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The Contribution of Labour Unions in Fostering Access to Flexible Work Arrangements in Britain

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Abstract:

Flexible work arrangements (FWAs) are negotiated at workplace level and all British employees now have a right to request for using such arrangements. However, the access such as the use of FWAs varies depending on several factors such as the gender or the income level but, surprisingly, only a few studies have focused on the role labour unions could play in facilitating the access to FWAs. Using data from Understand Society, wave 8 (N=16,992), we use the Structural Equation Modeling framework and, particularly, mediation analysis to examine the relationships between FWAs accessibility, union presence, income level and gender and control for the impact a set of independent covariates. Results show that high income, union presence and being a woman are associated with greater access to FWAs. Though, women do not use the same FWAs as men and low paid workers are more likely to use part-time arrangements than other types of FWAs. Union presence has an overall positive impact, but the impact is negative for home working.

Background

Flexible Work Arrangements (FWAs) arouse considerable interest in the scientific literature. They might gain in importance in the coming years and the recent covid-19 crisis has shown the importance of providing flexible work settings. But flexible work is not a new phenomenon. The first step in introducing a right to apply for contract variations was made in 1996. The Employment Rights Act 1996 (art. 80F) introduces a statutory right to apply for contract variation regarding changes related to working time. Such a right has been reinforced over the past few years. The Flexible Working Regulations 2014 relaxes the access to flexible working time as employees who have been continuously employed for a period of at least 26 weeks are now entitled to make a flexible working application. These regulations were supported by the main unions (particularly Unite and Unison) and by the Advisory, Conciliation and Arbitration Service (ACAS), which published in 2014 a code of practise titled 'Handling in a reasonable manner requests to work flexibly' (ACAS, 2014). Referring to the legislation, several reasons can be mentioned by the employers to refuse the employee's request (Gregory & Milner, 2009): the burden of additional costs, the inability to reorganise work amongst existing staff or to recruit additional staff, the detrimental impact on quality, performance or ability to meet customer demand, insufficient work for the periods the employee proposes to work or a planned structural change.

The *right to request* FWAs contrasts with what is implemented in some other European countries, particularly when looking at public arrangements supporting working time reduction (Author, 2018b). Two major characteristics can be pointed out. First, the UK does not provide social benefits in case of working time reduction: those who reduce working time do it at their own cost – the UK only provides a 'working tax credit'. Second, the right to request is typical from a liberal welfare state. In some other welfare states, flexible working arrangements and, particularly, working time reduction, are an employee's right. Giving the final say to the employer is not a universal setting. Though, the UK has made major efforts in promoting different kinds of flexible work arrangements. A recent article written by Wheatley (2017) has pointed out the diversity of flexible work arrangements and their impact in terms of employee satisfaction. The paper perfectly describes the main types of flexible working arrangements that are used in the UK (and about which information was collected by Understanding Society): part-time, flexi-time, compressed hours, annualized hours, job share and homeworking (please, read the article for a full description of these arrangements).

In mid-nineties European employment policies, flexible work arrangements were originally intended to support work life balance, and to encourage gender equality. But the narrative about the reconciliation of work and family life soon became much more market-oriented (Stratigaki, 2004). Gradually, the European Employment Strategy focused on the necessity to encourage more flexible forms of employment. Against this backdrop, gender and family roles became a component of flexible work arrangements much more than the reason for why flexible work arrangements are implemented. In fact, many policies now underline the need to develop flexible work for many categories of workers including the young and the older workers. Consequently, most studies focus on the outcomes of FWAs much more than on the reasons for why FWAs are made available and used. Three aspects have been explored.

First, a large part of the literature focuses on the impact of FWAs on job satisfaction and productivity. For instance, looking at the impact of flexitime and compressed workweek on job satisfaction and turnover intentions, McNall, Masuda, & Nicklin (2009) show that the availability of flexible work arrangements tend to help employees to experience greater job satisfaction and to lower turnover intentions. Focusing specifically on female workers, Scandura & Lankau (1997) demonstrate that women who perceive that flexible work hours is encouraged within their organisation report higher levels of organisational commitment and job satisfaction.

Second, the impact of FWAs on work-life balance is also examined. Studies focusing on this topic usually insist on the necessity to distinguish the different types of flexible work arrangements that are available. Looking at Ireland, Russell, Connell, & Mcginnity (2009) show that part-time work and flexitime reduce work pressure and work-life conflict, but home working is associated with higher levels of work pressure and work-life conflict. The specific form of flexibility is a key-point in the understanding of work-family conflicts (Allen, Johnson, Kiburz, & Shockley, 2013).

Finally, a third approach looks at the association between the use of FWAs and career prospects and income progression. Most of the recent literature suggests that flexible work arrangement might have an impact on income progression. According to this idea, there would be a so-called ‘flexiglass ceiling” according to which those who are using flexible working arrangements are more likely to be those earning lower hourly wages. Contradicting the idea of an “universal penalty associated with flexible work” Weeden (2005, p. 478) shows that flexible-work employees earn wages that are at least equal to their fixed-schedule and fixed-location counterparts. For Kossek & Lautsch (2017), part-time employment particularly hurts lower-level employees the most whereas it enhances recruitment and retention for upper-level jobs. Merz, Böhm, & Burgert (2004)

find that individual earnings are significant different with regard to the daily working hours arrangement capturing timing and fragmentation of work.

