



Kent Academic Repository

Chung, Heejung and Yuan, Shiyu (2025) *Did COVID-19 level the playing field or entrench it? Comparing patterns of homeworking by ethnicity, gender, and migration status, before, during, and after COVID-19 in the UK*. *Industrial Relations Journal*, 56 (3). pp. 236-250. ISSN 0019-8692.

Downloaded from

<https://kar.kent.ac.uk/108495/> The University of Kent's Academic Repository KAR

The version of record is available from

<https://doi.org/10.1111/irj.12462>

This document version

Publisher pdf

DOI for this version

Licence for this version

CC BY (Attribution)

Additional information

Versions of research works

Versions of Record

If this version is the version of record, it is the same as the published version available on the publisher's web site. Cite as the published version.

Author Accepted Manuscripts

If this document is identified as the Author Accepted Manuscript it is the version after peer review but before type setting, copy editing or publisher branding. Cite as Surname, Initial. (Year) 'Title of article'. To be published in **Title of Journal**, Volume and issue numbers [peer-reviewed accepted version]. Available at: DOI or URL (Accessed: date).

Enquiries

If you have questions about this document contact ResearchSupport@kent.ac.uk. Please include the URL of the record in KAR. If you believe that your, or a third party's rights have been compromised through this document please see our [Take Down policy](https://www.kent.ac.uk/guides/kar-the-kent-academic-repository#policies) (available from <https://www.kent.ac.uk/guides/kar-the-kent-academic-repository#policies>).

ORIGINAL ARTICLE OPEN ACCESS

Did COVID-19 Level the Playing Field or Entrench It? Comparing Patterns of Homeworking by Ethnicity, Gender and Migration Status, Before, During and After COVID-19 in the UK

Heejung Chung¹  | Shiyu Yuan² 

¹King's College London UK, London, UK | ²University of Kent, Canterbury, UK

Correspondence: Heejung Chung (Heejung.chung@kcl.ac.uk)

Received: 12 September 2024 | **Revised:** 19 December 2024 | **Accepted:** 2 January 2025

Funding: This project received funding from the Trade Union Congress project on 'Black and Minority ethnic workers' experience of home and hybrid working' and the Productivity Institute funded project 'Hybrid Working And Productivity: Exploring Flexibility Stigma And Racial Inequalities'.

Keywords: gender | inequalities | migration status | parental status | racial disparities | UK | working from home

ABSTRACT

This study examines how the pandemic changed the ethnicity gaps in working-from-home practices in the UK. We do this by examining seven waves of the UK Labour Force Survey from 2017 to 2023, divided into three time periods—pre-pandemic, during-lockdown and post-lockdown. The results show that although the gap found between White and BME workers in the pre-pandemic period disappears as we move into the post-lockdown period, there are large differences between different ethnicities, especially when we intersect ethnicity with migration status, gender, and parental status. Even in the post-lockdown period of 2022–2023, Black men, particularly Black fathers, stood out for their low levels of homeworking, alongside Chinese and 'Other Asian' workers - both men and women. On closer inspection, we found that it was especially migrant workers from these ethnicities who were significantly worse off in terms of their access to homeworking. The paper shows that although we see a positive change in homeworking, which has increased for most ethnic groups over the course of the pandemic, certain groups are still left behind in this growth. The paper further highlights the need for an intersectional analysis when examining such labour market patterns.

1 | Introduction

COVID-19 has brought about seismic changes to the way we work, as many governments and employers have enforced certain measures to limit the spread of the virus. This has led to a rapid increase in homeworking. Before the pandemic, only around one in eight workers in the UK worked from home (WFH) on a semi-regular basis, but by the first lockdown period in April 2020, this figure had risen to almost half of the total workforce (ONS 2020). Before the pandemic, it was generally better-educated workers in higher-paid occupations, and in many cases, men, who were more likely to have

access to WFH and other flexible working practices (Chung and Van der Lippe 2020). This was largely due to the fact that managers were reluctant to offer WFH opportunities to workers whom they did not trust to be productive enough to use WFH and other flexible working arrangements (Brescoll, Glass, and Sedlovskaya 2013; Lambert and Haley-Lock 2004; Munsch 2016). However, there has been a shift in managers' perceptions of flexible working during the pandemic (CIPD 2021; CMI 2020), as managers had no choice but to allow workers to use WFH, if they wanted them to continue working. This has led to a shift in who gains access to WFH (Abendroth et al. 2022).

This is an open access article under the terms of the [Creative Commons Attribution](https://creativecommons.org/licenses/by/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2025 The Author(s). *Industrial Relations Journal* published by Brian Towers (BRITOW) and John Wiley & Sons Ltd.

This paper specifically examines how the pandemic may have altered the WFH opportunities of Black and Minority Ethnic (BME) workers compared to white workers in the UK. Several studies have highlighted the potential benefits of WFH for BME workers in terms of access to work, improved sense of belonging, elimination of experiences of micro-aggressions, and improved engagement at work (Chung, Yuan, and Arkwright 2024; Future Form 2022; Gerzema 2022; TUC 2022; Wong 2020). This is why we observe a higher preference for WFH among ethnic minority workers compared to their white counterparts (BITC 2022; Future Form 2022; TUC 2022). It is not clear whether BME workers were able to benefit from the widespread use of WFH during and after the COVID-19 pandemic. Most studies examine the WFH differences by gender and parental status (Abendroth et al. 2022; Barrero, Bloom, and Davis 2023). The few existing studies on racial variation (Hendry et al. 2023; Mutebi and Hobbs 2022) have produced mixed results. This is because many have not been able to distinguish between different racial groups within the broader BME categories, nor have they been able to control for several different structural and other factors that determine workers' access to WFH. Furthermore, few take an intersectional approach to the question, distinguishing between migration, gender, and parental status in addition to ethnicity. This paper further contributes to the existing literature by looking beyond the lockdown periods of 2020 and 2021, examining data from post-lockdown 2022 and 2023 and comparing it with the pre-pandemic period (2017–2019) to allow us to see the evolution of gaps in WFH practices.

In this paper, we use a series of multivariate logistic regressions using the UK Labour Force Survey (LFS) from 2017 to 2023. We use these data because they provide the largest sample size of the employed workforce, comparable over a longer period of time. This allows us to make clearer distinctions between different racial minority groups, migration, and variations in gender and parental status, rather than a crude distinction between white and BME workers who are considered to be a homogeneous group.

2 | Theory and Background

2.1 | Race and Racism in UK Labour Markets

In the UK, although the term BME (Black and Minority Ethnic) is commonly used as an umbrella term to define ethnic minority groups (The Law Society 2022), there is a debate around its use as it assumes homogeneity across different ethnicities. The ONS, for example, suggests using the term ethnic minorities, with additional information regarding whether white minorities, such as Irish travellers, are included or not. The importance of disaggregating different ethnic minority groups becomes more apparent when we examine their different labour market outcomes. BME workers in the UK are generally discriminated against in hiring and promotion processes (Heath and Di Stasio 2019), largely based on biases against BME worker's capacities and competencies. This explains why BME workers are overall less likely to be in employment, and when employed, more likely to be earning lower wages (Forth, Theodoropoulos, and Bryson 2023), in insecure work, or in self-employment earning less than the national

minimum wage (Felstead et al. 2020; TUC 2022). What is more, BME workers experience racism at work (TUC 2022), including having limited access to good working conditions and control over their work compared to their white counterparts (M. Williams, Wang, and Koumenta 2024; Zwysen and Demireva 2020). There are variations across ethnicities with regard to discrimination faced. Racial hierarchy and stratification theory argue that there are hierarchies in the racism experiences across ethnic minority groups (Gong, Xu, and Takeuchi 2017). Exploring the racial variation in labour market outcomes in the UK, it is clear that within the BME group, there are large variations not only in the employment and income levels of workers, but also in the discriminations they face in the labour market on a wide range of factors (Heath and Di Stasio 2019; M. Williams, Wang, and Koumenta 2024; Zwysen and Demireva 2020).

Looking at 2022 data, although White workers (77% for White, 76% for White British, 82% for White other) have higher employment rates compared to Other ethnic groups, there are large disparities across BME groups (ONS 2023). Indian workers (77%) generally have higher or equivalent employment rates compared to White British workers, while Pakistani and Bangladeshi workers' employment rates (67%) are lower than most other groups. Black, Mixed (both 69%) and 'Other Asian' (70%) groups also have low employment rates compared to White workers. This pattern becomes even more complex when we consider gender. Although women are generally less likely to be employed compared to men across racial groups, there are large variations. For example, the gap in employment rates is relatively smaller for White workers (80% for men and 74% for women), larger gender gaps are found in the Pakistani and Bangladeshi populations (75% for men and only 46% for women), 'Other ethnicities' (75% vs. 60%) and Indian workers (84% vs. 70%). Black (74% for men and 66% for women) and Asian workers (79% vs. 61%) are somewhat in between. There were more Mixed women (71%) employed than men (67%), albeit a small difference.

A similar picture is drawn when we examine income data (ONS 2019) for 2018, where Chinese and Indian workers have generally higher median hourly earnings even compared to White British or 'White other' workers. However, the gender gap between these two former groups is significantly larger than other groups with women earning significantly less. On the other hand, Black, Pakistani and Bangladeshi workers are generally in lower income groups, although the gender pay gap is smaller for these groups. Among the Bangladeshi population, women generally earn more than men, although they are less likely to be employed overall. Similar patterns emerge when exploring hiring practices or control over one's work, where Black, Pakistani and Bangladeshi workers fare relatively worse compared to Indian, Chinese and Other Asian counterparts (Heath and Di Stasio 2019; M. Williams, Wang, and Koumenta 2024). This may be largely based on the racial hierarchies of the colonial history of Britain (El-Enany 2020). In a similar vein, within the BME groups, there are variations across migrant vs. UK-born BME workers in their position in the labour market. This may be due to language barriers, lack of social networks and capital and other barriers that limit access to good quality jobs in addition to the barriers faced by UK BME workers (Bryson and White 2019; Zwysen and Demireva 2020).

