from an average of 50 per week at the start of the year to an average of 65 per week during lockdown. Xue et al. (2020) applied machine learning analysis to over 300,000 Tweets relating to domestic violence and Covid-19 between April and July. The authors extracted nine themes from the discourse, concluding that Covid-19 "has an impact" on family violence, but due to the method are unable to say much more than that, as their analysis is of social media comments rather than witness or victim reports.

Schmidt and Natanson (2020) in the Washington Post describe how official reports of suspected child abuse decreased across the United States in the early stages of lockdown, but calls to child abuse and sexual assault hotlines increased, and hospital doctors reported treating more beaten children. Similarly, Thomas et al. (2020) say that double-digit percentage decreases in calls to child mistreatment hotlines in at least six states reflect a fall



in detection, not infliction, of abuse. In the UK, the Local Government Association (2020) reported “deep concern” that referrals to children’s social services had decreased around 18% between April and June, compared to the same period in the previous three years. The NSPCC’s Childline (2020b) has seen a 22% increase in the number of counselling sessions about child physical abuse, from an average of 420 sessions per month pre-lockdown, to an average of 514 sessions per month during lockdown.

The NSPCC (2020c) reported delivering three-times more Childline counselling sessions about child sexual abuse compared to before the pandemic: the average had been 8 such sessions per week, but rose to 23 per week between March and August. At the same time there has been a decrease in calls to the NSPCC helpline from adults with concerns about child sexual abuse, from an average of 138 per week to an average of 104 per week.

Sexual exploitation is also a threat online. The Internet Watch Foundation (2020) blocked at least 8.8 million UK-originating attempts to watch child sexual abuse online during the lockdown. A poll of 2,000 young people by NSPCC (2020d) found that children who were lonely were twice as likely to be groomed for sexual exploitation online. A briefing paper by the We Protect Global Alliance (Taddei, 2020) highlighted the threat to children’s safety posed by the combination of longer hours spent online without supervision, and lockdown-related loneliness and emotional vulnerability.

Mistreatment and neglect of children in the household may be more likely when adults are drinking or taking drugs. A survey for Alcohol Change UK (2020) found that 1-in-5 respondents were drinking more often during lockdown, and in households with children, 1-in-7 respondents said alcohol use was increasing tensions.

Gesi et al. (2020) describe the risk of ‘complicated grief’ developing in people who are unable to grieve normally after bereavement or a near-death trauma, such as intensive care treatment. Individuals at higher risk of developing complicated grief include females, and individuals with less education, social support, or social skills. The authors note that being unable to say goodbye to a loved one, as has been common during the pandemic due to infection risks, is itself an independent risk factor for developing complicated grief. Bertuccio and Runion (2020) also review the potential mental health impacts of grief in the context of the pandemic, though neither they nor Gesi et al. describe the particular circumstance of children losing a parent or primary caregiver.

In their survey on the mental health of young people during pandemic restrictions, Levita et al. (2020) detected “alarming levels” of young people experiencing PTSD-like symptoms, including a majority of female participants.



## Conclusion

At the time of writing, the pandemic was still ongoing. This summary is a stocktake of a wide range of evidence on the socio-economic impact on children of the pandemic so far.

This pandemic has been and will continue to affect people unequally, with direct and indirect effects on children of all ages.

Over time, more data is likely to be produced, and more analysis will be possible. However, there are likely to remain gaps in evidence that will limit the ability of researchers to be able to understand fully the impact of the pandemic on children over time.

Annex A compiles a range of suggestions on evidence gaps that could be filled that were asked about during the capability mapping part of the project. Key themes that come through include being able to have better data that allows researchers to robustly link low income to other issues, and having longitudinal data that allows children to be followed over time. Appropriate disaggregation of characteristics for equalities groups was also widely called for.

The key issues highlighted are not new – they have long been an issue for analysis on data in Scotland. Sample sizes can be of concern for researchers, and there are often unsurmountable barriers to data linking (particularly on income data which is ‘owned’ by the DWP) that make it extremely difficult to do meaningful analysis in Scotland to better inform evidence-based policy making.

With the Scottish Government citing that it wishes to incorporate the UN Convention on the Rights of the Child into Scots Law, data and evidence will be all the more important to show that Scotland is indeed upholding its obligations.

## Annex A – Data Gaps

This annex lists responses to a question regarding data gaps that were asked to many people and organisations as part of the capability mapping exercise.

The question asked was “What data would ideally you want to be available to do future work on the socio-economic impact on children of Covid-19?”

Most answers are quoted verbatim so to prevent any misinterpretation of the answers given.

### General

- More qualitative data on people’s lived experiences of COVID-19, including children
- Children’s rights indicators, disaggregated for groups. This is particularly for Scotland, in terms of UNCRC incorporation.
- Accounts of young people including those generated based on their priorities and interests
- Qualitative data on the experiences of pregnant women, families with young children etc.
- Better linking of data sets could be really valuable. I suspect that linking of education, social security and health admin data could theoretically be done – and probably is happening somewhere – but lead-in times huge given all the organisations and rules involved, so taking it forward probably needs a really powerful policy case, and great deal of patience. In absence of this, need to try to get better at incorporating diverse information in existing surveys, but obviously lots of trade-offs involved, e.g. sample size v. amount of information surveyed in determining cost.