One major area of concern is that different subgroups within the working population benefit from different types of FWAs. There are both gender and income discrepancies in the access and use of these arrangements. The right to request FWAs together with anti-discrimination laws should prevent inequalities in access to flexibility but the reality is quite different. Looking at the United States, Kelly and Kalev (2006) have shown that, even though most organizations have formalized flexible work arrangements with written policies, these policies "institutionalise managerial discretion rather than creating outright rights for employees" (Kelly & Kalev, 2006, p. 379). The gender divide also remains a major determinant. Chung (2018b) shows that working in female-dominated jobs and/or sectors significantly reduces access to schedule control for both men and women. Similarly, Chung (2018a) finds that it is not so much the contract status that plays a role in explaining the use of working time arrangements but rather the skill-level of the job/workers, and their perceived insecurity. Income inequalities within the workplace also play a key role in explaining the differential access to flexible work (Wainwright et al., 2018). One can therefore assume that the 'flexiglass ceiling' could work the other way around: income inequalities could contribute to explain whether flexible work arrangements are available and used within the company.

Interestingly, and whilst the access to FWAs is mainly company-based, the role of labour unions in explaining to what extent FWAs are made available has not been examined recently. On this particular matter, Sweet, Pitt-Catsouphes, Besen, & Golden (2014) have pointed out that the impact of union membership on FWAs availability is not well framed by the existing literature. The authors explain that organizations with larger union memberships would tend to enhance FWAs but with contrasted results depending on the study. That is particularly the case of Budd & Mumford (2004) who evidenced, using 1998 UK data, that labour unions were negatively associated with the availability of home working arrangements and flexible working hours options, but positively with parental leave, special paid leave, and job-sharing options. However, some other studies (particularly in the US) show that unions do not play a role in enhancing such arrangements, such as Davis & Kalleberg (2006) based on 1996 US data, Osterman (1995) using 1994 US data or Wood, de Menezes, & Lasaosa (2003) using 1998 UK data.

As are FWAs, collective negotiation is mainly company-based in the UK with little negotiation at sector level. There is still industry level bargaining in some industries (e.g. textile and furniture industries) but a clear move towards bargaining at local level is observed since the 1980s. Even

though some sectors are more traditionally unionized (particularly in the public sector) and some have very low union densities (such as the banking sector), most sectors of activity have companies that have a collective negotiation. The relationship between politics and the world of work is traditionally perceived under the idea of 'free collective bargaining' (Hyman, 2006) according to which industrial relations are largely autonomous from the political sphere. Therefore, it can be assumed that instead of taking a sector point of view (as it could be the case in the US or in some other European countries), the company level is the key level in the understanding of British labour unions (Wels, 2020). Furthermore, it has to be noticed that, even though union density is nowadays quite low in the UK (around 24 per cent)[1], 49 per cent of the British workforce is employed in a company in which there is a union or staff association that represents its interests (Wels, 2020).

This study provides estimates about the association between union presence and access to flexible working arrangements, paying particular attention to gender and income discrepancies in Great Britain. Using cross-sectional data, it answers three research questions: (1) What is the impact of gender, income level and union presence on FWAs available within the workplace?; (2) How does gender and income level are mediated by union presence in explaining the access to FWAs? ; and, (3) looking particularly at the workforce that has access to FWAs, how do union presence, gender and income levels affect the use of these arrangements?

More particularly, this study aims to address three main issues that have not been addressed by previous studies on this matter.

1°/ No recent data has been used for analysing the relationship between union presence and FWAs availability as most studies focusing on the UK have been using data from the late 1990s (whilst there were some changes in legislation and trade union density since then)

2°/ The problems of the co-founders that explain both flexible work-oriented management at company level and the presence of a collective negotiation within the workplace has not been analysed in-depth, one main issue being that companies who accept collective negotiation might be more likely to favour flexible working arrangements.

3°/ Studies usually set aside a gender perspective and a perspective in terms of collective negotiation. The recent rise in women's membership in the UK (Department for Business Energy &

[1] However, it has to be noticed that, in 2019, unions density rates have increased sharply in the UK (Department for Business Energy & Industrial Strategy, 2020).

Industrial Strategy, 2020) such as the use of different types of FWAs by gender encourage further investigations in looking at the potential relationship between these two cofounding variables.

Data and methods

Data

Data used in this study come from the Understanding Society (UKHLS) dataset. Understanding Society is a longitudinal survey of the members of approximately 40,000 households (at wave 1) in the United Kingdom and provides longitudinal and cross-sectional data at individual or household unit. Analyses carried out in this article use cross-sectional data from wave 8, released in 2017-2018. Analyses focus on the employed population aged 18-65 living in the United Kingdom (self-employees and non-employed respondents are excluded from the sample) (*N=16,992*).

Dependent variables

UKHLS collects Information about whether several FWAs (part-time, term time, job sharing, flextime, compressed hours, annualized workers, regular homeworking and other kinds of arrangements) are available within the workplace and, if available, whether they are used by the respondent. First, one calculates a latent variable that summarizes information about the access to the different types of FWAs at workplace level. Second, we create eight binary variables for each arrangement, coded '0' when the respondent does not have access to the specific arrangement and '1' when the respondent does.

