



The influence of **flexible working** (FW) on employment & well-being outcomes among people **with long-standing illness/chronic disease**



Image from Magnific. [URL](#)

Dr Baowen Xue

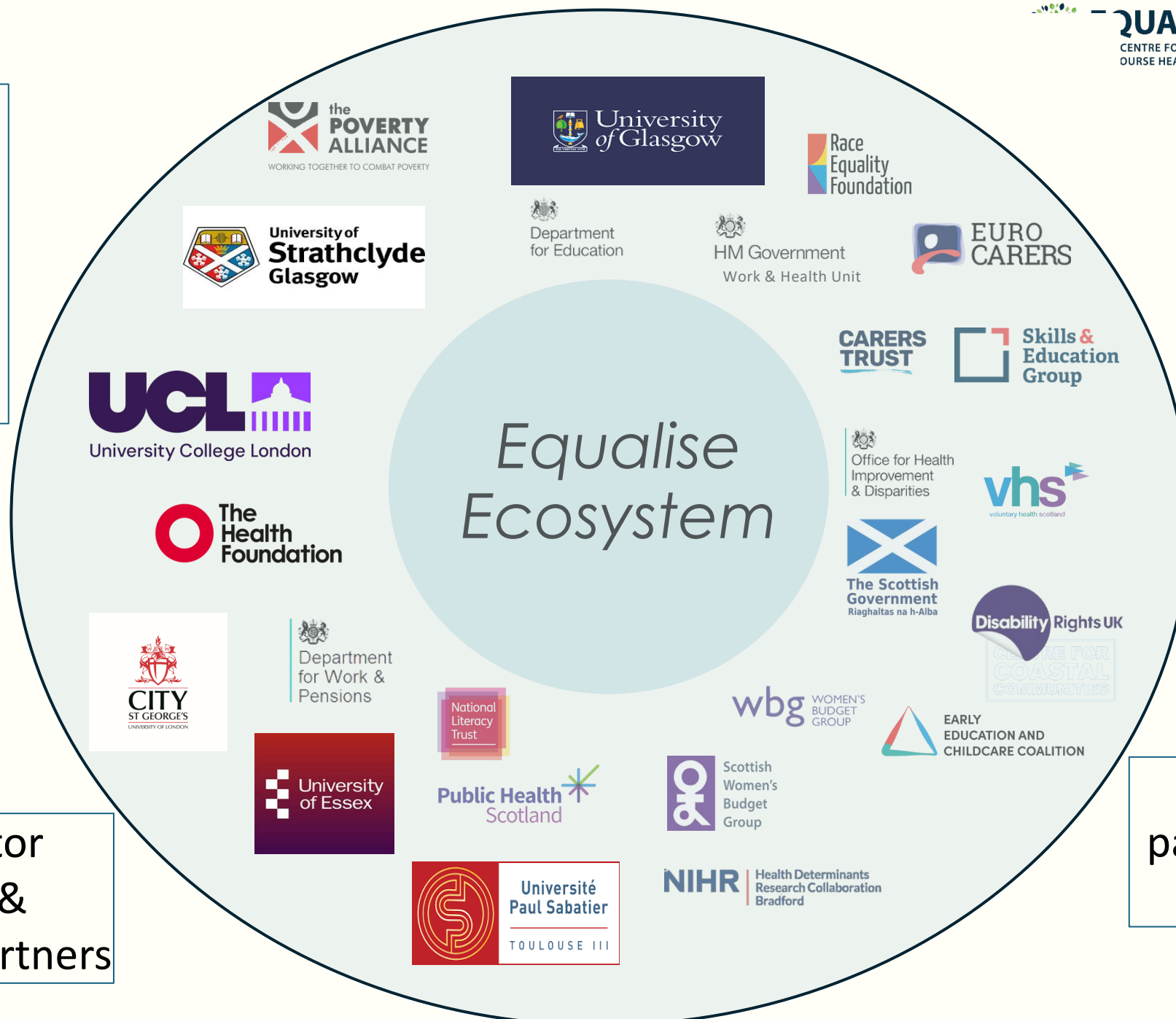
Department of Epidemiology & Public Health, UCL

Health Studies User Conference, UCL, 25 June 2026





6 academic
partners:
diverse
methods &
disciplinary
expertise



13 3rd sector
advocacy &
community partners

7 government
partners: national,
devolved, local



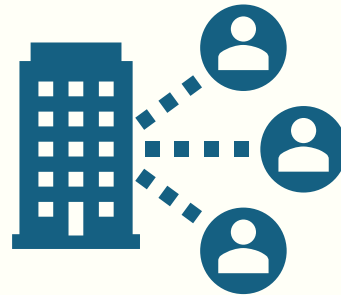


Equalise aims to achieve actionable solutions to reduce the UK's widening health inequalities



LEARNING

Learning environments that are safe, stimulating & supportive



WORK

Employment that is secure, adequately paid & meaningful



CARE

Care that is valued & supported



PLACE

Places in which to grow, live, work & flourish



Background

FW is increasingly common across industrialised countries and concerns *when, where, and for how long* individuals undertake work-related tasks

