

WPC INQUIRY ON THE DISABILITY EMPLOYMENT GAP

December 2020

Evidence submitted by:

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Our evidence is primarily submitted in response to the question:

What has been the impact of the coronavirus pandemic on disabled peoples' employment rates?

In answering this question, we also consider:

Whether some disabled people have been affected more than others.

1. WHO ARE WE?

We are a team of health and labour economists who have many years of experience of research on the complex relationship between health and work. This evidence is part of a larger project funded by the Health Foundation under their *Social and Economic Value of Health* research programme. We will be updating the evidence provided in this report as further data becomes available.

From September 2021 we will be starting a 3 year research project on '*Unpacking the Disability Employment Gap*' funded by the Nuffield Foundation. This will produce a detailed statistical breakdown of the factors behind the disability employment gap, and we will be working closely with the Department for Work and Pensions, Public Health England, and third sector disability groups.

2. EVIDENCE SUMMARY

- We use **Labour Force Survey data** to show trends in the disability employment gap from the beginning of 2018 to the third quarter of 2020. We also test whether the gap has widened following the COVID-19 lockdown in March 2020.
- We do not consider just one disability employment gap, we look at **mental and physical health disability**, and also consider **different types of people** and **different types of employment**.
- The overall disability employment gap just before COVID-19 was about 29 percentage points (pp). It was wider for those with mental health disability (39pp) than physical disability (25pp). It was also wider for: men; older workers; white ethnic groups; and workers with lower levels of education. The gap varies by region, being highest in Northern Ireland and the North East of England, and lowest in the South East.
- Disabled workers, especially those with mental health disability, are more likely to work in part-time jobs, non-permanent jobs, and in jobs with zero hours contracts. They are also more likely to work in the sectors that have been hardest hit by the COVID-19 pandemic and the economic response to it.
- Given that the **Job Retention Scheme** is still in place, changes in employment rates from pre- to post-lockdown do not yet fully reflect the medium- to long-term consequences of COVID-19 and the economic response to it. To counter this, as well as looking at employment, we also look at **two alternative outcomes** that might signal future employment changes once the Job Retention Scheme ends. These are the proportions of workers who are employed but currently 'away from work', and those who are 'working less hours due to economic and other causes'.
- We find **no statistically significant changes to any disability employment gaps** when comparing change from 2019:Q3 (pre-COVID-19) to 2020:Q3 (same quarter post-COVID-19).
- **The disability gap in those who are employed but 'away from work' has increased.** This is mainly for those with physical health disability, for men and for older workers (aged 50-64).
- **A disability gap in those who are employed but 'working reduced hours due to economic and other causes' has been created.** It did not exist pre-COVID, when virtually nobody reported this status. This gap now exists for both mental and physical health disability, for men and women, for older workers and for those with higher education.
- These two latter outcomes may **signal future employment changes** once the job retention scheme ends, and hence they suggest those groups of disabled people who may be most affected.
- Further, disabled workers (and particularly those with mental health disability) are not distributed evenly across industrial sectors. The **preponderance of workers with mental health disability in the hardest hit sectors** means that they are particularly vulnerable to job losses caused by COVID-19 and the economic response to it. This means that the mental health disability employment gap is likely to widen in the future as the economy adjusts and many jobs in these sectors are permanently lost.
- We have taken account of differences between people and types of work by dealing with one factor at a time. However, in the 'real world' these factors tend to be correlated, so disabled people deal with **multiple layers of disadvantage**. This intersectionality means that on average disabled people are more likely to suffer from the adverse labour market consequences of COVID-19 than non-disabled people. **Effective policy responses need to be mindful of these interdependences** and ensure they target multiple layers of disadvantage.

3. WHERE DOES OUR EVIDENCE COME FROM?

Our evidence is derived from the Labour Force Survey (LFS). This survey provides the official UK measures of employment and unemployment, and it is the data source used by Office for National Statistics to produce their regular updates on disability and employment.¹ The information in the LFS is self-reported by the survey respondents. We use quarterly LFS data from 2018:Q1 to 2020:Q3; this last quarter covers the period July to September 2020, and is the most recent data available at the evidence submission date. Each quarter contains around 37,000 households (88,000 individuals).

3.1. Evidence format

- Using LFS data we compare outcomes for disabled vs. non-disabled people, using a definition of disability consistent with the Equality Act 2010.²
- We distinguish between people whose primary disability is physical and those whose primary disability is a mental health problem.
- We distinguish people by gender, age group, educational attainment, broad ethnic group and region of residence.
- As well as the overall disability employment gap we also consider different types of work including: full-time and part-time employment, zero-hours contracts, non-permanent contracts, shutdown sectors and key workers.
- It is important to stress that as the Job Retention Scheme has been extended to April 2021, it is too early to see the full extent of any medium- to long-term effects on employment, either for disabled or non-disabled people, since many workers will be subject to the furlough scheme.
- As the LFS does not provide any explicit information on whether or not workers are furloughed, we also consider workers who are 'away from work' and those who 'worked less hours due to economic and other causes'. These two outcomes may be important signals of future employment changes.

The evidence is presented in two forms.

- Line graphs (Figures 1 to 21) show outcomes for disabled vs. non-disabled people from 2018:Q1 to 2020:Q3, illustrating any trends that were present prior to the COVID-19 pandemic, and whether they have changed since the first lockdown. The shading in the graphs represents confidence intervals, and the vertical line at 2020:Q1 shows when lockdown was first imposed (23 March 2020).³
- Simple 'difference-in-difference' tests (Table 1) compare the change in outcomes for disabled and non-disabled people from 2019:Q3 (before COVID-19 lockdown) to 2020:Q3 (after). The tests show whether the change in the outcome gap between these two points is statistically significant: i.e. did outcomes in comparable quarters for disabled people change significantly more than outcomes for non-disabled people – or in other words, has the disability gap widened?⁴

¹ House of Commons Briefing Paper 7540, 2020. <https://commonslibrary.parliament.uk/research-briefings/cbp-7540/>

² More detail on the variable definitions and LFS questions used is provided in the Appendix.

³ The LFS data are being released quarterly, so the figures plot rates at quarterly intervals, which are joined by linear trends. However, in reality, it is likely that the trends evolved in non-linear ways over time.

⁴ We present difference-in-difference tests here as a simple descriptive tool. We are not claiming to be identifying causal effects of the overall impact of policy responses to Covid-19.

4. BACKGROUND

The overall gap in employment rates between disabled and non-disabled people just before the COVID-19 outbreak (2019:Q3) was around 28 percentage points (pp). At this time there were 7.7m disabled people of working age in Great Britain, of whom 54% (4.1m) were employed. The employment rate for non-disabled people was 82%.⁵ While these figures are for Great Britain, in our analysis that follows below we use data for the United Kingdom as a whole, where the overall disability employment gap is around 29pp.

There is not just one disability employment gap. The gap varies by different types of people and also by different types of work. For example, for people whose primary disability is physical the employment gap is about 25pp, but it is wider for those whose primary disability is a mental health problem, at around 39pp (Figure 1 and Table 1). Also the disability employment gap is wider for: men than women (Figure 10); older workers than for younger workers (Figure 13); white ethnic groups than black, Asian and minority ethnic (BAME) groups (Figure 19); and people with lower levels of education (Figure 16). It also varies by region of the UK, being highest in Northern Ireland and the North East of England, and lowest in the South East (Figure 21). Disabled workers, especially those with mental health disability, are more likely to work in part-time jobs (Figure 4), non-permanent jobs (Figure 5), and in jobs with zero hours contracts (Figure 6). They are also more likely to work in the sectors that have been hardest hit by the COVID-19 pandemic and the economic response to it (Figures 7, 8a, 8b).

In the evidence we present here we take account of these differences between people and between types of work, dealing with one factor at a time. However, it is important to stress that in the 'real world' these factors tend to be correlated, so disabled people deal with multiple layers of disadvantage. This intersectionality means that on average disabled people are more likely to suffer from the adverse labour market consequences of COVID-19 than non-disabled people. It also means that effective policy responses need to be mindful of these interdependences and ensure they target multiple layers of disadvantage.