Variables of interest

The study pays particular attention to three variables: the gender, the level of daily income and whether there is a trade union or a staff association at workplace.

UKHLS does not contain lots of information about gender at individual level as it only distinguishes male and female respondents based on their self-declared gender. The information is missing for 5 individuals in the selected sample. The reference category that is picked up in the following analyses is 'male'. Therefore, coefficients are the average change in the dependent variable when respondents are female (versus male).

The variable 'union presence' is coded 'yes' or 'no' based on the answer to the following question: 'Is there a trade union, or a similar body such as a staff association, recognised by your management for negotiating pay or conditions for the people doing your sort of job in your workplace?'. 'No' is

selected as the reference category. Therefore, coefficients reflect the impact of working in a workplace where there is collective negotiation, versus workplaces where there is none.

Finally, the level of incomes used in the article is the post calculated hourly wage. One of the main issues with dealing with income variables is that they are clearly associated with working time. As flexible working arrangements might imply working time reduction, employees working in workplaces where FWAs are available are more likely to have lower monthly incomes compared with respondents working in a workplace where FWAs are not available. To tackle such a methodological issue, we calculated the hourly wage as the ratio between the monthly gross incomes excluding overtime and the total number of hours usually worked per week. To harmonize the information, the variable is calculated as the natural logarithm of the ratio between the monthly gross income and the standardized working time per month. The standardized working time per month is calculated as the weekly working time divided per 5 (five days a week) and multiplied by 22 (22 working days a month).

Covariates

The study controls for several covariates that might have an impact on FWAs availability, incomes and union presence. We use a quadratic function of age that is in year of age and range from 25 to 65 years old at time of the interview[2]. The distinction in geographical area is based on the Government Office Region nomenclature. The South East of England is selected as the reference category. The level of education is based on the highest qualification obtained at the time of the interview. The household composition distinguishes several compositions in the household, taking into consideration the number of adults as well as the number of children. The reference category is 'couple with no children'. The company size is controlled distinguishing several categories: 1 to 24 employees, 25-49 employees, 50-99 employees, 100 to 100 employees (reference category), 200 to 499 employees, 500 to 999 employees and more than 1000 employees. The occupation comes from the International Standard Classification of Occupations (ISCO-1988) and distinguishes 46 types of occupations. The socio-economic group distinguishes, manager, professional, non-manual, skilled or manual workers taking into consideration the size of the company. Finally, the working time is the total hours usually worked per week (excluding overtime).

[2] The models were tested using an age-squared variable to control for the non-linearity of the variable with no significant difference in the estimates.

Models

To assess the relationship between union presence, gender, hourly wage and access to FWAs, the study uses Structural Equation Modeling (SEM) and, particularly, mediation analysis.

Regarding mediation analysis, the study applies the classical Baron and Kenny's causal steps procedure (Baron & Kenny, 1986) that can be formalized as follow in the case of a simple mediation:

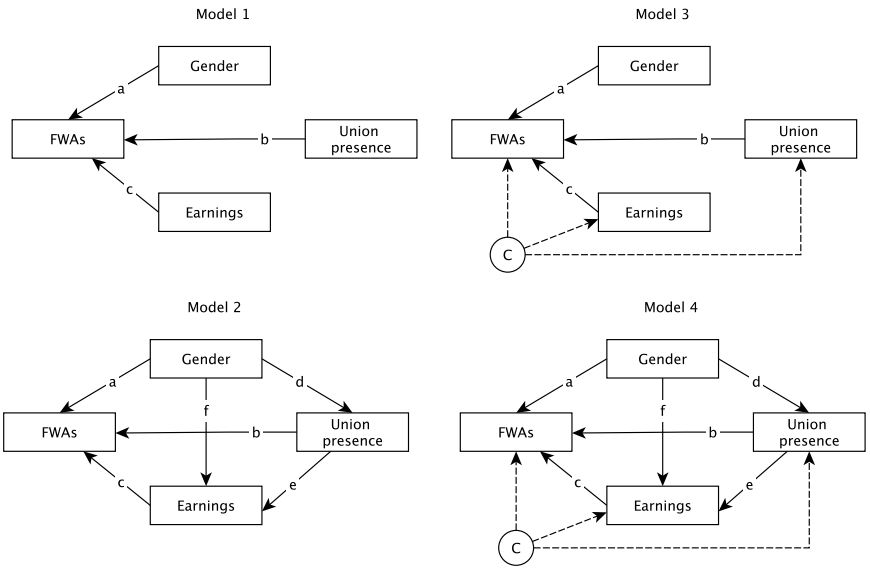
$$Y = b_{01} + cX \quad (1)$$

$$M = b_{02} + aX \quad (2)$$

$$Y = b_{03} + bM + c'X \quad (3)$$

In these equations, M is a mediator of the relationship between X and Y. The first step is about whether the independent variable (X) relate to the dependent variable (Y) so that the coefficient 'c' is significant. In other words, one condition is to establish that there is actually a statistically significant relationship between X and Y that can be mediated. The second condition is about testing for the significatively of the relationship between the mediator variable (M) and the independent variable (X). Similarly, the third condition is about the significance of the relationship between the mediator (M) and the dependent variable (Y). Finally, one should observe whether the independent variable (X) is not associated with the dependent variable (Y) after the mediator variable (M) is controlled ('c'). In other words, the relationship between X and Y disappears when the mediator is taken into consideration. The fourth condition is the most difficult to achieve and Baron and Kenny rather suggest seeking for mediators that significantly decrease (partial mediation) rather than eliminate (full- / perfect mediation) the relationship between the independent variable and the dependent variables. The total effect of X on Y is referred to as the total effect (a*b+c') and this effect is partitioned between a direct effect of X on Y (c), and an indirect effect of X on Y that is transmitted through M (a*b) (Agler & De Boeck, 2017).