### Relating to income and poverty

- Administrative data from national and local government, in particular the DWP
- Better break downs of income data by intersecting inequalities characteristics
- The Scottish sample fairly small on many surveys.
- Individual-level socio-economic characteristics – half of low income people don’t live in poor areas so SIMD can only get us so far



- Economic data which is already routinely collected, e.g. benefits
- Number of children living in households where parents'/carers' paid working hours/income levels have reduced due to COVID.
- Whether new and existing Universal Credit claimants have child dependents and, if possible, any characteristics information about the child dependents (e.g. age of child, disability of child and/or parent).
- Whether Food Bank users have child dependents and, if possible, any characteristics information about the child dependents (e.g. age of child, disability of child and/or parent).
- More evidence on the gendered nature of childcare and how child poverty interplays with mothers in the labour market. We know women are more likely to be in insecure jobs, on reduced hours contracts, they will be more impacted by Covid and the spikes in unemployment that are sure to come – with knock-on impacts on children. There are regular surveys around job quality, which includes questions on security of contract etc, which could perhaps serve as useful background to work in this area
- Effect of parent's changes in employment status due to Covid-19 on children

### **Relating to Education and childcare**

- Ideally, data that links children in the same schools with information on their home life and their teachers. It would be great to have more than test scores. Specified personality scales and other measures (e.g. Angela Duckworth's Grit scale and other scales on approaches to learning, self-confidence, depression, self-esteem, etc.). Putting measures like these into our administrative data collections would be a real help.
- For parents, information on not just socio-economic status of parents but also depressive symptoms, stress, etc. would be great. To really understand features of the school environment better, it would be great to have data that tracks teachers as well -- plus repeatedly surveys teachers with measures of implicit bias, attitudes, depression, stress, teaching styles, and backgrounds -- so that we could see the same teacher repeatedly over multiple cohorts of students. Even more ideally, it would be great to randomly assign teachers to students and students to teachers and repeat the random assignment each school year. Of course, I'm speaking of the most ideal!
- Finally, I think we really need to understand how social media interacts with all the above elements for kid's wellbeing. Something truly novel would be to gain permission to link kid's social media use (self-reports are one thing but I think we

want access to the actual usage data) into all the above. I have no idea if that's feasible, but it seems vital.

- Detailed information on children's access to pre-school education (hours/days of usage; pattern of usage; costs); children's health- and socially-related behaviour (a Glasgow HWB survey of secondary school pupils could have provided this but was disrupted by Covid)
- Time-use data; the extent to which parents followed their kids' home-school curriculum; family level income changes; measurements of skills – socio-emotional and cognitive; destinations of school leavers; measures of attainment/progress or teacher assessments post lockdown.
- Teachers are a key source of insight into the conditions and well being of children and it seems that we could draw upon what they are seeing to highlight key and emerging issues in the way that money / welfare advisors inform the EWS.
- I am particularly keen on the study of the role of non-cognitive skills for adult outcomes — understanding how COVID (and being out of school in particular) has impacted the accumulation of non-cognitive or socio-emotional skills may require following up on whatever data was collected on those in the past and continue doing so as the children age.
- In a panel dataset that allows children to be followed over time (pre and post pandemic):
  1. Detailed information on schooling during the pandemic: including physical location (home vs school), teaching style (home schooled, zoom-school, in person, etc), and if possible intensity (e.g. remote schooling, but teacher not engaged vs remote schooling with 4 contact hours per day).
  2. Individual data on the home environments of children during the pandemic, with a focus on the availability of parents to support their learning while away from school
    - Institution-level data on school closures with detailed information on the timing and type of closure (complete closure, part-time learning, open only to children of key workers, etc)
    - Detailed data on pandemic restrictions in different areas, including dates when restrictions changed and who was affected.
- Data on access to digital technology amongst children – e.g. number of PC/laptop devices per household size; access to broadband; access to mobile data; etc

### **Relating to health and wellbeing**

- Behavioural changes among children following Covid-19 (e.g. leisure time activities, exercise, socialising)

- Changes in health care access (especially among children with regular appointments for physical or mental health prior to Covid-19)
- There are recognised gaps in the data we can access. Areas where we would like more detailed data include on: in-work poverty at a city or neighbourhood level (currently only Scottish level estimates are published); accurate information on levels of food poverty; detailed information on children's access to pre-school education (hours/days of usage; pattern of usage; costs); children's health- and socially-related; more granular details on children's mental health; children's access to high quality publicly accessible greenspace
- Data on mental health, particularly for children and adolescents.
- Housing quality / type (to look at the impacts for families living in high rise flats etc.)
- Wellbeing data regarding young carers and single parents
- It is essential to have data on representative sample – so much of the information we have had to rely upon so far is very susceptible to bias. For example follow-up studies which see huge drop out in those previously identified as having mental health problems, or studies looking at SDQ only among children who have had contact with children from other families, will underestimate the impacts of COVID on population health and more importantly, inequalities.
  - Data with follow-up over the medium term – there will be cohorts of mothers/children who will have had very different experiences during a critical period in the life course - what is the longer term impact?

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