2.2 | Working From Home Definitions and Patterns Across Time

Flexible working arrangements (FWAs) include arrangements that give workers flexibility over when, where, and how much they work (Chung 2022; Kelly et al. 2014). Of the various types of FWAs, this paper focuses on arrangements that allow workers to WFH. The UK is unique in that the government introduced the right to request FWAs, including WFH options, since 2003. It was first limited to parents with young and disabled children but slowly expanded to cover all workers by 2014. This does not necessarily guarantee full access, and many studies have shown how despite the right to request, many workers are denied access as managers are able to refuse access on a number of grounds (ACAS 2016; TUC 2021c).

This paper defines WFH as ‘mainly working from home’. Although workers may work occasionally from home—for example, ad hoc basis when the need arises, like a sick child or boiler maintenance—our interest is in those who are generally WFH. There are two reasons behind this. Firstly, with regard to workers’ ability for better work-family integration, WFH occasionally is substantially different from mainly WFH (Allen, Golden, and Shockley 2015), with the latter providing workers with better resources to address family demands. There are significant differences in managers’ perceptions towards workers who occasionally WFH compared to those who mainly WFH, with the latter receiving more biased views against them (Chung and Wang 2024; Kasperska, Matysiak, and Cukrowska-Torzewska 2024). This is especially important as our study aims to explore how bias against BME workers and expected bias against homeworkers, in combination, prohibits access. Finally, methodologically, the LFS question asking occasional WFH ‘at least once in the past week’ has changed over the period that we examine in this paper,

making it difficult to compare across the years. However, as a robustness check, we will be comparing the two types of WFH patterns, mainly vs. occasionally, for the available year 2022 to see how the results change when we compare different approaches to operationalisation of WFH.

Despite the changes in the legislation across the years, WFH patterns have remained relatively stagnant across time before the pandemic. For example, in 1999, approximately 3% of the workforce said home is their main place of work. Although there was a steady increase in these numbers, even in 2019, this number only went up to 6%. Even when considering those who work even occasionally from home, this number was less than one out of four workers (CIPD 2020). On the other hand, during the peak of the pandemic in 2020, up to half of the workforce was WFH on a regular basis (ONS 2020). Interestingly, as shown in Figure 1, examining our LFS data where workers are asked whether home is their main place of work, only 10% responded that it is during the lockdown periods, despite large numbers were being in fact WFH. This is likely because many workers felt that the office/employer’s premises were the main place of work, but they were WFH only as an emergency lockdown measure. The number of workers who responded that home is their main place of work steadily increased over the years, as workers understood that WFH is an arrangement that will continue through to post-pandemic labour markets (ONS 2022b). This is why in our study, we distinguish between three time periods, namely 2017–2019 (pre-pandemic), 2020–2021 (peak lockdown period with surging number of homeworkers), 2022–2023 (‘post’-lockdown/pandemic period with a steady large number of homeworkers). It is also important to note that due to its sectoral structures and lockdown measures, post-lockdown, the UK is the leading country with regard to homeworking practices across Europe and the world (Chung 2024).

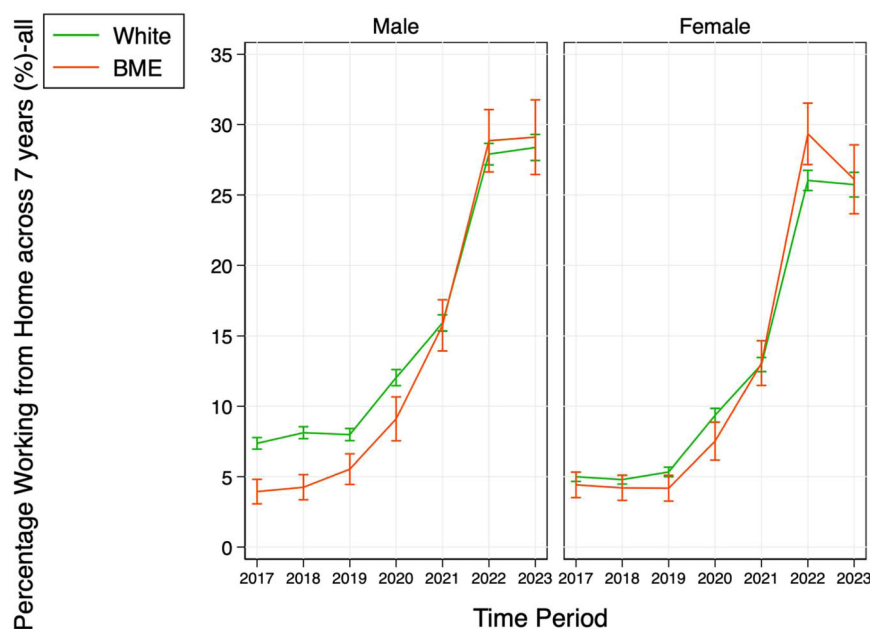


FIGURE 1 | The work-from-home trends across different gender and ethnic groups across 7 years. Source: Labour Force Survey Second Quarter data sets, covering the months of April to June from 2017 to 2023. The data are calculated as simple proportions of the pooled data sets across each period, without controlling for other factors such as demographics or socioeconomic status.

2.3 | Theories on Access to Flexible Working

There are several theories that explain who has access to home working arrangements (Chung 2022; Lambert and Haley-Lock 2004) that can help us better understand the variation in access across different ethnicities. The type of work that is being done has always been noted as one of the biggest constraints to the introduction flexible working by managers (Wanrooy et al. 2013). There are jobs where it is harder to WFH than in others due to, for example, production structure (machinery, client demand etc.) or types of jobs carried out (client facing such as retail, health care). This entails that workers in certain occupations and sectors such as manufacturing, construction, retail and health and social services have limited WFH opportunities. Public sector employers may be better at providing FWAs because they are not as sensitive to business cycles (Evans 2001) and are seen as the forerunners with regard to the provision of family-friendly arrangements (Chung 2008). Due to the administrative costs, larger companies may find it easier to administer and may have more resources to provide WFH arrangements. Having said that, small and medium-sized companies may be able to provide more informal arrangements (Dex and Scheibl 2001). Pakistani/Bangladeshi and Other Asian workers are overrepresented in sectors such as distribution, hotels and restaurants, which may mean that they are less likely to have WFH arrangements. Similarly, there are proportionally more Black workers in the education and health sectors which may decrease their likelihood, although Black workers are also overrepresented in the Public Administration sectors (House of Commons Library 2023) which are more likely to be using WFH arrangements. Previous studies have shown that although fixed-term contract status does not influence one's access to FWAs, low-skilled and those who perceive their jobs to be insecure were significantly less likely to have access to FWAs (Chung 2018). As ethnic minority, especially Black, Bangladeshi/Pakistani workers and migrant workers, are generally overrepresented in the low-paying occupations and sectors, this may mean that their access to WFH is limited compared to White workers (Bryson and White 2019; Zwysen and Demireva 2020). This can especially be true for women and mothers whose bargaining positions may be even weaker. However, these variations should then disappear once we control for occupation and sector.

Above and beyond the structural restrictions, employers' provision of WFH can depend on the way employers perceive the arrangement (see also, Chung 2022; Lambert and Haley-Lock 2004; Swanberg, Pitt-Catsoupes, and Drescher-Burke 2005). WFH can be seen as a smart working policy used to enhance performance outcomes, or more as a family-friendly policy to facilitate work-life integration of workers (Appelbaum et al. 2000; Wood and De Menezes 2010). When employers are genuinely interested in addressing the work-family needs of workers, those with the most family demands or in most need of family-friendly arrangements are more likely to WFH or have the ability to do so (Chung et al. 2020; Future Form 2022; Golden 2009). In this case, we could expect that BME workers, especially women, parents and migrant BME workers, to have better access. This is especially true when we know that BME and migrant workers are less likely to have other resources—for example, financial resources or a wider social network—to

address family demands. When employers' motivation for providing WFH is driven by more by performance demands, we can expect it to be used more in knowledge-intensive fields (Brescoll, Glass, and Sedlovskaya 2013) and provided to workers with higher occupational statuses/skills levels (Chung 2019; Chung and Van der Horst 2018; Ortega 2009; Wiß 2017) in expectation that it will enhance their productivity. In such cases, workers with the most need for WFH are sometimes the least likely to gain access to it (Stewart and Bivand 2016; TUC 2017, 2021a, 2021b) because employers do not expect large gains from this segment of the workforce when implementing the practice. Given the evidence we have with regard to employers' bias against BME workers (Gray 2019; Pedulla 2018; TUC 2022), we could expect that BME workers are less likely to gain access, when employers' provision of WFH arrangements is based on performance expectations. This may be true for certain BME groups such as Black, Pakistani/Bangladeshi population, and especially for migrant workers, and for women or parents, as has been evidenced with regard to other labour market inequalities (M. Williams, Wang, and Koumenta 2024; Zwysen and Demireva 2020).

In sum, we expect to find variations across ethnicities in their WFH patterns, even when factors such as occupation, sector, and other controls are included in the model. We anticipate that such gaps exist due to the potential discrimination BME workers face with regard to their work capacities, or on their expected return-on-investment of WFH practices. However, our data does not solely look at access to but practices of WFH, and the gaps may occur when BME workers have access, yet do not take up the available provision. However, we know from existing data (Future Form 2022; TUC 2022) that most workers, especially BME workers, want to WFH, meaning the gaps in take-up rates are unlikely to be due to preferences. When policy access does not translate into use, this may be driven more by workers' fear that WFH can lead to negative career outcomes (J. C. Williams, Blair-Loy, and Berdahl 2013). Such fears may especially be amplified for BME, especially migrant workers (Chung, Yuan, and Arkwright 2024), given the already existing biases against their work capacities, which may be amplified when they WFH. Finally, we hypothesise that the gap between BME and White workers may have been lessened during the pandemic lockdown period as there was no other option but to allow workers, who can WFH, to WFH during this period. However, as the pandemic eased in 2022–2023, we could potentially expect the ethnicity gaps to re-emerge as some workers have now moved permanently into a new hybrid/homeworking pattern, while others were asked to largely come back into the office. We expect that in this period of returning to the office, the ethnicity gaps are more likely to be observed.