An important point to bear in mind when considering this evidence is that levels of disability in the working age population are rising over time; this is especially the case for mental health disability. Data from the Family Resources Survey suggests that 19% of the working age population were disabled in 2018/19, and this had grown from 15% in 2010/11. Most of this growth is due to increased prevalence of mental health problems. COVID-19 itself is of course contributing to this; our LFS analysis suggests that the prevalence of long-term mental health problems in the working age population increased from 11.0% before lockdown to 12.5% in the latest quarter. Banks and Xu (2020) showed that early in lockdown mental health in the population as whole was worsening, and that those who started with worse mental health were also seeing the worst deterioration, so health inequality was increasing.⁶

A vast amount of research and grey literature has emerged in response to COVID-19. However there is virtually nothing that deals specifically with the labour market experiences of disabled people during the pandemic.⁷ The evidence we present below attempts to fill that gap in knowledge. Prior to the COVID-19 pandemic the disability employment gap was narrowing, largely due to an increasing employment rate among disabled people. The evidence we present below suggests that this narrowing has slowed, but we find no significant widening of the disability employment gap since the first lockdown in March 2020. We do however find that gaps in some other related outcomes have widened, and this may signal future employment changes when the Job Retention Scheme ends.

⁵ ONS, Labour Market Bulletin, Table A08.

www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/datasets/labourmarketstatusofdisabledpeoplea08

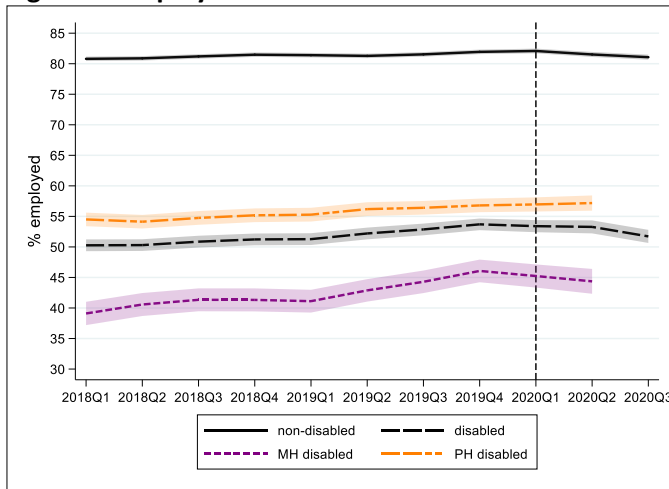
⁶ Banks, J., Xu, X., 2020. The Mental Health Effects of the First Two Months of Lockdown and Social Distancing during the Covid-19 Pandemic in the UK. IFS Working Paper W20/16

⁷ One relevant report is by Citizens advice (2020) and we discuss this in Section 6 below.

5. LINE GRAPHS SHOWING TRENDS FROM 2018:Q1 to 2020:Q3.

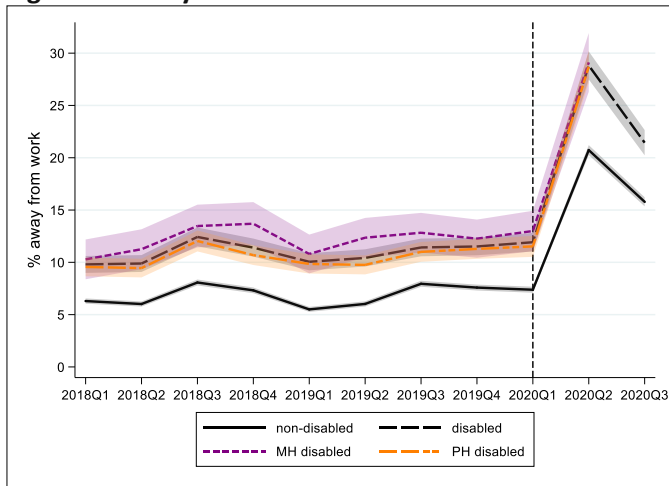
5.1. OVERALL EMPLOYMENT RATES

Figure 1: Employment rates



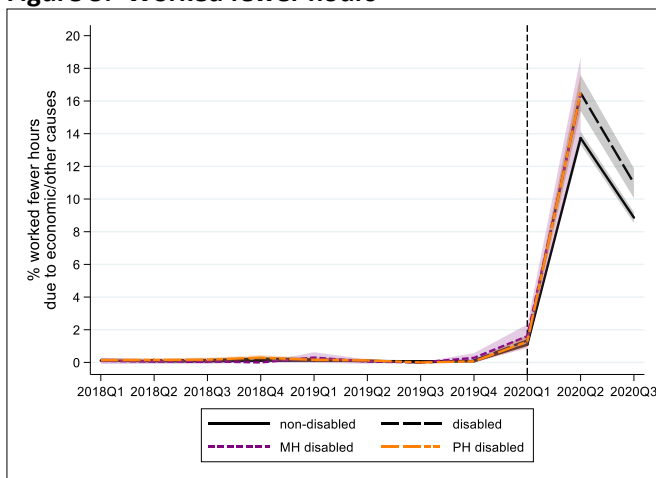
The disability employment gap is very apparent, and is virtually the same at the beginning and end of the period. The pre-COVID slight narrowing of the gap is evident, with some indication that the employment rate of disabled people is beginning to fall after 2020:Q2 thus widening the gap again. The employment rate of those with mental health disability is much lower than for those with physical health disability. The former was on a steeper increasing trend pre-COVID but appears to have been falling after 2019:Q4; a trend that is not apparent for those with a physical disability. The lines for physical and mental health disability end at 2020:Q2 because the data on *main* health problem are missing from the 2020:Q3 LFS release.

Figure 2: 'Away from work'



This graph shows workers who are employed but are away from work in the reference week. Throughout the period disabled workers (especially those with mental health disability) are more likely to be 'away from work' than non-disabled workers, and (especially pre-COVID) this will be due to a number of reasons, including sickness absence. Note that for all groups there is a slight upward trend over time. The graph clearly shows the steep jump between the first 2 quarters of 2020 (presumably due to the job retention scheme), and the subsequent fall in 2020:Q3 as the economy began to open up again. Both the increase and decrease are slightly steeper for disabled workers. Lockdown seems to have increased the gap between disabled and non-disabled workers.

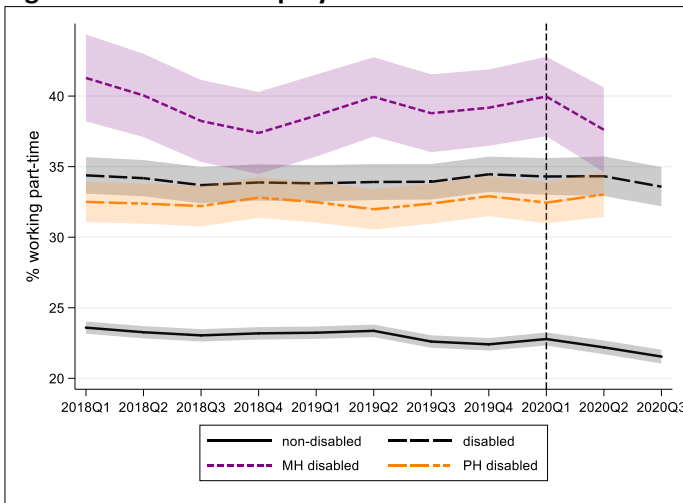
Figure 3: 'Worked fewer hours'



This graph shows workers who are employed but 'worked fewer hours than usual in the reference week due to economic and other causes'. Prior to COVID-19 this was virtually zero for all groups. It increased in 2020:Q1 (which includes the first week of lockdown) and then steeply in 2020:Q2, with some recovery in 2020:Q3. In this last quarter there are still more disabled (11%) than non-disabled people (9%) who worked fewer hours, and this is a gap that did not exist pre-COVID19. Some of these workers may be furloughed and earning 80% (or more) of their usual income; others may be working fewer hours with the consequent reduction in income.