Figure 1. Models specification



Four models are tested in this study. Model 1 is a simple logit regression that looking at the specific impact of gender (*a*), union presence (*b*) and earnings (*c*) on access to FWAs. The model is tested on a latent variable that sums up information about all available FWAs and on each FWA separately. *Model 1* does not include mediation and does not control for covariates. *Model 2* replicates model 1 but includes several mediators: the impact of union presence is mediated by gender (d), the impact of union presence is mediated by earnings (e) and the impact of gender is mediated by earnings (c)). Model 3 replicates model 1 but includes the set of covariates set of covariates (C) among which the type of occupation, the company size or whether the job is temporary or not. Finally, *model 4* combines models 2 and 3 is it includes the set of covariates and the mediators. Model 4 is later replicated looking at the use of FWAs among the working population that has access to FWAs only (excluding those who do not have access to FWAs within the workplace).

Results

Descriptive statistics

Table 1 exhibits some descriptive statistics about access to FWAs in the UK by gender and union presence within the workplace. The right-side column shows the total ratio, i.e. the percentage of workers that have access to FWAs. It can be observed that all FWAs are not successful in the United Kingdom. 58.7 per cent of the sample has access to part time arrangements. Flexitime is the second

most common arrangement to be mentioned: it is accessible to 30.4 per cent. Access to term time and job-sharing concerns respectively 17.1 and 17.8 per cent of the sample. 15.6 per cent of the employed population could work from home on a regular basis. Finally, compressed and annualised hours are accessible to 12.6 and 5.3 per cent of the sample.

Table 1. Access to FWAs by gender and union presence

	Gender			Union presence			
FWAs	Male	Female	Ratio[i]	No union	Union	Ratio[ii]	Total ratio[iii]
Part-time	3,373	6,580	1.95	4,620	5,333	1.15	58.7
Term time	855	2,040	2.39	806	2,089	2.59	17.1
Job Sharing	1,015	2,001	1.97	763	2,253	2.95	17.8
Flexitime	2,303	2,862	1.24	2,312	2,853	1.23	30.4
Compressed hours	911	1,227	1.35	648	1,490	2.30	12.6
Annualised hours	411	486	1.18	275	622	2.26	5.3
Home working	1,356	1,286	0.95	1,388	1,254	0.90	15.6
Other	1,252	1,420	1.13	1,344	1,328	0.99	15.7

Note: [i.] Ratio Female / Male ; [ii.] Ratio Union / No Union ; [iii.] Ratio total FWA / total population * 100

The ratio between male and female workers is also of interest. It clearly shows that most FWAs are more accessible to women except home working. To give an example, there are 1.95 women for one man who have access to part-time work arrangements and 0.95 women for one man who have access to home working arrangements. Interestingly, the same can be observed when looking at union presence. Collective bargaining within the workplace is associated with greater access to flexible work arrangements except in the case of home working. For instance, there are 1.15 workers in a unionized workplace who have access to part-time arrangements for one worker in a non-unionized workplace. Conversely, the ratio is 0.90 for home working.

These descriptive figures raise three main methodological issues. First, table 1 does not control for the covariates that could have an impact of the access to flexible work arrangements such as the age or, even more importantly, the type of occupation. Second, table 1 does not look at the potential mediation between gender and union presence in explaining the access to FWAs. Finally – and this is an important methodological issue when analysing the impact of labour unions in Great Britain (Wels, 2020) –, there might be a spurious relationship between the access to FWAs, on the one hand, and the presence of a unions or staff association within the workplace, on the other hand. In other words, as collective bargaining within the workplace is now dependent on whether employers support such a negotiation, it could be possibly argued that employers who accept

collative bargaining are also those who promote the access to flexible arrangements, and *vice versa*. Therefore, there is a need to control for the confounders that explain both aspects such as the type of occupation or the level of incomes of the workforce. Several strategies could be used to tackle such an issue such as propensity score matching (Wels, 2020) or the use of longitudinal data to assess the change in the dependent variable independently from its baseline value (Wels, 2018a). This study partially tackles such a bias by controlling for the impact of the set of covariates on the dependent variables (FWAs) as well as on union presence and hourly wage.

Structural Equation Modeling

Results flowing from models 1-4 are shown in table 2. Only the coefficients for the variables of interests (union presence, gender and earnings) are shown. The models were performed separately for the latent variable (FWAs latent) and for each FWA. Results are consistent across each model with slight variations.

Three observations can be made when looking at models 1 (no covariates) and 3 (with covariates).