In conclusion, we come to the following hypotheses;

H1: *BME workers, especially Pakistani/Bangladeshi, Black/Black British workers, are less likely to WFH compared to White workers.*

H2: *The gap in WFH across ethnicities will remain despite having controlled for occupations, sectors, and other factors that explain for WFH access.*

H3: *The gap in WFH across ethnicities is more evident for women and parents, and for migrant workers.*

H4: *The gaps in WFH across ethnicities are more evident in the pre-pandemic period, and post-lockdown periods, compared to the pandemic lockdown periods.*

3 | Data and Methods

3.1 | Data and Sample

The UK LFS data are used in this paper. It is the largest household study in the UK providing official measures of employment, unemployment and other labour market characteristics of the workforce (ONS 2024). Although the data was gathered originally using face-to-face interviews, during the pandemic due to restrictions, the survey shifted to primarily telephone-only interviews. This can lead to differential nonresponse rates that may introduce biases, especially considering the increase in nonresponse rate from those with a non-UK country of birth or nationality. To mitigate these effects, the LFS has incorporated the new weights into the 2020 and 2021 data, which are comprehensive adjustments validated against preliminary 2021 Census data (ONS 2022a). For our analysis, we applied the updated 2022 LFS weights to the 2020 and 2021 waves to reduce the effects of nonresponse bias. Despite these adjustments, we acknowledge that non-response among specific groups, such as those with non-UK nationality or birth, may still influence survey estimates. Nonetheless, the LFS remains the standard source for UK labour trends, making it the most reliable, if imperfect, source for examining broader labour market trends after several reweighting adjustment. Most importantly, with over 30,000 households in Great Britain each quarter and approximately 15% of respondents identifying as BME individuals (aged 16+) (ONS 2024), the LFS enables breakdowns beyond broad ethnic distinctions, making it possible to break down beyond the White British vs. BME distinction, that are comparable across time. To obtain sufficiently large samples, seven waves of data from the second quarter (April–June)—the quarter that collects WFH data—for the years 2017 to 2023 were used to conduct a pooled regression analysis. This selection provides a holistic view of labor market dynamics by encompassing periods unaffected by the pandemic, the subsequent phase of unprecedented global disruption and the recovery phases that followed. We selected only workers who were employed in each wave, resulting in a final pooled sample of 286,863 observations. Of those, 223,978 include responses to the question on WFH.

3.2 | Variables

To measure WFH, we use ‘(In your main job) do you work mainly...’, which is the only WFH question asked every year and in a consistent manner. Respondents who chose 1 ‘in own home’, 2 ‘in the same grounds or buildings as home’ and 3 ‘in different places using home as a base’ are considered as homeworkers. Later, as a robustness check, we compare this measure to the

occasional uses of homeworking in wave 2022 asking whether respondents worked at least 1 day from home in the reference week for their main job. The response category was the same as mainly WFH. Given the data limitation, we cannot analyse how occasional homeworking changes across years, but comparison in the result for 2022 allows us to see whether the operationalisation of WFH may have impacted our results.

We create our ethnicity variable based on a nine-category classification where the categories are: (1) White (which includes ‘White—Gypsy or Irish Traveller’ in England, Wales and Scotland, and ‘White—Polish’ in Scotland); (2) Mixed/Multiple ethnic groups; (3) Indian; (4) Pakistani; (5) Bangladeshi; (6) Chinese; (7) Any Other Asian background; (8) Black/African/Caribbean/Black British; (9) Other ethnic groups (which includes ‘Irish Traveller’ in Northern Ireland and ‘Arab’ across all UK countries). To ensure a robust statistical analysis given the smaller sample sizes of certain categories, we combined Pakistani with Bangladeshi as one category, and Chinese with ‘Any Other Asian background’ as one category. This results in a seven-category ethnicity variable for our analysis, like the approach used in other studies exploring ethnic variation in working conditions (M. Williams, Wang, and Koumenta 2024). Based on previous studies (Hu 2020), we code migration status based on whether one was born in the UK (Hu 2020), with 0 meaning ‘UK born’, and 1 meaning ‘Non-UK born’. We were unable to look at a more detailed level of country-of-origin due to the small sample sizes of each category of countries other than the UK, especially when considering the migrant and ethnicity interaction.

3.3 | Controls

Based on prior research examining access to FWAs (e.g., Abendroth et al. 2022; Chung 2020a; Lyness et al. 2012), this study controls for the following variables: gender (1 = female, 0 = male), age (18–24, 25–34, 35–44, 45–54, 55–64, 65+), disability (yes = 1, no = 0), relationship status (1 = married, cohabitating, or in a civil union, 0 = not), number of children (under 19 years old) living in the household (0, 1, 2, or 3 or more), presence of preschool children in the household (yes = 1, no = 0), educational level (no qualifications, secondary education or below, higher education and above), occupational level (managers, professional, associate professional, administrative and secretarial, skilled trades, caring, leisure and other service, sales and customer service, process, plant and machine operatives, elementary occupations), supervisory status (1 = yes, 0 = no), permanent contract (0 = yes, 1 = no), public sector company (1 = public sector, 0 = private sector), size of the organisation (small: number of employees < 25, medium: number of employees between 25 and 499; larger: number of employees > 500), industry (agriculture, forestry and fishing/energy and water, manufacturing, construction; distribution, hotels and restaurants, transport and communication, banking and finance, public admin and defence, education, health and social work, other services).

3.4 | Method

We begin with a descriptive analysis of WFH patterns across gender, migrant status and ethnicity groups across 7 years and

three periods: before (2017–2019), during (2020–2021) and ‘after’ COVID-19 lockdowns (2022–2023). Given the similarities within and differences between these periods, we conduct regression analyses separately for each of the three periods. Logistic regression is used to model the binary outcomes while preserving the interpretability of probabilities bounded between 0 and 1¹. We begin by analysing the main effects of ethnicity on WFH (Table 1 and Figures 1–4) and then examine the intersection of ethnicity and gender across all workers by exploring ethnic variations within male and female groups (Tables 2–3 and Figures 5 and 6) and analysing the interactions between gender and ethnicity (Supporting Information S1: Table A4 and Figure A1). As a robustness check, we also examine ethnic variations in homeworking by migrant status (Supporting Information S1: Tables A7–A10 and Figures A2–A4), parent-hood status (Supporting Information S1: Tables A11–A14 and Figures A5–A12) and looking at occasional homeworking use in April to June 2022 (Supporting Information S1: Table A15 and

Figures A13–A15). All analyses are conducted with survey weights to account for unequal selection probabilities and different nonresponse patterns in Stata 18.

4 | Results

4.1 | Descriptive Analysis

As we can see from Supporting Information S1: Table A1, only about 6% of workers stated that home was the main place of work before COVID-19, whereas this number increased to 10% and 14% during the pandemic lockdown period, when WFH was still compulsory in some cases, and further increased to over 27% after the pandemic in 2022–2023. On average, most of our sample are women (52.75%), White (90%) and UK-born (85.82%). In 2023, 1.00% identified as Mixed race, 2.28% were Indian, 1.36% were Pakistani/Bangladeshi, 1.48% were Chinese/

TABLE 1 | Weighted logistic regression results predicting homeworking by ethnicity across time for all workers.

| Variables | Working from home | | | | | |
|---|--------------------------|---------------------|-----------------------------|--------------------|----------------------------|---------------------|
| | Before COVID (2017–2019) | | During lockdown (2020–2021) | | After lockdown (2022–2023) | |
| | (1) Unadjusted | (2) Adjusted | (3) Unadjusted | (4) Adjusted | (5) Unadjusted | (6) Adjusted |
| Independent variable | | | | | | |
| Ethnicity (ref = White) | | | | | | |
| Mixed/Multiple ethnic groups | 1.005 (0.137) | 1.264 (0.181) | 1.077 (0.127) | 1.181 (0.153) | 1.348** (0.137) | 1.292* (0.147) |
| Indian | 0.643*** (0.064) | 0.601*** (0.064) | 1.189* (0.099) | 0.984 (0.090) | 1.307*** (0.088) | 0.888 (0.075) |
| Pakistani/Bangladeshi | 0.592*** (0.078) | 0.743* (0.108) | 1.020 (0.125) | 1.227 (0.170) | 0.853 (0.084) | 0.982 (0.114) |
| Chinese | 0.710** (0.087) | 0.759* (0.102) | 0.647** (0.087) | 0.667** (0.098) | 0.834+ (0.082) | 0.640*** (0.085) |
| Black/African/ Caribbean/Black British | 0.543*** (0.059) | 0.687** (0.086) | 0.764** (0.074) | 0.959 (0.104) | 0.788** (0.066) | 0.988 (0.097) |
| Other ethnic groups | 0.857 (0.129) | 0.871 (0.150) | 0.710* (0.105) | 0.718* (0.115) | 1.046 (0.106) | 0.859 (0.109) |
| Gender (ref = male) | | | | | | |
| Female | | 0.864*** (0.029) | | 0.907** (0.029) | | 1.039 (0.033) |
| Migrant status (ref = UK born) | | | | | | |
| Non-UK born | | 0.976 (0.047) | | 0.927 (0.045) | | 0.984 (0.045) |

Note: The coefficients are odds ratio and standard error in parentheses. Each adjusted model controls for a range of factors, including demographic characteristics (gender, age, whether they have a disability), household characteristics (relationship status, whether have a preschool child under 5 years old, number of children under 19 years old), job characteristics (occupational types, managerial status, job types) and organisation characteristics (ownership of the organisation, size of the organisation, industry).