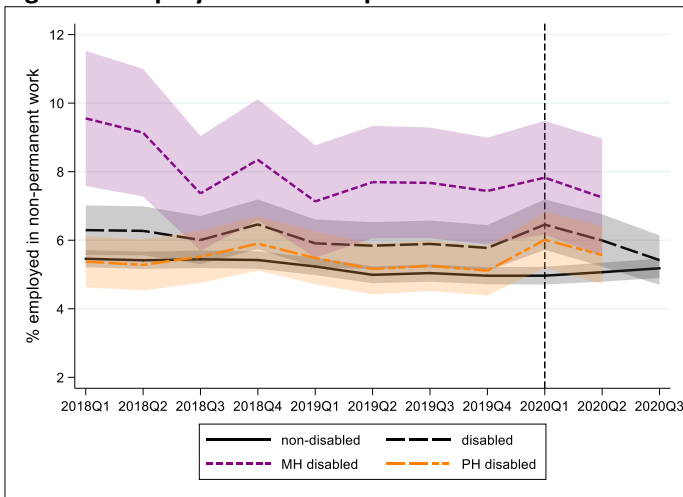
5.2 DIFFERENT TYPES OF WORK

Figure 4: Part-time employment



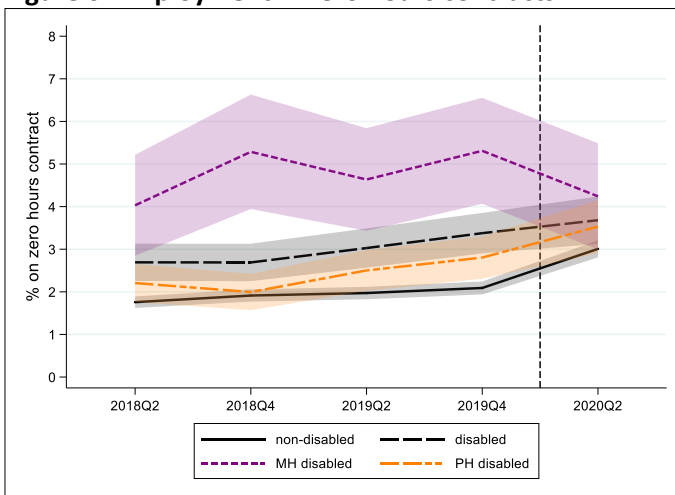
A higher proportion of disabled workers, than non-disabled workers, are employed part-time. The rate of part-time employment for disabled workers has held fairly steady at around 34% throughout the period, whereas for non-disabled workers it has fallen slightly, so the gap is widening. The rate of part-time employment is particularly high for those with mental health disability. There are indications that the rate of part-time employment has fallen for all groups in 2020, except for those whose primary disability is physical. Part-time employment may be preferred by some disabled workers as a way of managing disability; however working fewer hours clearly also means reduced income for most workers.

Figure 5: Employment in non-permanent work



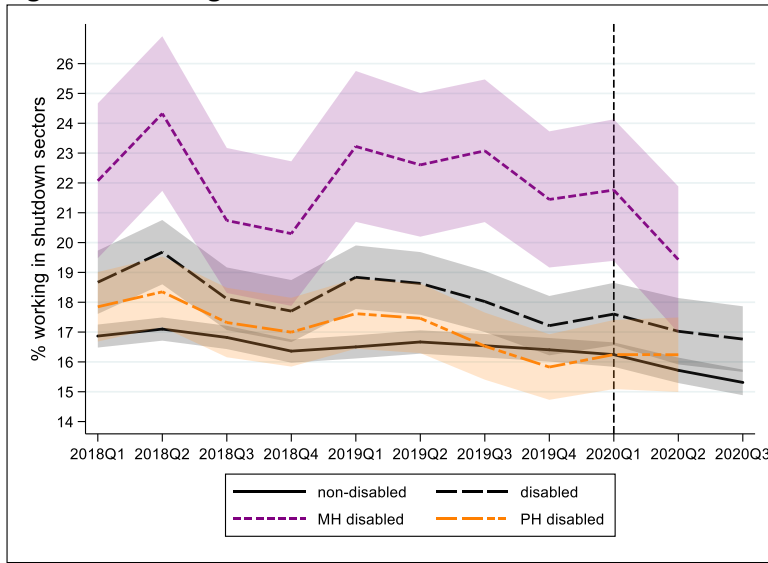
A higher proportion of disabled workers are employed in non-permanent contracts. This is largely due to people with mental health disability being employed on these contracts. The rate of employment in non-permanent contracts has been falling for disabled people since 2020:Q1, whereas it is rising for non-disabled people; therefore the gap is closing. This is not necessarily a positive outcome, because it may be that disabled people are more likely to be moving out of these jobs and into unemployment or inactivity, whereas non-disabled people are more likely to be losing 'permanent' jobs and moving into non-permanent employment. It is not clear why these trends go in opposite directions, but if confirmed they would merit further research, for example about the other differences in the jobs held by disabled and non-disabled people.

Figure 6: Employment in zero hours contracts



A higher proportion of disabled workers than non-disabled workers are employed on zero-hours contracts, which is mainly due to people with mental health disability being employed on these contracts. Some of this is due to the preponderance of this type of contract in certain sectors like retail and hospitality. The rate of employment in zero-hours contracts has been rising for all groups (except those with mental health problems). The gaps between disabled and non-disabled people seem to be closing in the more recent quarters.

Figure 7: Working in shutdown sectors



Throughout the period a higher proportion of disabled, than non-disabled, people work in the sectors that were shut down due to the COVID-19 pandemic.⁸ This is particularly true for those with mental health disability. Employment rates in these sectors are falling for both non-disabled and disabled people and this latter is entirely due to the fall in numbers of people with mental health disability working in these jobs. Given the economic situation we assume that these workers are more likely to be becoming unemployed or leaving the labour market altogether than finding alternative employment in other areas.

This unequal distribution of employment by sector is likely to have long-term consequences that could worsen the disability employment gap. The shutdown sectors are dominated by hospitality and retail jobs (with a high occurrence of part-time and flexible work) and some of these firms will not survive the economic consequences of lockdown, meaning that these jobs will not be available in future. The prevalence of people with mental health disability in these sectors means that these workers are more vulnerable to the employment consequences of the pandemic than both non-disabled people and people whose disability is physical.

Figures 8a and 8b below illustrate the unequal distribution of disabled workers by sector, just before the COVID-19 outbreak. Relatively high proportions of people with mental health disability work in accommodation and food services, and arts, entertainment and recreation. These are the sectors that have been hit the hardest by COVID-19, and are least likely to make a full recovery, meaning that permanent job loss will result. In contrast workers with physical health disability are more evenly distributed between shutdown and non-shutdown sectors. Indeed the highest proportions of workers with physical disability are in health and social care, and also water supply and waste management. These are sectors where workers are likely to be classified as key-workers; demand is more stable and hence jobs more secure in the long-term. However, workers in these jobs are exposed to greater COVID-19 health risks.

⁸ See Appendix for definition of shutdown sectors.