First, the variable gender (i.e. being a female worker) is associated with higher log odds (logit). In model 1, the latent variable is 0.152, significant by 99 per cent which indicates that, on average, the probabilities for female workers to have access to flexible work arrangements increase by 16 percentage points (0.152). Controlling for the association between the set of covariates and the variables of interests in model 2, the probabilities are divided by 2, the probabilities to have access to FWAs are increased by 9 per cent for female workers after controlling for cofounding factors. What is interesting when looking at models 1 and 2 is the difference between each FWAs. It can be observed that the logits are positive for most FWAs in model 1 including part-time (0.317), term time (0.193), job sharing (0.154), flexitime (0.027) and compressed hours (0.043). No statistically significant differences are observed for annualized hours, home working and the other types of arrangements. Though, the high coefficient observed for part-time work is normalized after introducing covariates in the model, moving from 0.317 to 0.145, still significant at 99 per cent. In other words, even though gender plays a key role in explaining access to part-time employment within the work unit, such high impact is also explained by other factors such as the type of occupation, the company size or the level of education.

Second, the variable union presence does have a positive impact on most FWAs except home working. The latent variable indicates a coefficient of 0.238 (significant at 99 per cent) in model 1. One major source of concern is that the factors explaining union presence might be the same than those explaining access to FWAs. One could indeed assume that the sector of activity or the

company size play a role in explaining both the implementation of a collective negotiation, on the one hand, and the accessibility of flexible work arrangements, on the other hand. Controlling for the set of covariates only on one side of the equation does not guarantee to avoid a spurious association. Through the Structural Equation Modeling framework, one solution is to control for the impact of the set of covariates on the different terms including union presence, earning and FWAs. After controlling for the set of covariates in model 2, the coefficient is slightly higher (0.261). In other words, the impact of union presence on access to FWAs is positive when only controlling for gender and earnings but is even stronger after controlling for other confounders. Though, home working is not positively associated with union presence: the association is negative and significant at 99 per cent in model 1 and negative and non-significant in model 2.

Finally, the relationship between FWAs and earning is also of interest. As mentioned above, a methodological issue related to incomes is that companies that implement FWA schemes are more likely to employ a workforce that work, on average, below the average working time that could be observed when looking at all companies. That is the reason why we have post-calculated an hourly wage variable that neutralizes working time effects. Results in model 1 and 3 show that the access to all FWAs is determined by the level of incomes so that highly paid workers are more likely to benefit from these arrangements except in the case of part-time work. To take the two highest values contained in table 2, it can be observed that those having access to part-time employment are more likely to have lower hourly wages in modes 1 and 2 (respectively -0.021 and -0.027) and those having access to home working are more likely to have higher hourly wages in both models (respectively 0.422 and 0.245).

When looking at some descriptive statistics, it has been observed (Wels, 2020) that female workers are more likely to work in a unionized workplace than male workers. In this dataset, 52 per cent of the female sample (N=9,263) and 42 per cent of the male sample (N=7,730) are working in a unionized environment, i.e. a difference of 10 percentage points between men and women. What can be observed in model 2 and 4 that use several mediators including gender, union presence and earnings to explain the relationship with FWAs? Interestingly, after controlling for the covariates (model 4), one observes a negative relationship between gender and union presence. In other words, female workers are less likely to work in a unionized workplace than men (-0.049 that correspond to about 5 percentage point in probabilities) if one keeps the effects of the covariates at constant level. (In fact, further investigations have shown that the level of income is the major cofounder in explaining such an association. If one removes the set of covariates from the analyses

but keeps the incomes, the association is -0.043, significant at 99 per cent, and if one removes both the set of covariates and the incomes, the association is 0.124, still significant at 99 per cent).