+ $p < 0.10$.

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

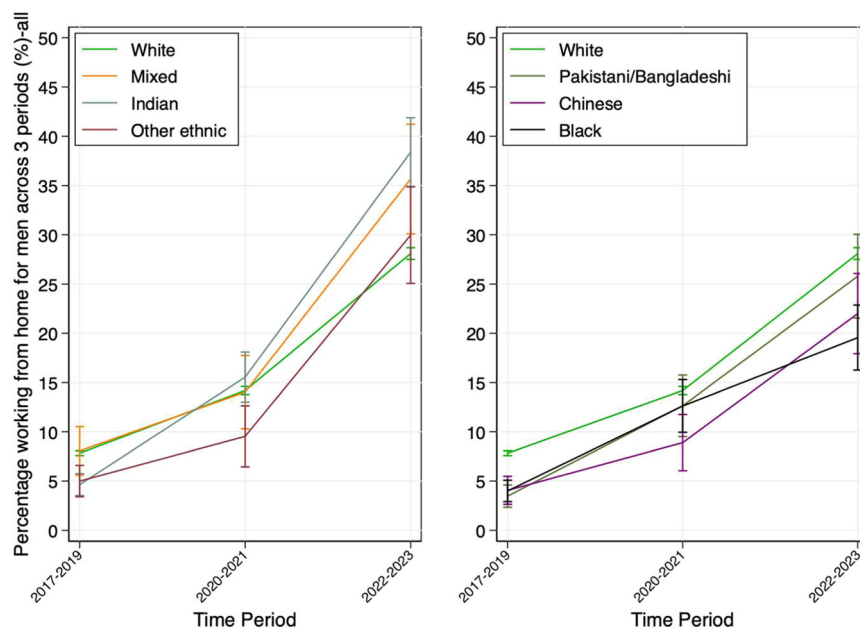


FIGURE 2 | The work-from-home trends across different ethnic groups for male workers before, during and after the pandemic. Source: Labour Force Survey Second Quarter data sets, covering the months of April to June from 2017 to 2023. The data are calculated as simple proportions of the pooled data sets across each period, without controlling for other factors such as demographics or socioeconomic status.

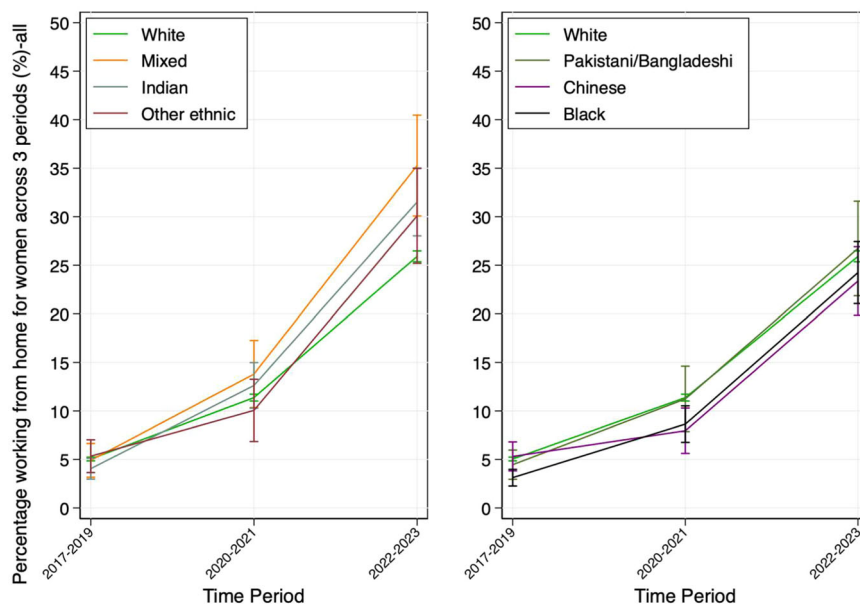


FIGURE 3 | The work-from-home trends across different ethnic groups for female before, during and after the pandemic. Source: Labour Force Survey Second Quarter data sets, covering the months of April to June from 2017 to 2023. The data are calculated as simple proportions of the pooled data sets across each period, without controlling for other factors such as demographics or socioeconomic status.

Other Asian background, 2.36% of our sample were Black and about 1.18% were ‘Other’ ethnicities. There are fluctuations in the percentage of BME workers across time, where it is the lowest in 2020 and 2021. The reduced representation of certain ethnic populations during the pandemic period may indicate the higher levels of unemployment or withdrawal away from the labour market of these groups in the period. It is worth noting how there were reports of BAME workers being disproportionately impacted by the COVID-19 virus with regard to mortality rates (Aldridge et al. 2020; Public Health England 2020).

This could potentially explain why many were not in employment during the peak COVID-19 infection periods. Other descriptive statistics can be found in Supporting Information S1: Tables A1 and A2.

4.2 | WFH Across Ethnicity and Gender Lines

Figure 1 provides an overview of patterns in WFH before, during and ‘after’ the pandemic across gender and ethnic lines

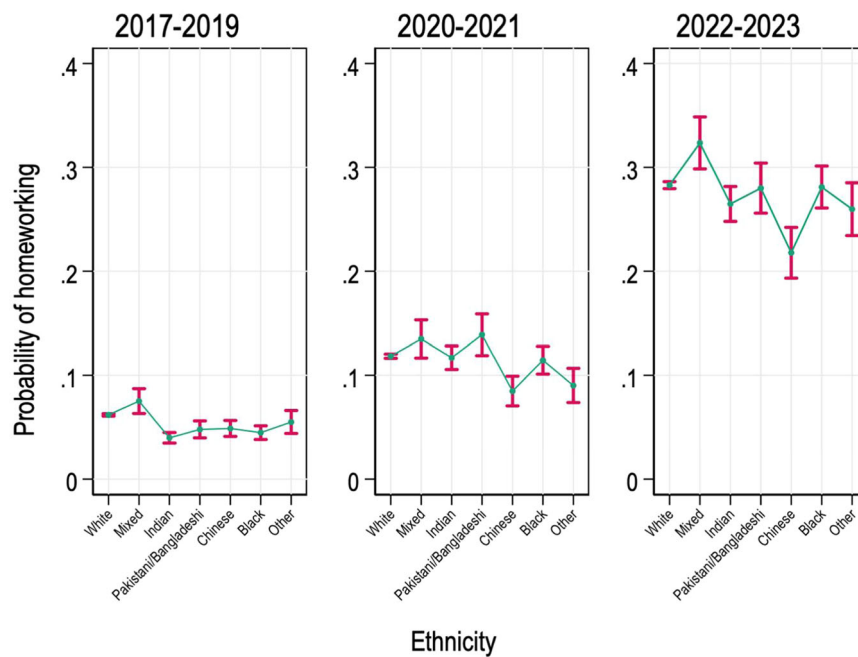


FIGURE 4 | Predicted probability of working from home by ethnicity before, during and after the pandemic (with 83% confidence intervals). Source: This graph displays the predicted probability, derived from Models 2/4/6 in Table 1, based on the pooled data sets from Labour Force Survey Second Quarter data sets, covering the months of April to June from 2017 to 2023. The analysis employed survey weight and controlled for socio-economic and demographic characteristics, enhancing the representativeness of the findings.

without controlling for any other relevant factors. We can see that the proportion of workers who responded that home is their main workplace was low before 2020 for both White and BME workers, with White men considerably more likely to WFH than BME men. The gap between White and BME women is not as large. Starting in 2020, the proportion of workers working from home rose sharply, with BME workers even surpassing White workers in 2022 and 2023 for both men and women, albeit not significantly different. However, breaking it down into detailed ethnic categories (Figures 2 and 3) reveals many ethnic minorities lagging, exposing deeper disparities. For men, before the pandemic, White and Mixed-race workers had slightly higher WFH rates than other population groups, but during the pandemic, Indian, Mixed, Pakistani/Bangladeshi and 'Other' ethnic groups saw significant increases, narrowing the gap with White workers. On the other hand, although we do see a growth among Chinese/Other Asian, and Black men's WFH patterns, the growth is not as strong as what has been shown for Indian and Mixed-raced groups. This was especially true for Chinese men between pre-(2017–2019) to during (2020–2021) pandemic, and for Black men between during (2020–2021) to 'post'-pandemic (2022–2023). For women, their WFH rates were generally lower than for men, with no clear ethnic differences before the pandemic. However, Indian, Mixed and 'Other' ethnic women showed stronger growth during and 'post' the pandemic, while other groups had similar trends to White women.

Table 1 reported odds ratio derived from pooled logistic regression analysis results distinguishing between pre-covid (2017–2019), during lockdown (2020–2021) and post-lockdown (2022–2023), both with (adjusted) and without (unadjusted) control variables like occupation and sector. We can see that

other than Mixed Ethnic and 'Other' ethnic groups, before the pandemic, ethnic minority groups were less likely to WFH, both with and without controls. This changed significantly during lockdown period (2020–2021) where the differences disappear, especially after introducing controls (4th column), except for Chinese (0.667, $p < 0.01$), and 'Other ethnic' workers (0.718, $p < 0.05$). By 2022–2023, only Chinese workers were significantly less likely to WFH in the adjusted models (0.640, $p < 0.001$). However, it is important to note that when examining the unadjusted figures, Black workers remained less likely to WFH throughout all periods, though the gap with White workers narrowed from an odds ratio of 0.543 ($p < 0.001$) pre-pandemic to 0.788 ($p < 0.01$) post-lockdown. Indian workers were more likely to WFH in 2022–2023 (odds = 1.307, $p < 0.001$), though this advantage disappeared with controls. Moreover, Mixed-race workers were significantly more likely to WFH both before (odds = 1.348, $p < 0.01$) and after (odds = 1.292, $p < 0.05$) controls were introduced during the post-lockdown period. These patterns were further confirmed in Figure 4, which reported predicted probability derived from Model 2/4/6 in Table 1 with 83% confidence intervals. When ethnicity is controlled for, migration status does not make a difference in homeworking status before, during and after the lockdown periods. Women are less likely to say home is their main place of work before and during lockdown, both using unadjusted and adjusted figures, yet post-lockdown in 2022–2023, we can see that the gap reduced and there are no statistically significant gaps in WFH between men and women when other factors are controlled for.