Figure 8a: Mental Health Disability by Sector

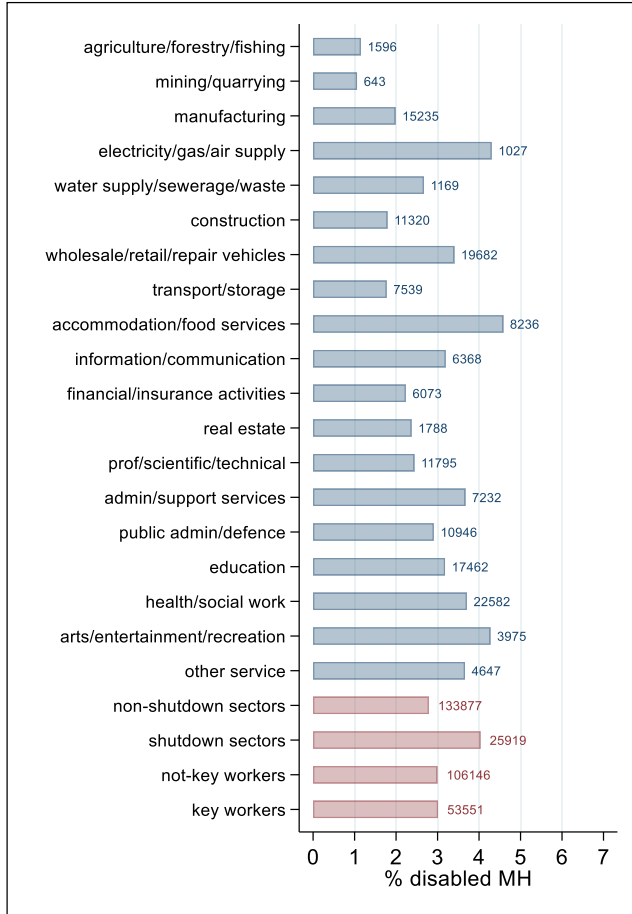
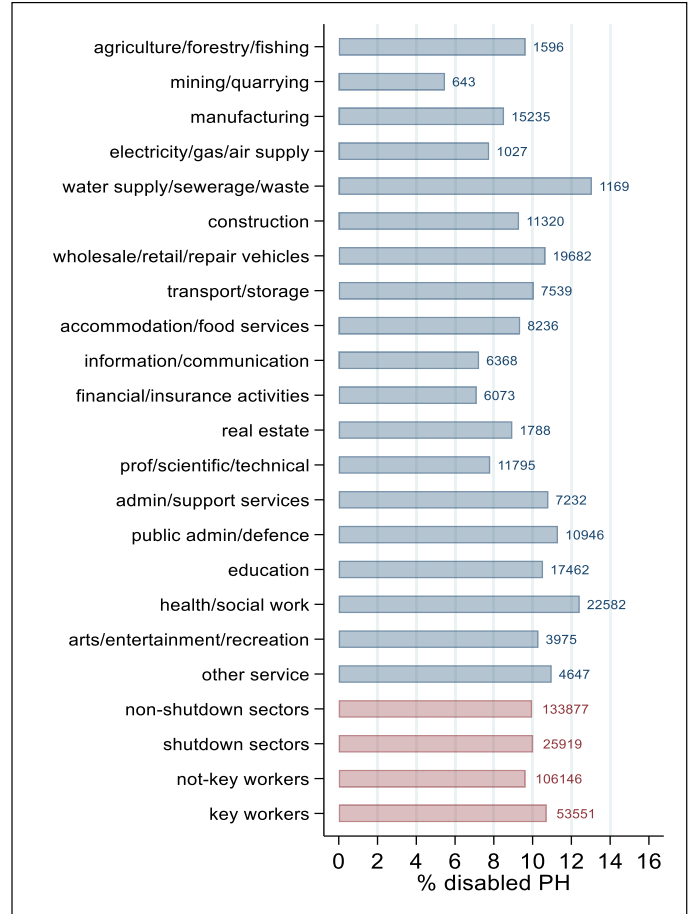
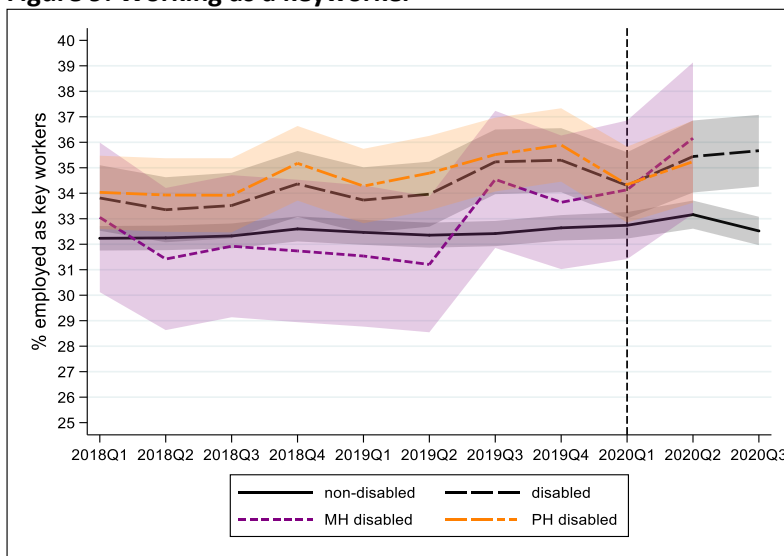


Figure 8b: Physical Health Disability by Sector



Note: The figures at the end of each bar show the number of workers in the LFS in each sector; the 'x' axis shows the proportion of those workers with a disability.

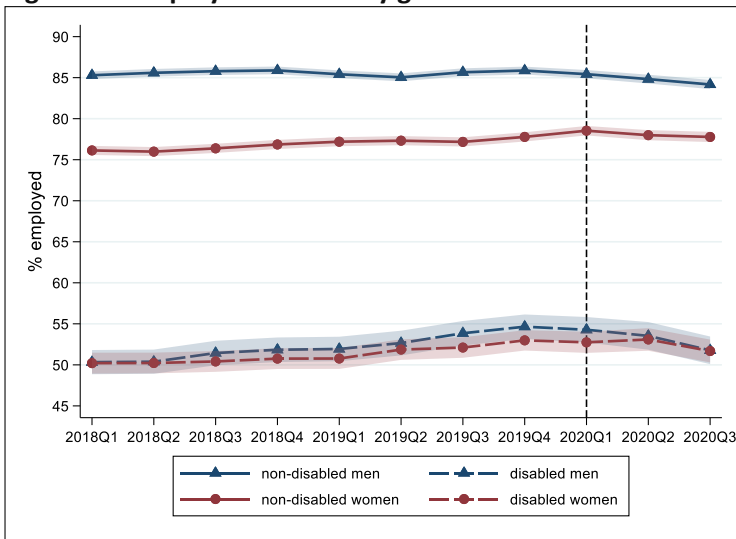
Figure 9: Working as a keyworker



Disabled workers are more likely to be employed as key-workers (although the wide confidence intervals suggests this may not be significant). Workers with a physical health disability are more likely to be key-workers than those with a mental health disability; and this may have protected their employment levels during lockdown to some extent. Figure 8b suggests that this is mainly due to their employment in the health and social care sector. Although note the overlapping confidence intervals, which suggest that these differences may not be significant.