Core FW arrangements typically include **reduced work hours** (e.g. PT) , **flexible time** (e.g. work during term time only), and **working from home**

Both men and women using **reduced hours** report **lower levels of chronic stress** (Chandola et al., 2019)

Results for **flexitime** and **working from home** are mixed (Vacchiano et al., 2024) (Agnolotto, 2024)

FW may be **particularly important** for individuals with disabilities/ chronic illness, given its potential to support employment retention and well-being

No existing research has specifically examined FW's effects in this population

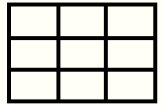




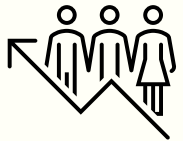
Summary of aims/study data/ methods



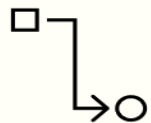
Aims to provide up-to-date evidence on whether flexible working can support **employees with health conditions/disabilities**



Quantitative project using W2-W15 of **Understanding Society** from 2010-2025



Sample size of **~12,000** employees with long-standing illness or a diagnosed chronic disease at baseline



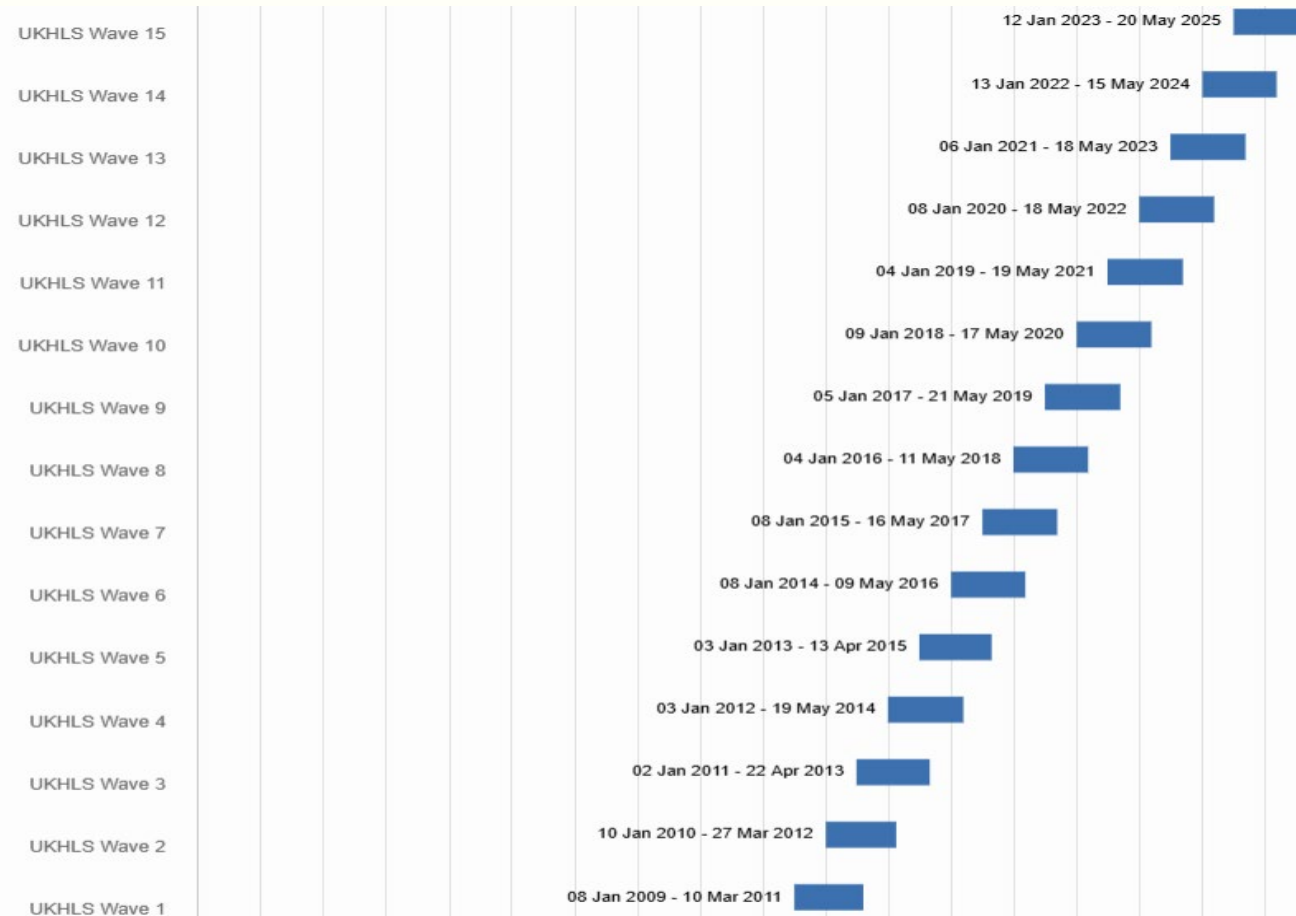
Estimate how the uptake of **flexible working** influence **work exit & wellbeing**



Fixed effect method: compares people to themselves over time



Survey timeline of Understanding Society



UK Household Longitudinal Study (UKHLS)- a longitudinal survey of approximately 40,000 households (at Wave 1) in the UK.