Analysis across gender lines reveals that the gaps found between White and Black workers in WFH during the pandemic and post-lockdown period were primarily due to differences among men.

TABLE 2 | Weighted logistic regression results predicting working from home by ethnicity across time for male workers.

| Variables | Working from home | | | | | |
|---|--------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| | Before COVID (2017–2019) | | During lockdown (2020–2021) | | After lockdown (2022–2023) | |
| | (1) Unadjusted | (2) Adjusted | (3) Unadjusted | (4) Adjusted | (5) Unadjusted | (6) Adjusted |
| Ethnicity (ref = White) | | | | | | |
| Mixed/Multiple ethnic groups | 0.953 (0.168) | 1.305 (0.234) | 0.907 (0.156) | 1.05 (0.193) | 1.312 ⁺ (0.197) | 1.397* (0.238) |
| Indian | 0.548*** (0.073) | 0.574*** (0.083) | 1.218 ⁺ (0.139) | 0.988 (0.123) | 1.429*** (0.130) | 0.895 (0.106) |
| Pakistani/Bangladeshi | 0.449*** (0.083) | 0.661* (0.130) | 1.038 (0.165) | 1.410 ⁺ (0.263) | 0.814 (0.106) | 0.891 (0.138) |
| Chinese | 0.488*** (0.094) | 0.568** (0.118) | 0.665* (0.132) | 0.713 (0.157) | 0.804 (0.128) | 0.567* (0.126) |
| Black/African/ Caribbean/Black British | 0.497*** (0.075) | 0.715 ⁺ (0.126) | 0.856 (0.119) | 1.078 (0.169) | 0.659** (0.085) | 0.779 ⁺ (0.110) |
| Other ethnic groups | 0.727 (0.167) | 1.008 (0.252) | 0.652* (0.138) | 0.705 (0.166) | 0.981 (0.142) | 0.799 (0.142) |
| Migrant status (ref = UK born) | | | | | | |
| Non-UK born | | 0.840** (0.056) | | 0.878 ⁺ (0.061) | | 0.887 ⁺ (0.061) |

Note: The coefficients are odds ratio and standard error in parentheses. Each adjusted model controls for a range of factors, including demographic characteristics (gender, age, whether they have a disability), household characteristics (relationship status, whether they have a preschool child under 5 years old, number of children under 19 years old), job characteristics (occupational types, managerial status, job types) and organisation characteristics (ownership of the organisation, size of the organisation, industry).

⁺ $p < 0.1$.

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

According to Figure 5 and Table 2, although Black men were not significantly different from White workers during the lockdown period, in the post-lockdown period, they were significantly less likely to be WFH than White workers both with (adjusted = 0.779, $p < 0.10$) and without controls (unadjusted odds = 0.659, $p < 0.01$) controls, although the former is just outside the bounds of the traditional statistical significance levels. In contrast, in Figure 6 and Table 3, although Black women were significantly less likely to be WFH than White women in the lockdown period (2020–2021), this gap disappeared after adjusting other factors (also seen in the middle panel in Figure 6). Also, by 2022–23, no significant gaps remained for Black women, both in the adjusted and unadjusted models. Other ethnicities showed varying levels of significance and strength of the association, but none as pronounced as for Black men and women (see Supporting Information S1: Table A4 for gender interaction results). On the other hand, Chinese workers, both men and women, are significantly less likely to be WFH compared to White workers (by almost half for men), especially when adjusting for other factors such as occupations, sectors and migration status. There is no clear gender variation in this association. Detailed results are presented in Supporting Information S1: Tables A3–A6 and Figure A1.

4.3 | Robustness Checks

To test for robustness, we ran several additional analyses. Firstly, rather than controlling for migration status, we explore whether the intersection between ethnicity and migration status matters when considering WFH patterns of workers. The results are shown in Supporting Information S1: Tables A7–A10 and Figures A2–A4, by including interaction terms with the sub-categories of ethnicity and migration status. As we can see here, the variation in homeworking across workers of different ethnicities varies significantly depending on their migration status. Firstly, it is important to note that non-UK-born White workers were less likely to WFH than UK-born White workers pre-pandemic (unadjusted odds = 0.898, $p < 0.05$), as likely during lockdown (unadjusted odds = 1.055, $p > 0.05$), but more likely to do so post-lockdown (unadjusted odds = 1.226, $p < 0.001$)—although these gaps disappear in both cases when we control for other factors. On the other hand, we see that among ethnic minority workers, migrants are generally less likely to WFH. The patterns were clearer during lockdown, and post-lockdown periods compared to pre-pandemic (see Supporting Information S1: Figure A2). More specifically, we find that the ethnicity gap between Chinese and Black workers is largely driven by the

TABLE 3 | Weighted logistic regression results predicting working from home by ethnicity across time for female workers.

| Variables | Working from home | | | | | |
|---|-------------------------------|--------------------|-----------------------------|-------------------|----------------------------|-------------------|
| | Before COVID (2017–2019) | | During lockdown (2020–2021) | | After lockdown (2022–2023) | |
| | (1) Unadjusted | (2) Adjusted | (3) Unadjusted | (4) Adjusted | (5) Unadjusted | (6) Adjusted |
| Ethnicity (ref = White) | | | | | | |
| Mixed/Multiple ethnic groups | 1.102 (0.236) | 1.177 (0.268) | 1.292 (0.210) | 1.314 (0.238) | 1.390* (0.190) | 1.194 (0.185) |
| Indian | 0.780 ⁺ (0.115) | 0.653** (0.102) | 1.128 (0.135) | 0.979 (0.130) | 1.148 (0.115) | 0.867 (0.106) |
| Pakistani/Bangladeshi | 0.844 (0.159) | 1.043 (0.213) | 0.918 (0.169) | 0.968 (0.196) | 0.895 (0.135) | 1.105 (0.192) |
| Chinese and Other Asian | 1.050 (0.167) | 0.943 (0.169) | 0.640* (0.115) | 0.615* (0.119) | 0.867 (0.103) | 0.709* (0.107) |
| Black/African/ Caribbean/Black British | 0.626** (0.097) | 0.649* (0.113) | 0.713* (0.096) | 0.860 (0.128) | 0.915 (0.101) | 1.180 (0.158) |
| Other ethnic groups | 1.049 (0.186) | 0.722 (0.150) | 0.777 (0.156) | 0.729 (0.154) | 1.118 (0.160) | 0.912 (0.165) |
| Migrant status (ref = UK born) | | | | | | |
| Non-UK born | | 1.178* (0.084) | | 0.980 (0.066) | | 1.081 (0.067) |

Note: The coefficients are odds ratio and standard error in parentheses. Each adjusted model controls for a range of factors, including demographic characteristics (gender, age, whether they have a disability), household characteristics (relationship status, whether they have a preschool child under 5 years old, number of children under 19 years old), job characteristics (occupational types, managerial status, job types) and organisation characteristics (ownership of the organisation, size of the organisation, industry).

⁺ $p < 0.1$.

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

migrant workers of these ethnic minorities. In fact, UK-born Black workers are more likely to be WFH compared to UK-born White workers post-lockdown (see Table A7), both before and after controlling for different factors. Similarly, UK-born Chinese and Other Asian workers are more likely to WFH compared to UK-born White workers, although this gap disappears when we control for other factors. On the other hand, migrant Chinese and Black workers are significantly less likely to not only be WFH compared to White workers, both UK-born and migrant (Table A8).

As a second robustness check, we analysed WFH patterns among childless individuals and parents (Supporting Information S1: Tables A11–A14 and Figures A5–A12) to explore intersection of ethnicity, gender and parental status (Wanrooy et al. 2013). Firstly, as we can see in Supporting Information S1: Table A3, before the pandemic (2017–2019) having children was positively associated with WFH, however, by post-lockdown (2022–2023) it was negatively associated with WFH, with parents significantly less likely to WFH. The results for post-pandemic labour market contradict our assumption based on the fact that parents normally prefer WFH more for better work-family integration than childless individuals (Burgess

and Goldman 2021; Chung et al. 2020). As Supporting Information S1: Table A11 shows, the patterns of WFH by ethnicities were generally consistent across parents and childless workers, especially pre-pandemic (2017–2019) and during lockdown (2020–2021) period. Although the ethnicity variation is not necessarily driven by the parent populations, some exceptions exist. For example, among women (Supporting Information S1: Table A13), pre-pandemic, Indian women without children (adjusted odds = 0.385, $p < 0.01$) were significantly less likely than White women to WFH, whereas there were no significant differences for Indian mothers. On the contrary, Black mothers were less likely than White mothers to be WFH (adjusted odds = 0.569, $p < 0.05$) pre-pandemic, whereas no significant differences were found for childless Black and White women, especially in the adjusted models. Similarly, during the pandemic, Chinese and Black, and somewhat Pakistani/Bangladeshi, women without children were significantly less likely than their White counterparts to be WFH, while there were no significant differences between mothers of different ethnicities. For men (Supporting Information S1: Table A14), we see more variations in the 2022–2023 post-lockdown period. For example, Black men's lower WFH rates post-lockdown seem to be largely driven by