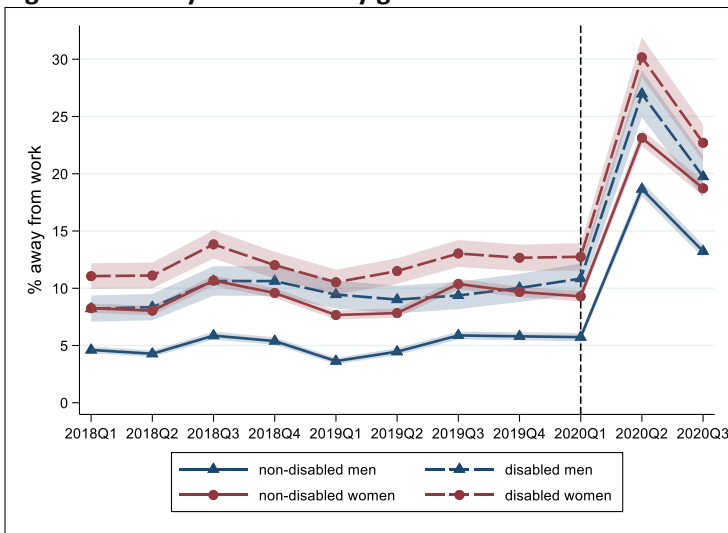
5.3 DIFFERENT TYPES OF PEOPLE

Figure 10: Employment rates by gender



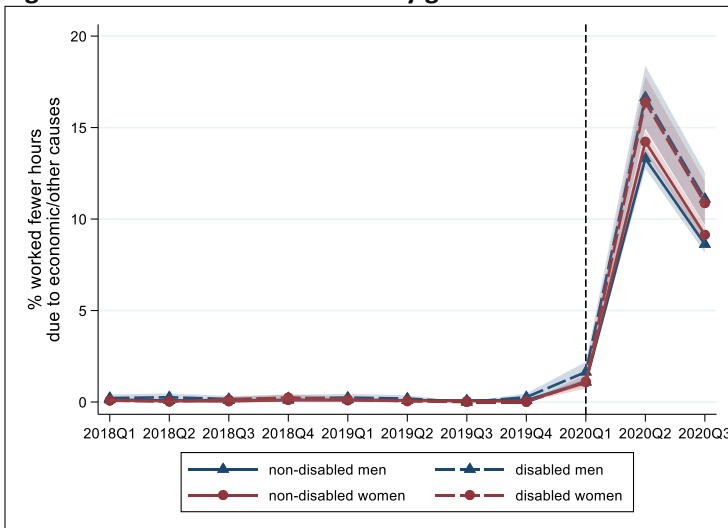
The employment rates of both disabled men and women were on a slightly upward trend prior to COVID-19, and there is some indication of a reversal from 2020:Q2, but COVID-19 seems to have had little effect on the disability employment gap by gender. Interestingly the employment rates of disabled men and women are very similar, unlike for non-disabled people, where male employment rates are about 10pp higher than women's.

Figure 11: Away from work by gender



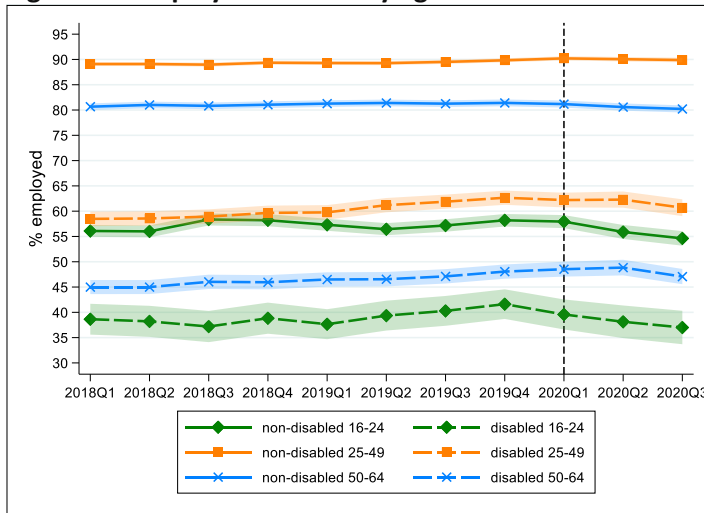
Throughout the period disabled women are more likely to be 'away from work' than non-disabled women, and also more likely than both disabled and non-disabled men. Lockdown seems to have increased the disability gap in this outcome for both men and women.

Figure 12: Worked fewer hours by gender



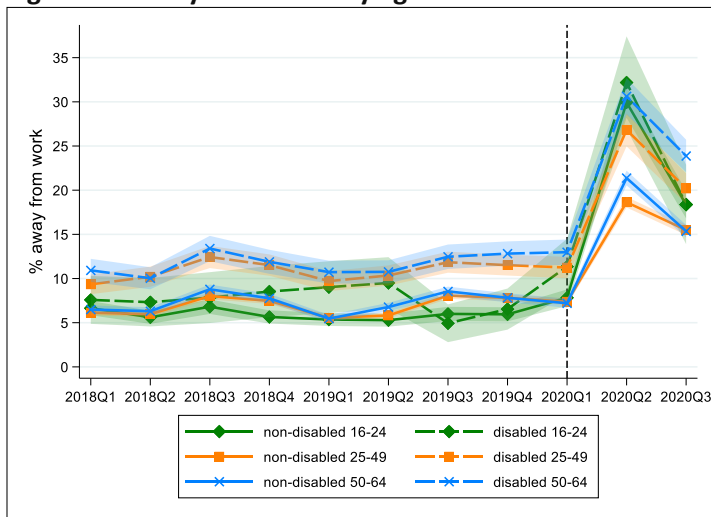
As for all workers, COVID-19 has resulted in a disability gap in 'reduced hours' for both men and women, which was not present prior to lockdown. The proportions of disabled men and women working fewer hours since lockdown is very similar.

Figure 13: Employment rates by age



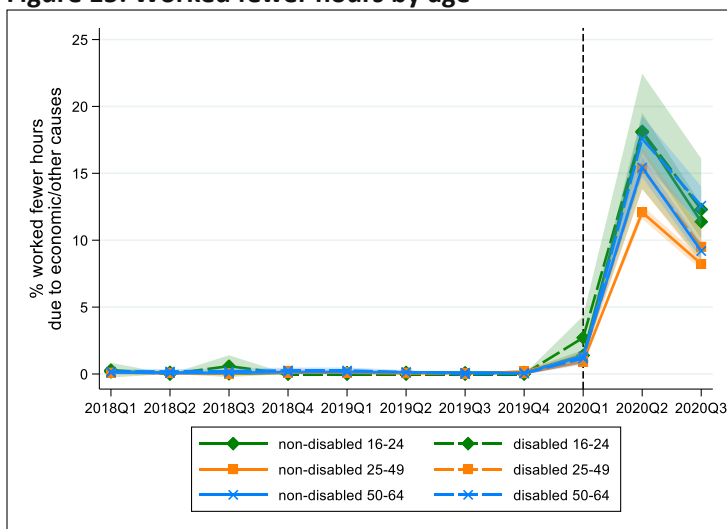
As for non-disabled people, the employment rates of disabled people vary by age and are highest for the mid-age group (25-49), and lowest for the youngest age group (16-24). Employment rates have dropped for all young workers since 2020:Q1, with some indication that this fall started earlier for younger disabled workers. No real effect of the pandemic on the disability employment gaps by age is apparent over the period.

Figure 14: Away from work by age



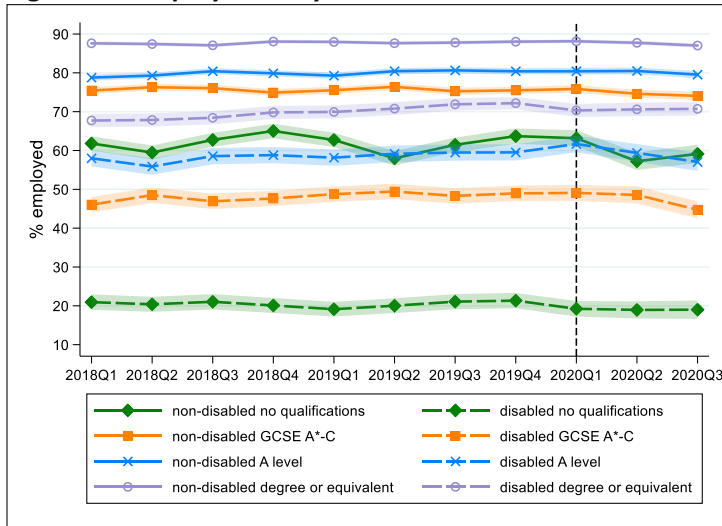
Before COVID-19 older disabled workers (age 50-64) were the most likely to be away from work. By 2020:2 they had been overtaken by younger disabled workers (aged 16-24); however note the overlapping confidence intervals, which suggest that these differences may be not significant. The increase in younger disabled workers away from work was already evident by 2020:Q1 which included the first week of lockdown. This may suggest that they are among the first groups to be furloughed. By 2020:Q3 the proportion of younger workers away from work had fallen steeply, and was the same for both disabled and non-disabled workers. For older workers the gap in this outcome between disabled and non-disabled people appears to have widened since the initial lockdown.