Table 2. Results

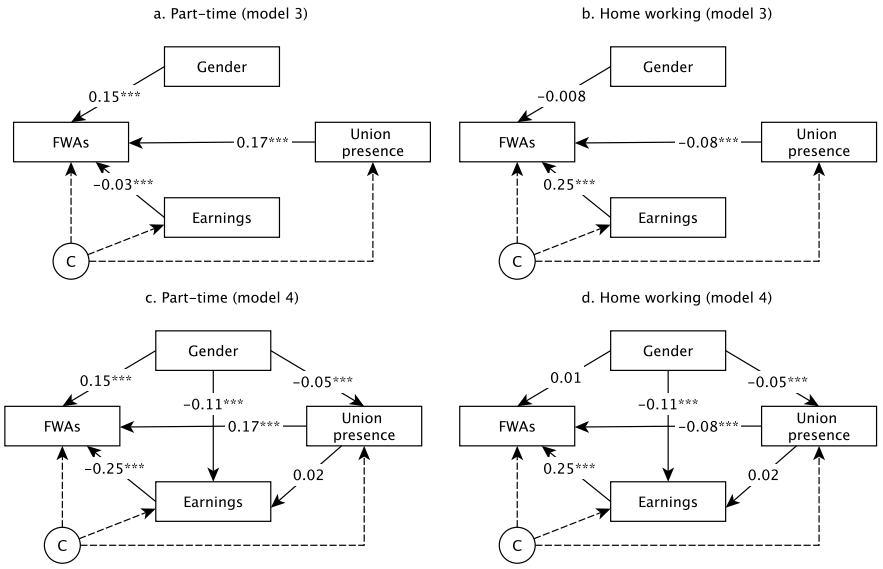
	Direct effects			Indirect effects (Mediators)		
	Gender – FWA (a)	Union – FWA (b)	Incomes – FWA (c)	Gender – Union (d)	Incomes – Union (e)	Incomes – Gender (f)
Model 1 (no mediation / no covariates)						
FWAs (latent)	0.152***	0.238***	0.284***	-	-	-
Part-time	0.317***	0.152***	-0.021**	-	-	-
Term time	0.193***	0.301***	0.042***	-	-	-
Job Sharing	0.154***	0.324***	0.181***	-	-	-
Flexitime	0.027***	0.109***	0.178***	-	-	-
Compressed hours	0.043***	0.233***	0.247***	-	-	-
Annualised hours	-0.004	0.192***	0.167***	-	-	-
Home working	-0.009	-0.042***	0.422***	-	-	-
Other	-0.001	0.011	0.132***	-	-	-
Model 2 (mediation / no covariates)						
FWAs (latent)	0.171***	0.304***	0.288***	-0.031***	0.188***	-0.054***
Part-time	0.336***	0.184***	-0,034***	-0.031***	0.188***	-0.054***
Term time	0.221***	0,347***	0.021***	-0.031***	0.188***	-0.054***
Job Sharing	0.175***	0.371***	0.144***	-0.031***	0.188***	-0.054***
Flexitime	0.028***	0.130***	0.167***	-0.031***	0.188***	-0.054***
Compressed hours	0.055***	0.272***	0.214***	-0.031***	0.188***	-0.054***
Annualised hours	0.013	0,229***	0.142***	-0.031***	0.188***	-0.054***
Home working	-0,058***	-0.071***	0,426***	-0.031***	0.188***	-0.054***
Other	-0.011	0.012	0.131***	-0.031***	0.188***	-0.054***
Model 3 (no mediation / covariates)						
FWAs (latent)	0.093***	0.261***	0.138***	-	-	-
Part-time	0.145***	0.172***	-0.030***	-	-	-
Term time	0.118***	0.281***	-0.003	-	-	-
Job Sharing	0.104***	0.332***	0.098***	-	-	-
Flexitime	0.023**	0.122***	0.095***	-	-	-
Compressed hours	0.038***	0.249***	0.143***	-	-	-
Annualised hours	-0.025	0.193***	0.122***	-	-	-
Home working	-0.008	-0.078***	0.245***	-	-	-
Other	-0.006	-0.004	0.077***	-	-	-
Model 4 (mediation / covariates)						
FWAs (latent)	0.121***	0.257***	0.133***	-0.049***	0.015	-0.110***
Part-time	0.145***	0.172***	-0.030***	-0.049***	0.015	-0.110***
Term time	0.132***	0.280***	-0.007	-0.049***	0.015	-0.110***
Job Sharing	0.131***	0.329***	0.094***	-0.049***	0.015	-0.110***
Flexitime	0.040***	0.120***	0.094***	-0.049***	0.015	-0.110***
Compressed hours	0.066***	0.246***	0.141***	-0.049***	0.015	-0.110***
Annualised hours	-0.002	0.190***	0.120***	-0.049***	0.015	-0.110***
Home working	0.015	-0.082***	0.248***	-0.049***	0.015	-0.110***
Other	0.002	-0.005	0.078***	-0.049***	0.015	-0.110***

Source Understanding Society (wave 8). N=16,992. Fully standardized coefficients.

Sig. levels as follows: ***: < 0.01, < 0.05, < 0.10.

How to interpret the impact of the mediators on the access to FWAs? To facilitate the interpretation, figure 2 compares models 3 and 4 for two particularly different types of arrangements: part-time and home working. When looking at part-time work, it can be observed that the direct coefficients for gender (a), union presence (b) and earnings (c) do not vary greatly from model 3 to 4. In fact, the three coefficients remain constant, which indicates that the introduction of mediating effects does not satisfy the fourth Baron and Kenny's assumption according to which the relationship between X and Y should disappear or significantly decrease. Yet, gender reduces the union presence log odds and union presence is associated with greater access to part-time possibilities. One observes a very slight indirect effect that is the multiplication of b and d of -0.008. In the case of part time work, union presence does not act as a strong mediator. The effect – sill particularly small – is a bit stronger when looking at term time, job sharing, flexitime, compressed hours and annualized hours. What could be assumed is that union presence does not contribute to increase or reduce the gender difference in terms of access to FWAs, even though gender and union presence are negatively associated (after controlling for the earnings). The same could be argued for home working though as constant observation is the negative impact of union presence on the access to such an arrangement.

Figure 2. Results representation for part-time and home working, models 3 and 4.



For information only, results from some covariates (from model 3) are presented in appendix 1. They mainly indicate the role played by company level and the type of employment relationship in having access to FWAs.

Finally, table 3 replicates model 3 but pays attention to the use – rather than the access – of FWAs, within the population the has access to FWAs (that is the reason why the population sizes vary depending on the FWAs we are looking at). First, looking at the hourly earnings, one observes a paradoxical trend. It was observed in model 3 that higher earnings were associated with greater access to FWAs. Though, among those who have access to FWAs, that is those who have lower earnings who are more likely to use FWAs except in the case of home working. Put in another way, home working is accessible to those who have higher incomes and, among those who have access to this type of FWA, that is those who have even higher incomes who use it. Second, union presence is associated with higher use of part-time, term time and flexitime but lower use of compressed hours, annualized hours and home working. Finally, being a female is associated with higher use of part-time, term time, job sharing and compressed hours but lower use of annualized hours and, with a lower significance level, home working.