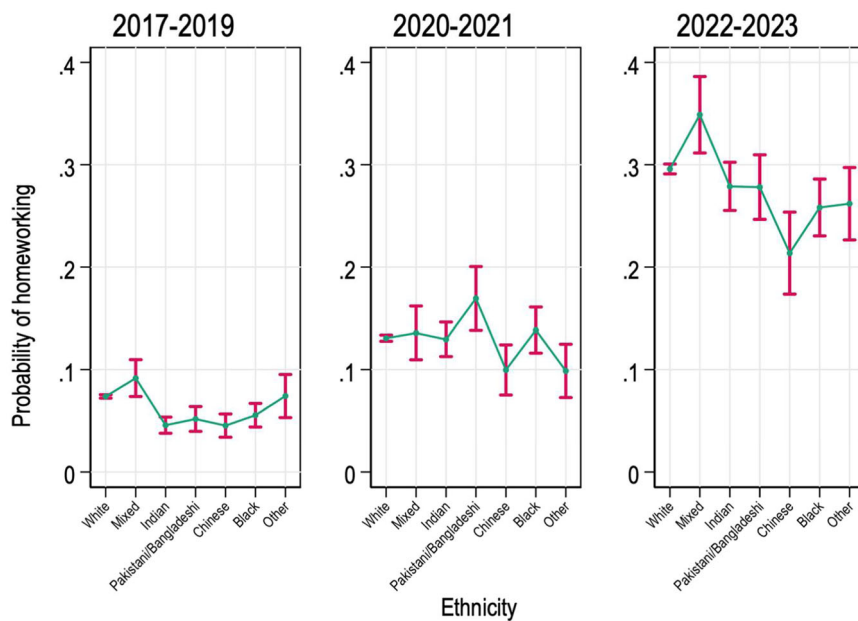


FIGURE 5 | Predicted probability of Working from home by ethnicity for men before, during and after the pandemic (with 83% confidence intervals). Source: This graph displays the predicted probability, derived from Models 2/4/6 in Table 2, based on the pooled data sets from Labour Force Survey Second Quarter data sets, covering the months of April to June from 2017 to 2023. The analysis employed survey weight and controlled for socio-economic and demographic characteristics, enhancing the representativeness of the findings.

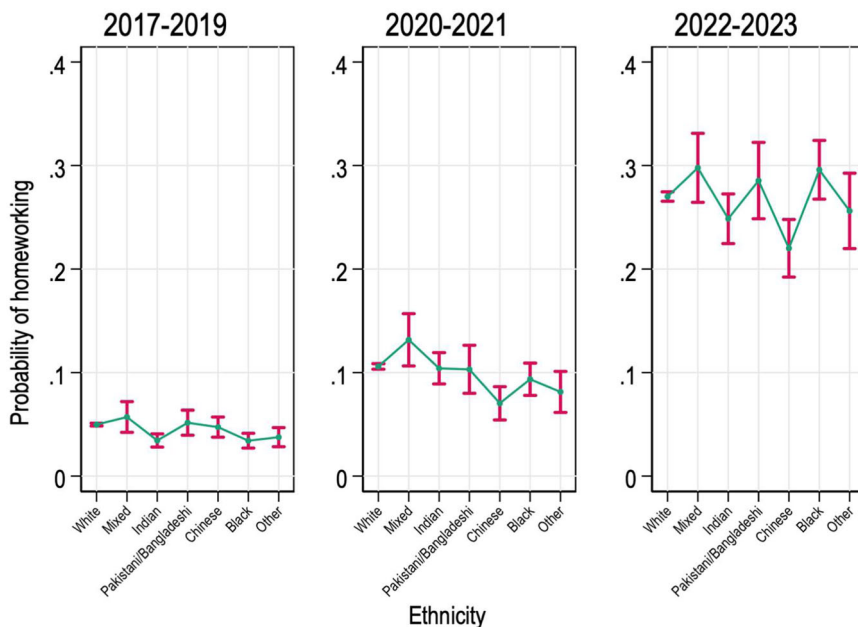


FIGURE 6 | Predicted probability of Working from Home by Ethnicity for women on before, during and after the pandemic (with 83% confidence intervals). Source: This graph displays the predicted probability, derived from Models 2/4/6 in Table 3, based on the pooled data sets from Labour Force Survey Second Quarter data sets, covering the months of April to June from 2017 to 2023. The analysis employed survey weight and controlled for socio-economic and demographic characteristics, enhancing the representativeness of the findings.

Black fathers, who were half as likely to WFH as White fathers (unadjusted odds = 0.538, $p < 0.001$), even after having controlled for various factors (adjusted odds = 0.691, $p < 0.10$). The gap between Black and White workers without children is negligible (adjusted odds ratio = 0.912, $p = \text{n.s.}$). Mixed-race fathers were almost twice as likely to be WFH (adjusted odds = 1.970, $p < 0.05$) compared to White fathers post-

lockdown, whereas there were no significant gaps between White and Mixed-race men without children. On the other hand, Pakistani/Bangladeshi (adjusted odds = 0.542, $p < 0.05$) and Chinese/'Other Asian' men without children (adjusted odds = 0.399, $p < 0.001$) were significantly less likely to WFH than their White counterparts in the post-lockdown labour markets, while no significant gaps were found for fathers.

As a final robustness check (Supporting Information S1: Table A15 and Figures A13–A15), we explored whether the operationalisation of WFH—as main place of work vs. at least once in the past week—makes a difference to our results. Firstly, when examining workers working at home for at least 1 day in the reference week in April to June 2022, over 37% have done so compared to 27% of workers saying they mainly working from home (Supporting Information S1: Table A1). Moreover, over 70% of those who worked at home at least once in the past week said they mainly WFH (Supporting Information S1: Table A2). There are differences in the levels of significance of the coefficients between the two models with different operationalisation of WFH. However, the relative size and direction of the associations generally remain consistent, despite changing the definition of WFH from mainly working from home to occasional working from home.

5 | Conclusion and Discussion

This paper examines racial differences in WFH practices among workers in the UK, comparing the periods before the pandemic in 2017–2019, during the lockdown in 2020–2021 and after the lockdown in 2022–2023. We see an overall increase in WFH practices across these periods, with around one in 20 workers working from home as their main place of work before the pandemic, rising to almost one in seven by 2021, and over a quarter of workers by the 2022–2023 post-lockdown period. Looking at the difference between White and BME workers, we found that there was a clearer gap in WFH practices before the pandemic. This was particularly true for men, where BME men were significantly less likely to be WFH than White men. However, this gap narrowed significantly during the pandemic and by the post-pandemic period (2022–2023) there were no significant gaps when looking at BME as a single group. In fact, among women, BME female workers were on average more likely to have WFH as their main place of work than White female workers after the pandemic lockdown periods. On the face of it, the increase in WFH practices seems to have evened out the differences between White and BME workers. These findings can be seen as positive, especially given what we know about workers' preferences for WFH and the potential benefits to workers, particularly BME workers, and society of enabling workers to access WFH.

However, this pattern becomes more complex when we look more closely at different ethnic groups and at migration, gender and parental status. We found that by 2022–2023, Mixed race and Indian workers were more likely to be in WFH than White workers, particularly when other factors are not controlled for. For other groups, such as Chinese and 'Other Asian' and Black workers, the gaps still exist—particularly when we look at the gap before we include a range of control variables—albeit smaller. Looking more closely, we found that the intersection of ethnicity, gender, migration and parental status all mattered. In particular, Black men were significantly less likely to be WFH than White men, even after controlling for other factors such as sector and occupational level, while Black women were just as likely as White women to be WFH. Chinese and 'Other Asian' workers were significantly less likely to be WFH for both men and women, and interestingly, this was particularly true when

controlling for other factors. When we looked at whether the migrant status of workers played a role in the variation in homeworking by ethnicity, we found that it was particularly Chinese and Black migrant workers who drove this result, and UK-born workers of these ethnicities were even more likely to be WFH than White workers. Further analysis, looking at parents and workers without children, has shown that it was particularly Black fathers whose WFH patterns differed from those of White fathers, while it was Chinese and 'Other Asian' and Pakistani/Bangladeshi childless men who were less likely to engage in WFH than their White counterparts. In summary, we can conclude that the rise of WFH in the labour market has been positive in providing workers of all ethnicities with a greater opportunity to engage in WFH, even providing certain ethnic minority groups with a greater opportunity to engage in WFH compared to White workers. However, we still see gaps in certain areas of the labour market where WFH patterns have not caught up with the rest of the population.

There are several reasons why we might see such trends in racial disparities in access to WFH. Managers may have (unconscious) biases against BME workers, particularly Black or migrant workers (Gray 2019; TUC 2022). This may limit the access of certain BME workers to WFH because managers do not trust their ability to use WFH in a productive way. Similarly, certain BME workers may not take advantage of FWAs that are available in the workplace. This may be due to personal choices where workers feel that they do not need WFH. However, it is more likely to be due to the potential negative consequences of flexible working and the fear of flexibility stigma leading to negative career outcomes. (Chung 2020b; J. C. Williams, Blair-Loy, and Berdahl 2013). Given the weaker bargaining power of ethnic minority workers, particularly migrant workers, it is not surprising that some workers may feel unable to engage in WFH, even if it is required by company policy, for fear that it will have a further negative impact on their career progression. As the likely breadwinners for their families, or because of social norms that they should be (West and Zimmerman 1987), BME men in particular may be less likely to take up FWAs due to fears of potential negative career consequences (Chung 2020b; Rudman and Mescher 2013). On the other hand, some ethnic minority women may choose to work in WFH despite the potential negative career outcomes. This is because, as well as allowing them to work longer hours and stay in more lucrative jobs, WFH (Chung and Van der Horst 2018; Fuller and Hirsh 2018), but also enable workers without other resources to meet work-family demands better than they would otherwise (Chung and Booker 2023; Kim 2020). This may explain the gender differences we see in our results.