Figure 15: Worked fewer hours by age



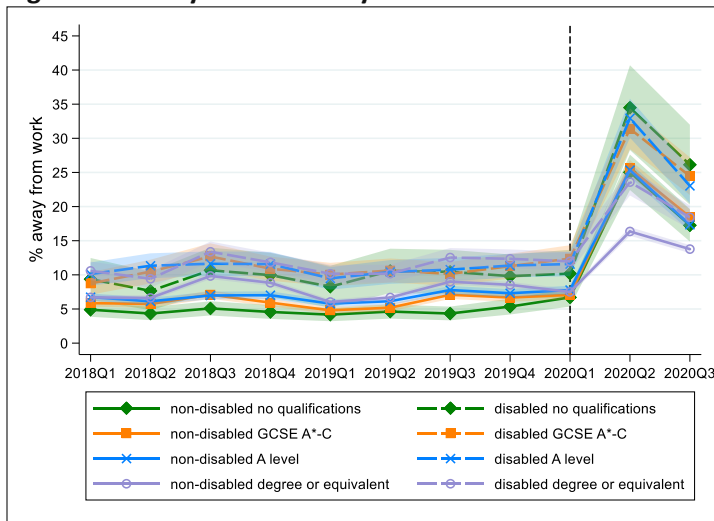
From a base of virtually zero before COVID-19 the increase in the proportion of younger disabled workers working fewer hours was already apparent by 2020:Q1, suggesting they are the first group to experience reduction in working hours due to the lockdown. Young workers generally are more likely to be working fewer hours since lockdown and there is little gap between disabled and non-disabled workers in this age groups. The largest gap is for older workers, and this gap did not exist at all before COVID-19.

Figure 16: Employment by education



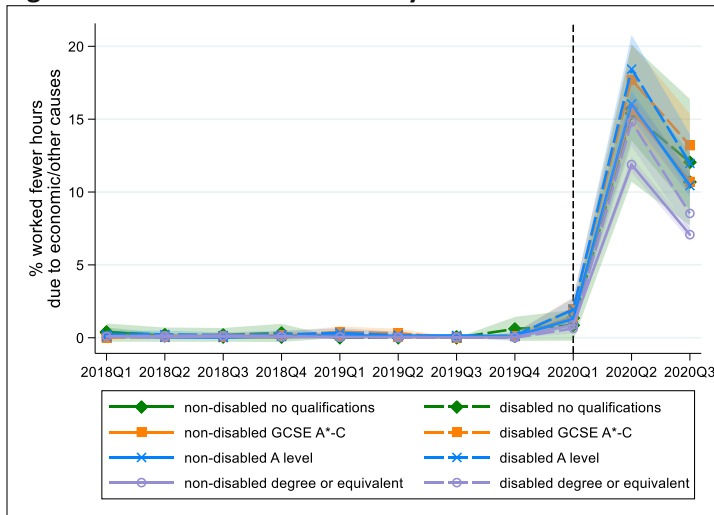
A clear gradient exists in employment rates by educational attainment for both disabled and non-disabled workers. Disabled workers with higher education have a higher employment rate than non-disabled workers with no qualification. COVID-19 does not seem to have affected the disability employment gaps over this period, but the largest falls in the employment rate seem to be for disabled people educated to GCSE or A level.

Figure 17: Away from work by education



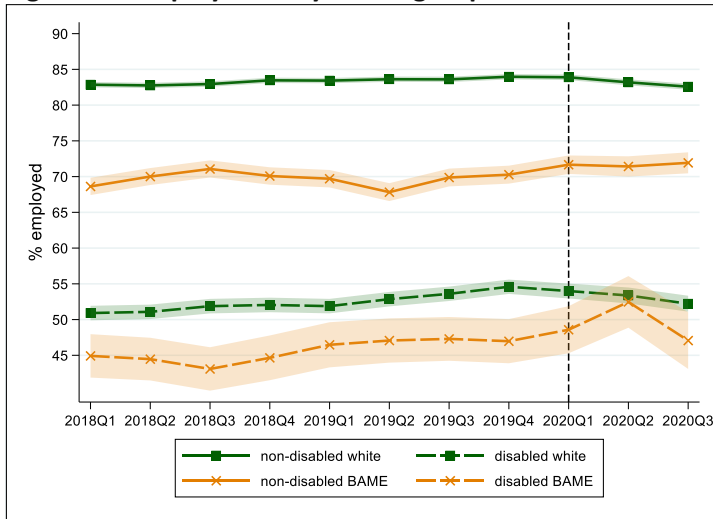
The confidence intervals on this graph (represented by the shading) are largely overlapping suggesting few significant differences at all between groups. It does appear that before COVID-19 non-disabled workers with no qualifications were the least likely to be away from work; by 2020:2 it was non-disabled workers with higher education.

Figure 18: Worked fewer hours by education



Again the confidence intervals are largely overlapping. Disability gaps in 'reduced hours' exist for all levels of education, and these were not present pre-COVID.

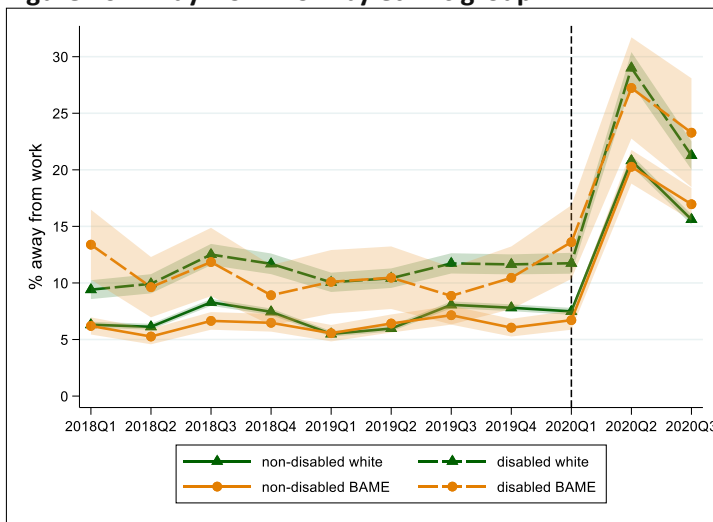
Figure 19: Employment by ethnic group



Sample sizes in the LFS mean that we can only meaningfully distinguish the very broad ethnic categories of white vs. BAME.

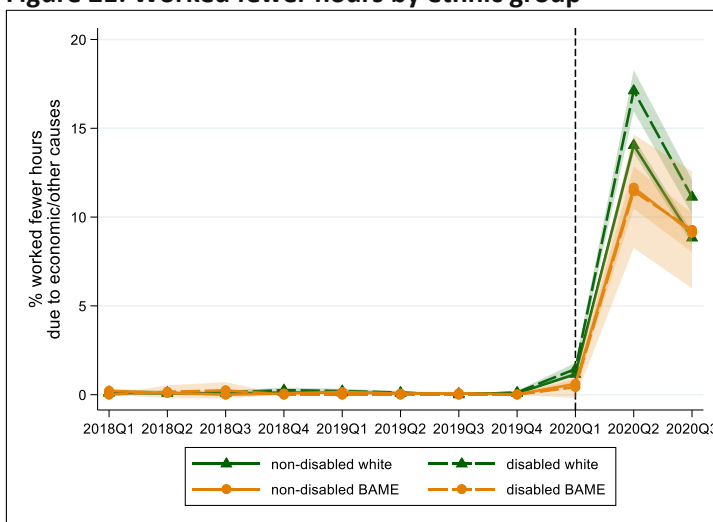
BAME workers with a disability have the lowest employment rate and while the gap does not seem to have changed very much over the entire period, there is a big fall in the employment rate of this group between the second and third quarters of 2020, which may suggest that they are among the first group of workers to permanently lose their jobs, but note the wide confidence intervals.