Table 3. Model 4' – Use of FWAs, including gender, unions and incomes as mediators

	Gender – FWA (a)	Union – FWA (b)	Incomes – FWA (f)	Gender – Union (c)	Incomes – Union (e)	Incomes – Gender (f)
Part-time [N=9,953]	0.109***	0.131***	-0.261***	-0.052***	0.133***	-0.111***
Term time [N=2,895]	0.109***	0.133***	-0.261	-0.054***	0.100***	-0.107***
Job Sharing [N=3,016]	0.065***	-0.074*	-0.105***	0.043***	0.221***	0.088***
Flexitime [N=5,165]	0.006	0.067***	-0.11	-0.059***	0.038**	-0.110***
Compressed hours [N=2,138]	0.133***	-0.115**	0.059	0.063***	0.154***	0.128***
Annualised hours [N=897]	-0.161***	-0.148**	-0.234***	-0.030*	0.092**	-0.056*
Home working [N=2,642]	-0.048*	-0.244***	0.081***	-0.088***	-0.046*	-0.169***
Other [N=2,672]	0.060**	-0.186***	-0.050*	-0.032***	0.116***	-0.054***

Source Understanding Society (wave 8). Fully standardized coefficients.
Sig. levels as follows: *** < 0.01, ** < 0.05, * < 0.10.

Limitations

Four main limitations can be mentioned. First, the study takes an individual point of view and does not focus on household composition (it is one of the covariates controlled by the models), household incomes, tax credits and other social benefits. Even though these factors probably have no impact on access to FWAs, they might play a role in the use of these arrangements (model 4). Similarly, the study is not based on data that are collected at company level (as it can be the case in other studies, see above). Second, the study purposely looks at whether there is a collective negotiation within the workplace. Analyses where performed separately looking at whether respondents are unionized or not with similar (but lower) estimates. Fourth, the article purposely chose to look at the working age population. It is obvious that different arrangements are used over the life course, for different reasons and by different types of workers. The models used in this paper control for the age and one can therefore assume that results presented above show

the specific impact of gender, earnings and union presence after the age is kept at constant level. Finally, one main limitation, but, at the same time, one quality of the study is to pay attention to the subjective perception of FWAs availability within the workplace. Such a perspective does not guarantee that FWAs are *actually* unavailable but, rather, it evaluates whether respondents know about these arrangements and whether they feel that these arrangements are accessible. One can assume that labour unions have an impact on both the concrete accessibility to some FWAs and the information that is provided about these arrangements.

Discussion

The right to request flexible work arrangements as implemented in the United Kingdom opens up the way to more suitable working conditions over the life course. Although, it is certainly not enough and much more can be done to protect workers, improve working conditions, ensure work-life balance and tackle gender inequalities. The article shows that there is a clear heterogeneity in terms of access to flexible work arrangements. To sum up, three main findings flow from this study. First, there is a gender divide in access to FWAs. Overall, women have access to a larger number of FWAs than men. Though, female workers are more likely to have access to part-time, term time or compressed hours whilst male workers are more likely to have access to home working. Second, the level of income (as calculated per hour) is positively associated with FWAs availability. However, low earners have higher probabilities to work part-time or term time and high earners have higher probabilities to work from home on a regular basis. Finally, the study finds that the role of union presence within the workplace is of particular significance. Union presence is associated with a high number of available FWAs except in the case of home working. Though, union presence does not contribute to regulate both the gender and earning discrepancies in terms of access to flexible work arrangements.

What does this study add to the existing literature? Firstly, the study updates and validate the figures provided by Budd & Mumford (2004) more than twenty years ago. The panorama of the relationship between the FWAs and labour unions has not changed much since 1998. Secondly, the study partially controls for one main source of concern that could be the impact of confounders both on FWAs accessibility and on trade union presence. In the UK, employers are free to recognise a trade union for collective bargaining purposes. This is regulated under the 1999 Employment Relations Act that sets out the statutory recognition procedure (Ewing, 1999). But even though this has slightly shifted employers' attitude towards union (Oxenbridge, Brown, Deakin, & Pratten, 2003), 51 per cent of the employed workforce is still outside workplace bargaining. The study does not find any strong effects of controlling for cofounders on the association between unions and

FWAs. Thirdly, the study disaggregates the relationship between gender, earnings, union presence and FWAs that is complex as each variable has an impact on the other. It shows two main relationships. On the one hand, collective bargaining is not a strong mediator of the impact of gender and earnings on access to FWAs. On the other hand, earnings are a good mediator in the relationship between gender and home working as low incomes and being a female largely reduce the access to such type of arrangement.