There are several limitations to this paper. Firstly, due to the size of the sample, we were not able to explore racial differences in more detail, distinguishing between larger categories of ethnicity, and in an intersectional way—for example, intersecting migration and gender and/or parental status, looking at parents of younger children and/or disabled workers, etc. Larger data sets should be collected that oversample ethnic minority workers to enable such analyses. Secondly, due to data limitations, we were only able to compare home as the main place of work, rather than exploring different levels of WFH. However, our robustness check examining the 2022 data

showed that the results remain relatively stable regardless of the definition of homeworking used. Nevertheless, future studies should compare different types of WFH practices (e.g., 1–2 vs. 3–4 days) to see if there are similar racial differences in any WFH practices. In addition, where possible, it would be useful to collect data in an embedded way (workers embedded in firms) to allow for a multi-level approach to explore where/which firms these racial discrepancies are most and least visible. This would allow us to explore policy solutions to address inequalities in access to FWAs in the future. Finally, studies should explore the outcomes of FWAs for workers of different ethnicities in terms of careers and well-being, which can also help us to better understand what the consequences of the differences in FWA practices mean for workers and their families.

Regardless, this paper has contributed to the literature by providing evidence of intersectional racial differences in WFH practices in the UK, comparing pre-pandemic, during the lockdown and post-lockdown periods. This paper was one of the first to control for a wide range of different factors explaining WFH and to explore this in an intersectional way, looking at variation across gender, migration, parental status and sub-groups of ethnic groups. As we have shown, it is only through such an approach that a clearer conclusion can be drawn about the real gaps in the population. Future studies of labour market inequalities should also adopt such an intersectional approach and ensure that variation within BME groups is explored as much as possible. Ignoring this heterogeneity would lead to misleading conclusions. Future studies should also look more closely at why there are such differences between groups. Where possible, policy-makers and trade unions should seek to address this issue to ensure that the spread and normalisation of flexible working practices does not end up exacerbating existing labour market inequalities.

Acknowledgements

This project received funding from the Trade Union Congress project on 'Black and Minority ethnic workers' experience of home and hybrid working' and Productivity Institute funded project 'Hybrid Working And Productivity: Exploring Flexibility Stigma And Racial Inequalities'.

Ethics Statement

The authors have nothing to report.

Consent

The authors have nothing to report.

Data Availability Statement

The data used for this paper is the UK Labour Force Survey of 2017 to 2023. They are publicly available via the UK Data Archive, which can be accessed at the following link: <https://beta.ukdataservice.ac.uk/datacatalogue/series/series?id=2000026#1/faqs>.

Endnotes

¹ It is widely believed that group comparison with logit models is problematic due to the underlying latent outcome variable measured as binary and group variations in response to the treatment of

interest. However, we argue that our dependent variable captures a natural binary situation where those who work somewhere separate from home and those who mainly work at home are mutually exclusive, rather than some latent underlying outcomes with potential values between these two situations. Moreover, we acknowledge that the group-dependent effect exists when analysing the varying impacts of ethnicity on WFH across periods and gender/migrant groups. Thus, we compared our odds ratio estimates with predicted probabilities of homeworking, which were widely recommended in the literature to mitigate non-comparability issues in logistic models. Predicted probabilities represent the likelihood of an event occurring (e.g., working from home) based on explanatory variables (e.g., ethnicity) while controlling for covariates. We evaluate whether the difference between two predicted probabilities is significant at the 5% level by checking the overlap between 83% Cis (Austin and Hux 2002). The results align with our interpretations of the odds ratios and are included in the Appendix for cross-validation purposes.

References

- Abendroth, A. K., Y. Lott, L. Hipp, D. Müller, A. Sauermann, and T. Carstensen. 2022. "Has the COVID-19 Pandemic Changed Gender- and Parental-Status-Specific Differences in Working From Home? Panel Evidence From Germany." *Gender, Work & Organization* 29, no. 6: 1991–2011.
- ACAS. 2016. The Right to Request Flexible Working. <http://www.acas.org.uk/index.aspx?articleid=1616>.
- Aldridge, R. W., D. Lewer, S. V. Katikireddi, et al. 2020. "Black, Asian and Minority Ethnic Groups in England Are at Increased Risk of Death From COVID-19: Indirect Standardisation of NHS Mortality Data." *Wellcome Open Research* 5: 88.
- Allen, T. D., T. D. Golden, and K. M. Shockley. 2015. "How Effective Is Telecommuting? Assessing the Status of Our Scientific Findings." *Psychological Science in the Public Interest* 16, no. 2: 40–68. <https://doi.org/10.1177/1529100615593273>.
- Appelbaum, E., T. Bailey, P. B. Berg, A. L. Kalleberg, and T. A. Bailey. 2000. *Manufacturing Advantage: Why High-Performance Work Systems Pay Off*. Ithaca: Cornell University Press.
- Austin, P. C., and J. E. Hux. 2002. "A Brief Note on Overlapping Confidence Intervals." *Journal of Vascular Surgery* 36, no. 1: 194–195.
- Barrero, J. M., N. Bloom, and S. J. Davis. 2023. "The Evolution of Work From Home." *Journal of Economic Perspectives* 37, no. 4: 23–49.
- BITC. 2022. Who Cares 2022. London, Business in the Community. <https://www.bitc.org.uk/wp-content/uploads/2022/03/bitc-gender-report-whocares-march2022.pdf>.
- Brescoll, V. L., J. Glass, and A. Sedlovskaya. 2013. "Ask and Ye Shall Receive? The Dynamics of Employer-Provided Flexible Work Options and the Need for Public Policy." *Journal of Social Issues* 69, no. 2: 367–388.
- Bryson, A., and M. White. 2019. "Migrants and Low-Paid Employment in British Workplaces." *Work, Employment and Society* 33, no. 5: 759–776.
- Burgess, A., and R. Goldman. 2021. Lockdown Fathers: The Untold Story (Full Report) (Contemporary Fathers in the UK Series, Issue, London, Fatherhood Institute. Accessed May 12, 2021. <http://www.fatherhoodinstitute.org/2021/what-was-lockdown-like-for-dads-and-how-can-we-keep-the-best-bits/>.
- Chung, H. 2008. "Provision of Work-life Balance Arrangements in European Companies: Public vs Private." In *Privatisation and Marketisation of Services: Social and Economic Impacts on Employment, Labour Markets and Trade Unions*, edited by Private, M. Keune, J. Leschke, and A. Watt. Brussels: ETUI-REHS.
- Chung, H. 2018. "Dualization and the Access to Occupational Family-Friendly Working-Time Arrangements Across Europe." *Social Policy & Administration* 52, no. 2: 491–507. <https://doi.org/10.1111/spol.12379>.