Figure 20: Away from work by ethnic group



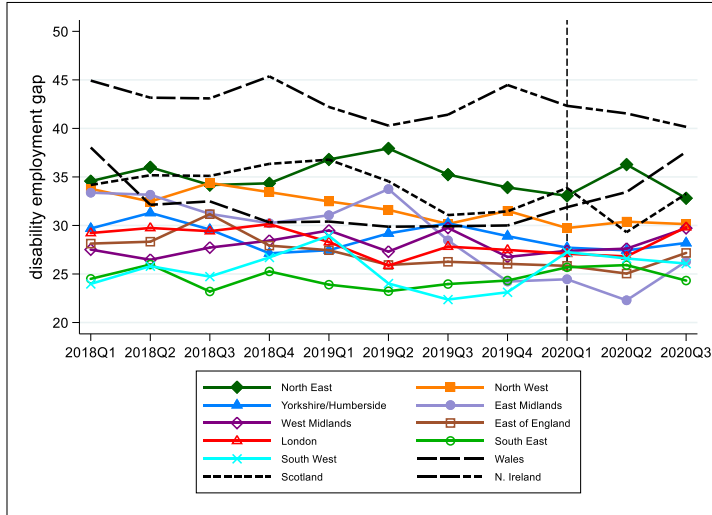
There does not appear to be any difference in the trend in this outcome by ethnic group post-COVID, and the overall disability gap by ethnic group does not really seem to have changed throughout the whole period.

Figure 21: Worked fewer hours by ethnic group



White workers with a disability are most likely to have worked reduced hours in the post-lockdown period, and there is a disability gap in this outcome for white workers, which does not seem to be there for BAME workers.

Figure 21: Disability employment gap by region



The disability employment gap varies enormously by region. It is largest in Northern Ireland, where it is trended downward over time but is still 40pp in 2020:Q3. In contrast it is around 25pp in the South East of England. Within England the gap is largest in the North East and North West. There is no obvious systematic change to any of these gaps following lockdown. It is important to note that levels of both employment and disability vary by region, but are correlated. Areas of high unemployment also tend to have high disability prevalence. These areas are likely to be particularly adversely affected by COVID-19 and the economic response to it.

6. TESTS FOR WIDENING OF THE DISABILITY OUTCOME GAPS

The figures in Table 1 compare changes in outcomes for disabled and non-disabled people from 2019:Q3 (before the first lockdown) to 2020:Q3 (after). We compare the same quarter in each year to remove seasonal differences. The shaded areas denote whether the differences in these changes (the difference-in-difference) is statistically significant at the 5% level. If the difference is significant it signals that the disability gap in the outcome has widened. As in the line graphs, we look at 3 outcomes: the employment rate, the proportion of people who are employed but away from work, and the proportion of people working reduced hours.

Looking at the first two rows of the employment columns (1), the employment rate of non-disabled people fell very slightly (from 81.5% to 81.1%) in the 12 months from 2019:Q3 to 2020:Q3. The employment rate of disabled people fell by a larger amount (from 52.9% to 51.7%). The difference between these changes is not statistically significant, so these cells are not shaded. Looking down the employment column none of the differences are statically significantly different from zero, so in no case was the change in employment for disabled people statistically different to the change for non-disabled people; suggesting that the disability gap has not widened significantly for any group. However, it is very important to stress that these data are too early to identify any real medium- to long-term employment effects of COVID-19 because the Job Retention Scheme is still in operation.

In contrast, the second columns (2) show changes in the percentage of people who were away from work in the reference week. Here we do see some significant widening of the gap between disabled and non-disabled people. The share of non-disabled people in this category increased from 7.9% to 15.8% over the period, but that of disabled people grew more (from 11.4% to 21.4%) and this difference is statistically significant. Hence, the disability gap in being 'away from work' (which already existed before) has grown following the COVID-19 lockdown. The same is true in the first two rows of column (3) which shows the shares of people who worked fewer hours than usual in the reference week. These shares are virtually zero for both groups in 2019:Q3 but by 2020:Q3 had risen to 8.9% for non-disabled workers and 11% for disabled workers. Again these changes are significantly different from each other, so there is now a disability gap in 'reduced hours', which did not exist before the COVID-19 lockdown.

The third and fourth rows in columns (2) and (3) distinguish between people whose primary disability is mental or physical.⁹ For physical disability the increases in shares of disabled people both 'away from work' and 'working reduced hours' are greater than the equivalent increase for non-disabled people; both gaps have increased. For mental health disability, only the widening of the 'reduced hours' gap is significant.

Reading down the columns we can see how the gaps change for different types of people classified by gender, age and educational attainment. In column (2) we can see that the disability gap in being 'away from work' has significantly widened for men, but not women. This gap has also significantly widened for older workers (aged 50-64) but not for the younger age groups. The figures in column (3) show that the disability gap in working 'reduced hours' has significantly widened for men and women. It has also widened for older workers and for workers who have higher education.

Despite the fact that we do not see any widening of the disability employment gap since the first lockdown (largely due to the Job Retention Scheme), the significant widening of the gap in these other outcomes may signal employment changes to come. These findings are in line with a report from Citizens Advice (2020)¹⁰, which argued that disabled people are at greater risk of redundancy than non-disabled people, both because of their concentration in sectors that have been hardest hit, as well as unfair and discriminatory practices by employers.

⁹ The variable indicating which is the *main* health problem was unfortunately missing from the last quarter of the LFS data (2020:Q3), so these figures show the changes in shares from 2019:Q2 to 2020:Q2.

¹⁰ Citizens Advice (2020) An Unequal Crisis: Why Workers Need Better Enforcement of their Rights. www.citizensadvice.org.uk/about-us/policy/policy-research-topics/work-policy-research-surveys-and-consultation-responses/work-policy-research/an-unequal-crisis/

They also point out that some disabled people may have chosen to be furloughed or stay away from work because their health status makes them more vulnerable to the consequences of contracting coronavirus, but that this may have longer term consequences.

Table 1: 'Difference in difference' tests for employment outcomes 2019:Q3 to 2020:Q3

	(1)		(2)		(3)	
	% employed		% away from work		% worked fewer hours	
	2019:Q3	2020:Q3	2019:Q3	2020:Q3	2019:Q3	2020:Q3
non-disabled	81.5	81.1	7.9	15.8	0.1	8.9
disabled	52.9	51.7	11.4	21.4	0	11
disabled - mental health*	42.9	44.4	12.4	29.1	0.1	16.4
disabled - physical health*	56.2	57.2	9.8	28.7	0.1	16.5
non-disabled men	85.7	84.2	5.9	13.2	0.1	8.6
disabled men	53.9	51.8	9.4	19.8	0	11.1
non-disabled women	77.2	77.8	10.4	18.7	0.1	9.1
disabled women	52.1	51.7	13	22.7	0	10.9
non-disabled 16-24	57.2	54.6	6	18.4	0.1	11.4
disabled 16-24	40.3	37	4.9	18.4	0	12.3
non-disabled 25-49	89.5	89.9	8.1	15.5	0.1	8.2
disabled 25-49	61.9	60.7	11.8	20.2	0	9.5
non-disabled 50-64	81.3	80.2	8.5	15.3	0.1	9.2
disabled 50-64	47.1	47.1	12.5	23.9	0	12.6
non-disabled no quals.	61.5	59.1	4.3	17.3	0.1	10.7
disabled no qualifications	21.1	19	10.4	26.1	0	12
non-disabled GCSE A*-C	75.2	74.1	7.1	18.5	0	10.7
disabled GCSE A*-C	48.3	44.7	10.1	24.5	0	13.2
non-disabled A level	80.6	79.5	7.8	17.3	0.2	10.4
disabled A level	59.5	57.1	10.8	23	0	12
non-disabled higher educ.	87.8	87	9	13.8	0	7.1
disabled higher educ.	71.9	70.7	12.5	18.4	0	8.5

*Figures for mental and physical disability compares changes from 2019:Q2 to 2020:Q2, as the 'main' health problem variable is missing from LFS 2020:Q3. The comparable employment rates for all disabled (non-disabled) people in were 52.2% (81.35) in 2019:Q2 and 53.3% (81.5%) in 2020:Q2.