These findings raise some policy issues. FWAs are not used in a homogenous way. Low paid workers have access to a smaller number of FWAs and use only a few specific arrangements. Similarly, women have a larger access to FWAs but are particularly working in part-time or term time jobs. One major challenge is to offer the same opportunities to low and high earners and to men and women. The right to request flexible working arrangements, if implemented properly, would translate into a perfect equality between men and women, high and low earners and unionized workplaces and non-unionized workplaces after controlling for the age, the type of activity and the size of the workplace. This is not the case and the way workers perceive FWAs availability at the workplace level greatly varies. In such a context, collective negotiation has an important role to play in setting up FWAs at company level and informing workers. Labour unions do so, except in the case of home working that remains, independently from all other factors, an arrangement on which unions have little power. The right to request flexible working arrangements appears to be an important tool but should be part of a "more comprehensive suite of laws to make it that effective by implementing a right to achieve flexible working, rather than just to ask for it" (Himmelweit, 2007). In such a context, labour unions compensate, at company level, what the state does not do but do not reduce the gap between men and female and high and low earners.

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Appendix 1. Covariates in model 4

	FWA	Part time	Term time	Job shar.	flexitime	Comp. hrs	Ann. hrs	Home wk	others
Size 1-24	-0.017	-0.012	-0.038**	0.035*	-0.024	-0.006	-0.013	-0.028	-0.035*
Size 25-49	-0.012	-0.007	0.004	0.028*	-0.035**	-0.003	-0.010	-0.026*	-0.032*
Size 50-99	-0.009	0.003	0.009	0.012	-0.020	-0.015	-0.016	-0.036**	0.001
Size 200-499	0.045***	0.030*$	-0.017	0.025*	0.037***	0.056***	0.021	0.060***	0.007
Size 500-999	0.047***	0.028***	-0.012	0.028**	0.055***	0.046***	0.017	0.056***	0.005
Size >1000	0.103***	0.032**	-0.000	0.065***	0.087***	0.098***	0.057***	0.144***	0.058***
Agric.,Forestry	0.029***	-0.012	-0.023*	0.013	0.045***	0.042***	0.022	0.019	0.028**
Energy/Water	0.006	-0.017*	-0.092***	-0.038***	0.032***	0.041***	0.007	0.023**	0.036***
Mining	-0.005	-0.008	-0.048***	-0.025*	0.009	0.008	0.009	-0.007	0.022**
Chemicals	0.035***	0.006	-0.088***	-0.002	0.063***	0.048***	0.020	0.026***	0.035**
Synthetics	-0.002	-0.031***	-0.047***	-0.051**	0.027***	0.021	0.017	0.006	-0.002
Iron/Steel	-0.008	-0.019*	-0.066***	-0.052***	0.015	-0.006	0.019	-0.027	0.010
Mechanical Eng.	-0.028**	-0.058***	-0.185***	-0.086***	0.071***	0.029*	0.003	-0.011	0.028**
Electrical Eng	0.034***	-0.007	-0.079***	-0.024*	0.066***	0.060***	0.003	0.033***	0.031***
Wood/Paper	0.007	-0.027***	-0.090***	-0.028**	0.057***	0.033**	0.003	0.027**	0.022
Clothing/Text.	0.033***	-0.000	-0.069***	-0.019	0.065***	0.057***	0.036*	0.027**	0.050***
Food Industry	-0.021**	-0.026***	-0.111***	-0.042***	0.028**	0.013	0.028	-0.017	0.012
Construction	0.018	-0.033***	-0.102***	-0.020	0.063***	0.060***	0.024	0.030***	0.025
Constr. Relate	-0.009	-0.051***	-0.071***	-0.052***	0.039***	0.023	0.020	0.019	0.033**
Wholesale	0.026***	0.005	-0.131***	-0.028**	0.072***	0.057***	0.033*	0.009	0.046***
Retail	0.008	0.093***	-0.230***	-0.094***	0.107***	0.079***	0.025	-0.042**	0.108***
Communication	0.033***	0.019**	-0.130***	-0.020*	0.093***	0.053***	0.002	0.059***	0.063**
Other Trans.	0.003	0.020**	-0.166***	-0.062***	0.064***	0.026	0.023	0.014	0.039***
Financial Inst.	0.065***	0.019**	-0.107***	0.013	0.084***	0.130***	0.023	0.077***	0.058***
Insurance	0.050***	0.015**	-0.050***	-0.013	0.074***	0.068***	0.027*	0.059***	0.038***
Restaurants	0.055***	0.073***	-0.053***	-0.023	0.087***	0.106***	0.064***	-0.056***	0.073***
Service Indus.	0.031***	0.031***	-0.071***	-0.000	0.047***	0.049***	0.024	0.001	0.032***
Trash Removal	-0.000	-0.006	-0.054***	-0.008	0.022**	0.010	0.006	0.005	0.012
Health Service	0.014	0.078***	-0.236***	-0.042***	0.104***	0.100***	0.103***	-0.073***	0.101***
Legal Services	0.086***	0.035***	-0.097***	0.021**	0.116***	0.120***	0.060***	0.095***	0.059***
Other Services	0.096***	0.019*	-0.159***-	-0.051***	0.186***	0.165***	0.050**	0.144***	0.108***
Volunt./Church	0.107***	0.070***	-0.165***	-0.011	0.205***	0.201***	0.090***	0.116***	0.130***
Public Admin.	0.170***	0.062***	-0.111***	0.050***	0.283***	0.263***	0.147***	0.139***	0.140***
Social Sec.	0.041***	0.027***	0.012	-0.001	0.091***	0.044***	0.001	0.027***	0.015
Temporary	-0.028***	-0.032***	0.002	-0.035***	0.000	-0.001	-0.022	-0.012	-0.008