- Chung, H. 2019. "National-Level Family Policies and the Access to Schedule Control in a European Comparative Perspective: Crowding Out or in, and for Whom?" *Journal of Comparative Policy Analysis* 21, no. 1: 23–40. <https://doi.org/10.1080/13876988.2017.1353745>.
- Chung, H. 2020a. "Company-Level Family Policies: Who Has Access to It and What Are Some of Its Outcomes?" In *The Palgrave Handbook of Family Policy*, edited by R. Nieuwenhuis and W. Van Lancker, 535–573. Palgrave Macmillan. Accessed January 7, 2021. https://link.springer.com/chapter/10.1007/978-3-030-54618-2_21.
- Chung, H. 2020b. "Gender, Flexibility Stigma, and the Perceived Negative Consequences of Flexible Working in the UK." *Social Indicators Research* 151, no. 2: 521–545.
- Chung, H. 2022. *The Flexibility Paradox: Why Flexible Working Can Lead to (Self-)Exploitation*. Bristol: Policy Press.
- Chung, H. 2024. *Flexible Working Arrangements and Gender Equality in Europe*. Brussels: Publication Office of the European Union.
- Chung, H., and C. Booker. 2023. "Flexible Working and Division of Housework and Childcare: Examining the Divisions Across Occupational Lines." *Work, Employment & Society* 37, no. 1: 236–256. <https://doi.org/10.1177/09500170221096586>.
- Chung, H., H. Seo, S. Forbes, and H. Birkett. 2020. *Working From Home During the COVID-19 Lockdown: Changing Preferences and the Future of Work*. Canterbury, UK: University of Kent. <http://wafproject.org/covidwfh/>.
- Chung, H., and M. Van der Horst. 2018. "Women's Employment Patterns After Childbirth and the Perceived Access to and Use of Flexitime and Teleworking." *Human Relations* 71, no. 1: 47–72. <https://doi.org/10.1177/0018726717713828>.
- Chung, H., and T. Van der Lippe. 2020. "Flexible Working Work Life Balance and Gender Equality: Introduction." *Social Indicators Research* 151, no. 2: 365–381. <https://doi.org/10.1007/s11205-018-2025-x>.
- Chung, H., and S. Wang. 2024. "Flexibility Stigma in the UK Post-Pandemic: Intersectionality of Stigma Across Gender and Parental Lines." In *Understanding Society Innovation Panel Wave 16: Results From Methodological Experiments and New Data*. Colchester: ISER, University of Essex.
- Chung, H., S. Yuan, and A. Arkwright. 2024. *Making Hybrid Inclusive: Black Workers Experiences of Hybrid Working*. London, UK: Trades Union Congress.
- CIPD. 2020. *Working From Home: What's Driving the Rise in Remote Working?* (Mega Trends, Issue, London, Chartered Institute of Personnel and Development).
- CIPD. 2021. *Flexible Working: Lessons From the Pandemic*. London: Chartered Institute for Personnel Development. Accessed April 2, 2021. <https://www.cipd.co.uk/knowledge/fundamentals/relations/flexible-working/flexible-working-lessons-pandemic#gref>.
- CMI. 2020. *Management Transformed: Managing in a Marathon Crisis*. London, UK: Chartered Management Institute. <https://www.managers.org.uk/knowledge-and-insights/research-thought-leadership/management-transformed/>.
- Dex, S., and F. Scheibl. 2001. "Flexible and Family Friendly Working Arrangements in UK Based SMEs: Business Cases." *British Journal of Industrial Relations* 39, no. 3: 411–431.
- El-Enany, N. 2020. *(B)ordering Britain: Law, Race and Empire*. Manchester: Manchester University Press.
- Evans, J. M. 2001. *The Firm's Contribution to the Reconciliation Between Work and Family Life* (Labour Market and Social Policy Occasional Paper Issue, Paris, OECD).
- Felstead, A., D. Gallie, F. Green, and G. Henseke. 2020. "Unpredictable Times: The Extent, Characteristics and Correlates of Insecure Hours of Work in Britain." *Industrial Relations Journal* 51, no. 1–2: 34–57.
- Forth, J., N. Theodoropoulos, and A. Bryson. 2023. "The Role of the Workplace in Ethnic Wage Differentials." *British Journal of Industrial Relations* 61, no. 2: 259–290.
- Fuller, S., and C. E. Hirsh. 2018. "Family-Friendly" Jobs and Motherhood Pay Penalties: The Impact of Flexible Work Arrangements Across the Educational Spectrum." *Work and Occupations* 46, no. 1: 3–44.
- Future Form. 2022. *Leveling the Playing Field in the Hybrid Workplace*. Online, Future Forum/Slack.
- Gerzema, J. 2022. Harris Poll COVID-19 Tracker Wave 104. The Harris Poll. <https://theharrispoll.com/briefs/covid-19-tracker-wave-104/>.
- Golden, L. 2009. "Flexible Daily Work Schedules in US Jobs: Formal Introductions Needed?" *Industrial Relations: A Journal of Economy and Society* 48, no. 1: 27–54.
- Gong, F., J. Xu, and D. T. Takeuchi. 2017. "Racial and Ethnic Differences in Perceptions of Everyday Discrimination." *Sociology of Race and Ethnicity* 3, no. 4: 506–521.
- Gray, A. (2019). The Bias of 'Professionalism' Standards. Stanford Social Innovation Review, June 2019. https://ssir.org/articles/entry/the_bias_of_professionalism_standards.
- Heath, A. F., and V. Di Stasio. 2019. "Racial Discrimination in Britain, 1969–2017: A Meta-Analysis of Field Experiments on Racial Discrimination in the British Labour Market." *British Journal of Sociology* 70, no. 5: 1774–1798.
- Hendry, C., S. King, J. Probert, and G. Scott. 2023. *Characteristics of Homeworkers, Great Britain: September 2022 to January 2023*. London, UK: ONS. <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/characteristicsofhomeworkersgreatbritain/september2022tojanuary2023>.
- House of Commons Library. 2023. *Skills and Labour Shortages* (Research Briefing, Issue, London, UK Parliament. <https://commonslibrary.parliament.uk/research-briefings/cdp-2023-0001/>.
- Hu, Y. 2020. "Intersecting Ethnic and Native-Migrant Inequalities in the Economic Impact of the COVID-19 Pandemic in the UK." *Research in Social Stratification and Mobility* 68: 100528.
- Kasperska, A., A. Matysiak, and E. Cukrowska-Torzewska. 2024. "Managerial (Dis)Preferences Towards Employees Working From Home: Post-Pandemic Experimental Evidence." *PLoS One* 19, no. 5: e0303307.
- Kelly, E. L., P. Moen, J. M. Oakes, et al. 2014. "Changing Work and Work-Family Conflict: Evidence From the Work, Family, and Health Network." *American Sociological Review* 79, no. 3: 485–516. <https://doi.org/10.1177/0003122414531435>.
- Kim, J. 2020. "Workplace Flexibility and Parent-Child Interactions Among Working Parents in the U.S." *Social Indicators Research* 151, no. 2: 427–469. <https://doi.org/10.1007/s11205-018-2032-y>.
- Lambert, S. J., and A. Haley-Lock. 2004. "The Organizational Stratification of Opportunities for Work-Life Balance: Addressing Issues of Equality and Social Justice in the Workplace." *Community, Work & Family* 7, no. 2: 179–195.
- Lyness, K. S., J. C. Gornick, P. Stone, and A. R. Grotto. 2012. "It's All About Control Worker Control Over Schedule and Hours in Cross-National Context." *American Sociological Review* 77, no. 6: 1023–1049. <https://doi.org/10.1177/0003122412465331>.
- Munsch, C. L. 2016. "Flexible Work, Flexible Penalties: The Effect of Gender, Childcare, and Type of Request on the Flexibility Bias." *Social Forces* 94, no. 4: 1567–1591.
- Mutebi, N., and A. Hobbs. 2022. *The Impact of Remote and Hybrid Working on Workers and Organisations*. London, Parliamentary Office of Science and Technology (POST).
- ONS 2019. *Ethnicity Pay Gaps in Great Britain: 2018*. London, Office for National Statistics. <https://www.ons.gov.uk/employmentandlabourmarket/>

peopleinwork/earningsandworkinghours/articles/ethnicitypaygapsingreatbritain/2018.

ONS. 2020. Coronavirus and Homeworking in the UK: April 2020 (Statistical Bulletin, Issue, London, Office for National Statistics). <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/coronavirusandhomeworkingintheuk/april2020>.

ONS. 2022a. Impact of Reweighting on Labour Force Survey Key Indicators: 2022. London, Office for National Statistics. <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/impactofreweightingonlabourforcesurveykeyin>.

ONS. 2022b. Is Hybrid Working Here to Stay? (Data Briefing, Issue, London, Office for National Statistics). <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/isahybridworkingheretostay/2022-05-23>.

ONS. 2023. Employment. London, Office for National Statistics. <https://www.ethnicity-facts-figures.service.gov.uk/work-pay-and-benefits/employment/employment/latest/>.

ONS. 2024. Labour Force Survey user guide: Volume 1–LFS background and methodology. London, Office for National Statistics. Retrieved from <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/methodologies/labourforcesurveyuserguidance>.

Ortega, J. 2009. “Why Do Employers Give Discretion? Family Versus Performance Concerns.” *Industrial Relations: A Journal of Economy and Society* 48, no. 1: 1–26.

Pedulla, D. S. 2018. “How Race and Unemployment Shape Labor Market Opportunities: Additive, Amplified, or Muted Effects?” *Social Forces* 96, no. 4: 1477–1506.

Public Health England. 2020. *Disparities in the Risk and Outcomes of COVID-19*. London: Public Health England.

Rudman, L. A., and K. Mescher. 2013. “Penalizing Men Who Request a Family Leave: Is Flexibility Stigma a Femininity Stigma?” *Journal of Social Issues* 69, no. 2: 322–340.

Stewart, E., and P. Bivand. 2016. How Flexible Hiring Could Improve Business Performance and Living Standards. Joseph Rowntree Foundation. Accessed October 1, 2019. <https://www.jrf.org.uk/report/how-flexible-hiring-could-improve-business-performance-and-living-standards>.

Swanberg, J. E., M. Pitt-Catsoupes, and K. Drescher-Burke. 2005. “A Question of Justice Disparities in Employees’ Access to Flexible Schedule Arrangements.” *Journal of Family Issues* 26, no. 6: 866–895.

The Law Society. 2022. *A Guide to Race and Ethnicity Terminology and Language*. London, UK: The Law Society. [https://www.lawsociety.org.uk/topics/ethnic-minority-lawyers/a-guide-to-race-and-ethnicity-terminology-and-language#:~:text=Both%20'BAME'%20\(Black%2C,and%20in%20company%20diversity%20monitoring](https://www.lawsociety.org.uk/topics/ethnic-minority-lawyers/a-guide-to-race-and-ethnicity-terminology-and-language#:~:text=Both%20'BAME'%20(Black%2C,and%20in%20company%20diversity%20monitoring).

TUC. 2017. Better Jobs for Mums and Dads. <https://www.tuc.org.uk/research-analysis/reports/better-jobs-mums-and-dads>.

TUC. 2021a. *Denied and Discriminated Against: The Reality of Flexible Working for Working Mums*. London, UK: UK Trades Union Congress.

TUC. 2021b. *Disabled Workers’ Access to Flexible Working as a Reasonable Adjustment*. London, UK: UK Trades Union Congress.

TUC. 2021c. *Half of Working Mums Don’t Get the Flexibility They Ask for - TUC Survey*. London, UK: Trades Union Congress. <https://www.tuc.org.uk/news/half-working-mums-dont-get-flexibility-they-ask-tuc-survey>.

TUC. 2022. *Still Rigged: Racism in the UK Labour Market 2022*. London, UK: UK Trades Union Congress.

Wanrooy, B. v, H. Bewley, and A. Bryson, et al. 2013. The 2011 Workplace Employment Relations Study: First Findings. <https://www.gov.uk/government/publications/the-2011-workplace-employment-relations-study-wers>.

West, C., and D. H. Zimmerman. 1987. “Doing Gender.” *Gender & Society* 1, no. 2: 125–151. <https://doi.org/10.1177/0891243287001002002>.

Wiß, T. 2017. “Paths Towards Family-Friendly Working Time Arrangements: Comparing Workplaces in Different Countries and Industries.” *Social Policy & Administration* 51, no. 7: 1406–1430. <https://doi.org/10.1111/spol.12270>.

Williams, J. C., M. Blair-Loy, and J. L. Berdahl. 2013. “Cultural Schemas, Social Class, and the Flexibility Stigma.” *Journal of Social Issues* 69, no. 2: 209–234. <https://doi.org/10.1111/josi.12012>.

Williams, M., S. Wang, and M. Koumenta. 2024. “Ethnicity Disparities in Job Control in the United Kingdom.” *Industrial Relations Journal* 55, no. 1: 33–53.

Wong, V. 2020. These People Of Color Are Anxious About Racist Microaggressions When They Return To The Office. Buzz Feed News. <https://www.buzzfeednews.com/article/venessawong/workers-returning-office-racism>.

Wood, S. J., and L. M. De Menezes. 2010. “Family-Friendly Management, Organizational Performance and Social Legitimacy.” *International Journal of Human Resource Management* 21, no. 10: 1575–1597.

Zwysen, W., and N. Demireva. 2020. “Ethnic and Migrant Penalties in Job Quality in the UK: the Role of Residential Concentration and Occupational Clustering.” *Journal of Ethnic and Migration Studies* 46, no. 1: 200–221.

Supporting Information

Additional supporting information can be found online in the Supporting Information section.