7. CONCLUSION

We have used **Labour Force Survey data** to show trends in the disability employment gap from the beginning of 2018 to the third quarter of 2020, and to test whether the gap has widened following the COVID-19 lockdown in March 2020. Rather than simply look at the overall disability employment gap, we have also considered **mental and physical health disability**, as well as **different types of people** and **different types of employment**.

Our evidence shows no statistically significant changes to any disability employment gaps when comparing change from 2019:Q3 to 2020:Q3. However, given that the Job Retention Scheme is still in place, these changes will not yet fully reflect the medium- to long-term consequences of COVID-19. To counter this we also look at two alternative outcomes that might signal future employment changes once the Job Retention Scheme ends. We find that the disability gap in those who are employed but 'away from work' has increased. This is mainly for those with physical health disability, for men and for older workers (aged 50-64). We also find that a disability gap in those who are employed but 'working reduced hours due to economic and other causes' has been created. It did not exist pre-COVID, when virtually nobody reported this status. This gap now exists for both mental and physical health disability, for men and women, for older workers and for those with higher education.

For workers currently away from work or working reduced hours it is not clear that work will ever return to the pre-COVID level, and it seems likely that some of these jobs will disappear as the economy adjusts. Hence, these two outcomes may signal future employment changes once the job retention scheme ends, and our evidence reveals those groups of disabled people who may be most affected.

Further, disabled workers (and particularly those with mental health disability) are not distributed evenly across industrial sectors. The preponderance of workers with mental health disability in the hardest hit sectors means that they are particularly vulnerable to job losses caused by COVID-19 and the economic response to it. This means that the mental health disability employment gap is likely to widen in the future as the economy adjusts and many jobs in these sectors are permanently lost.

In our analysis we have taken account of differences between people and types of work by dealing with one factor at a time. However, in the 'real world' these factors tend to be correlated, so disabled people deal with multiple layers of disadvantage. This intersectionality means that on average disabled people are more likely to suffer from the adverse labour market consequences of COVID-19 than non-disabled people. Effective policy responses need to be mindful of these interdependences and ensure they target multiple layers of disadvantage.

APPENDIX: VARIABLE DEFINITIONS

Disabled status

We define being **disabled according to the Equality Act 2010** (i.e. if the respondent reports having any physical or mental health conditions or illnesses lasting or expecting to last 12 months or more AND they report that the condition/illness reduces their ability to carry out day-to-day activities). MH/PH disabled status is based on reported condition/illness. Individuals are asked if they have one or more of the following:

- (1) Depression, bad nerves or anxiety
- (2) Autism (including Autism Spectrum Condition, Asperger syndrome)
- (3) Severe or specific learning difficulties (mental handicap)
- (4) Mental illness, or suffer from phobia, panics or other nervous disorders
- (5) Problems or disabilities (including arthritis or rheumatism) connected with...arms or hands
- (6) Problems or disabilities (including arthritis or rheumatism) connected with....legs or feet
- (7) Problems or disabilities (including arthritis or rheumatism) connected with....back or neck
- (8) Difficulty in seeing (while wearing spectacles or contact lenses)
- (9) Difficulty in hearing
- (10) A speech impediment
- (11) Severe disfigurement, skin conditions, allergies
- (12) Chest or breathing problems, asthma, bronchitis
- (13) Heart, blood pressure or blood circulation problems
- (14) Stomach, liver kidney or digestive problems
- (15) Diabetes
- (16) Epilepsy
- (17) Progressive illness not included elsewhere (e.g. cancer, multiple sclerosis, symptomatic HIV, Parkinson's disease, muscular dystrophy)
- (18) Other health problems or disabilities

This question is asked to all respondents of working age who said that health or disability problems limit the kind of paid work they can do, and who indicated that they have a health problem lasting, or expected to last, more than one year. Respondents who report multiple conditions/illnesses are then asked which is their main health problem/disability? Respondents are classified as **mental health disabled** if they report any of the health problems (1) through (4) as their only or main health problem, and **physical health disabled** if they report any of the problems (5) through (18) as their only or main health problem. Although data related to the main health problem is collected in all quarters, it is currently unavailable for 2020:Q3.

Employment status

Employment status is based on the International Labour Organisation (ILO) definitions of economic activity:

- (1) Employee
- (2) Self-employed
- (3) Government employment & training programmes
- (4) Unpaid family worker
- (5) Unemployed
- (6) Inactive - seeking, unavailable (student, looking after family/home, temporarily sick or injured, long-term sick or disabled, other reason, no reason given)
- (7) Inactive - not seeking, would like to work (waiting results of job application, student, looking after family/home, temporarily sick or injured, long term sick or disabled, believes no jobs available, not yet started looking, does not need or want employment, retired from paid work, other or no reason)
- (8) Inactive - not seeking, does not want to work (categories as in (7)).

An individual is classified as **employed** if they are either an employee or self-employed. The employment rate used in this report is defined as the percentage of people who are employed out of all respondents aged 16-64.

Away from work

Respondents are considered to be away from work if they are in paid work but report not working in the reference week due to being temporarily away from work.

Worked fewer hours

Individuals who worked fewer hours than usual in the reference week are asked to provide a reason for this, which includes:

- (1) Number of hours worked/overtime varies
- (2) Bank holiday
- (3) Maternity
- (4) Paternity leave
- (5) Adoption leave
- (6) Shared parental leave
- (7) Unpaid parental leave
- (8) Other leave/holiday
- (9) Sick or injured
- (10) Attending a training course away from own workplace
- (11) Started new job/changed jobs
- (12) Ended job and did not start new one that week
- (13) Laid off/short time/work interrupted by bad weather
- (14) Laid off/short time/work interrupted by labour dispute at own workplace
- (15) Laid off/short time/work interrupted by economic or other causes
- (16) Off season
- (17) Time off to deal with an emergency
- (18) Other personal family reasons
- (19) Other reasons

Our measure includes individuals working fewer hours due to economic disruption and other causes (reason 15 above).

Types of work

Individuals in employment are asked to self-report their full-/part-time status and whether their work arrangement includes a zero hours contract; however, the work arrangement data are only available in quarter two and four of each year. Only employees are asked to report if their job is either permanent or "not permanent in some way".

Shutdown sectors¹¹

Shutdown sectors include (SIC codes in brackets): non-food, non-pharmaceutical retail (4719, 4730-4772, 4776-4799); passenger transport (4910, 4931-4939, 5010, 5030, 5110); accommodation and food (5510-5630); travel (7911-7990); childcare (8510, 8891); arts and leisure (9001-9329 except 'artistic creation' 9003); personal care (9601-9609 except 'funeral and related' 9603); domestic services (9700).

Key workers

The UK government guidance on key workers is broad, and it is often up to the employers to decide who is a key worker. We use the ONS methodology that combines 2010 Standard Occupational Classifications and 2007 Standard Industrial Classifications to match the UK government definition of key workers.¹²

¹¹ Taken from Joyce, R. and Xu, X. (2020). 'Sector shutdowns during the coronavirus crisis: which workers are most exposed?', IFS Briefing Note BN278.

¹² ONS (2020). 'Coronavirus and key workers in the UK'.

www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/articles/coronavirusandkeyworkersintheuk/2020-05-15

Ethnicity

Our black, Asian and minority ethnic (BAME) category includes: mixed/multiple ethnic groups, Indian, Pakistani, Bangladeshi, Chinese, any other Asian background, Black/African/Caribbean/Black British, and any other ethnic group.

COVID-19 and LFS data collection

It should be noted that COVID-19 had an impact on the achieved LFS sample in 2020:Q1; social distancing measures were implemented towards the end of the quarter leading to a decline in response rates as face-to-face interviews moved to telephone interviews. The uneven distribution of the achieved sample across the quarter has been accounted for with changes to the LFS weights. The overall achieved sample for 2020:Q1 (77,903 individuals in 33,329 households) was about 11% lower than the achieved sample for 2019:Q1.