Source: Understanding Society website

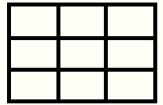
<https://www.understandingsociety.ac.uk/documentation/mainstage/survey-timeline/>



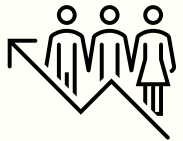
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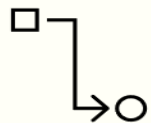
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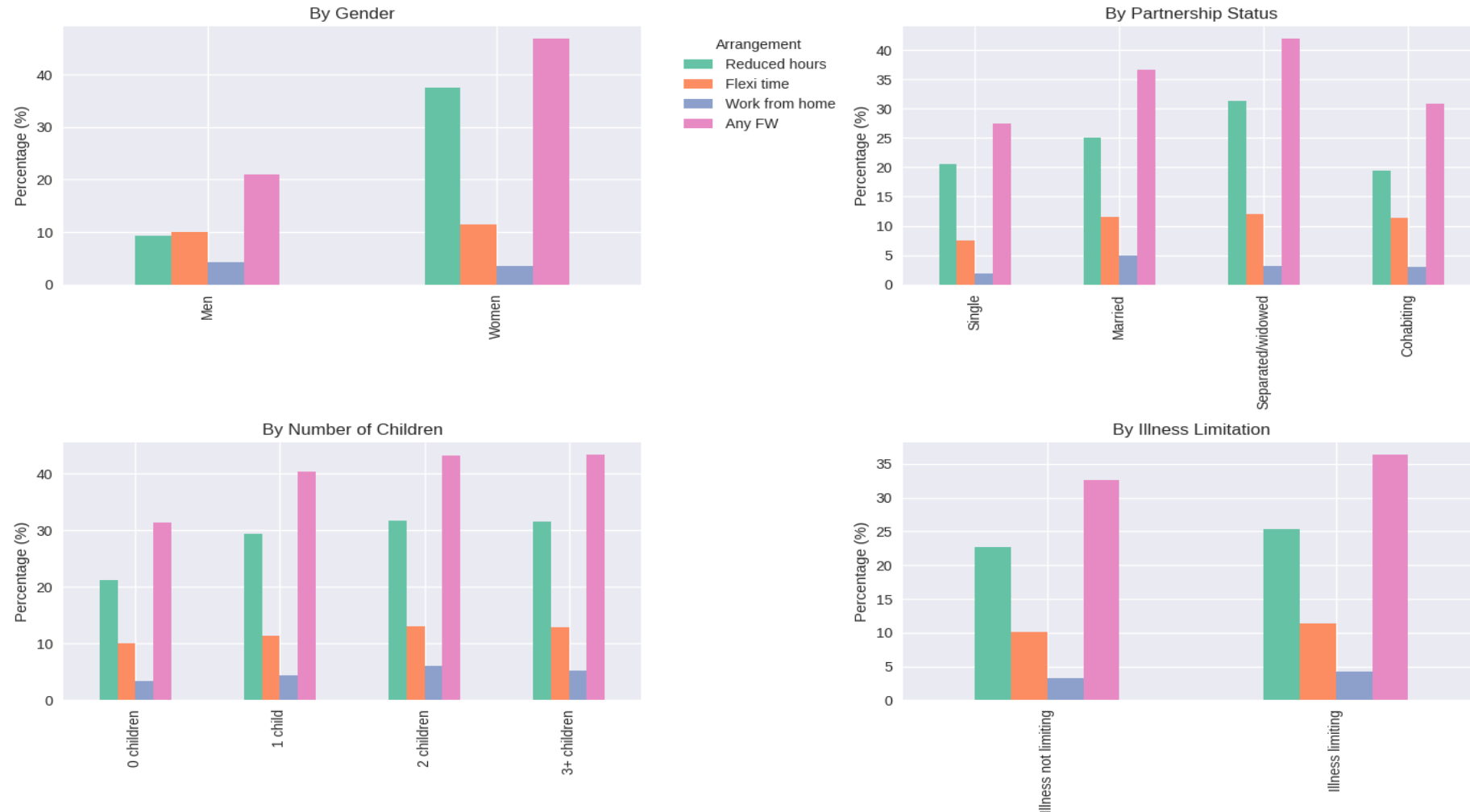
Statistical Method

- Fixed effects models estimate how changes in the uptake of flexible working influence changes in employment & wellbeing by **differencing out time-invariant characteristics**, such as education, personality and early life characteristics.
- Exposure: Uptake of FW working (0 no; 1 yes)
- Outcomes: Employment (0 working, 1 not working), GHQ, SF-12 MCS, SF-12 PCS, overall life satisfaction, life satisfaction with leisure
- 1 year lag
- Model adjusted for **time-varying covariates**: age, number of children, marital status





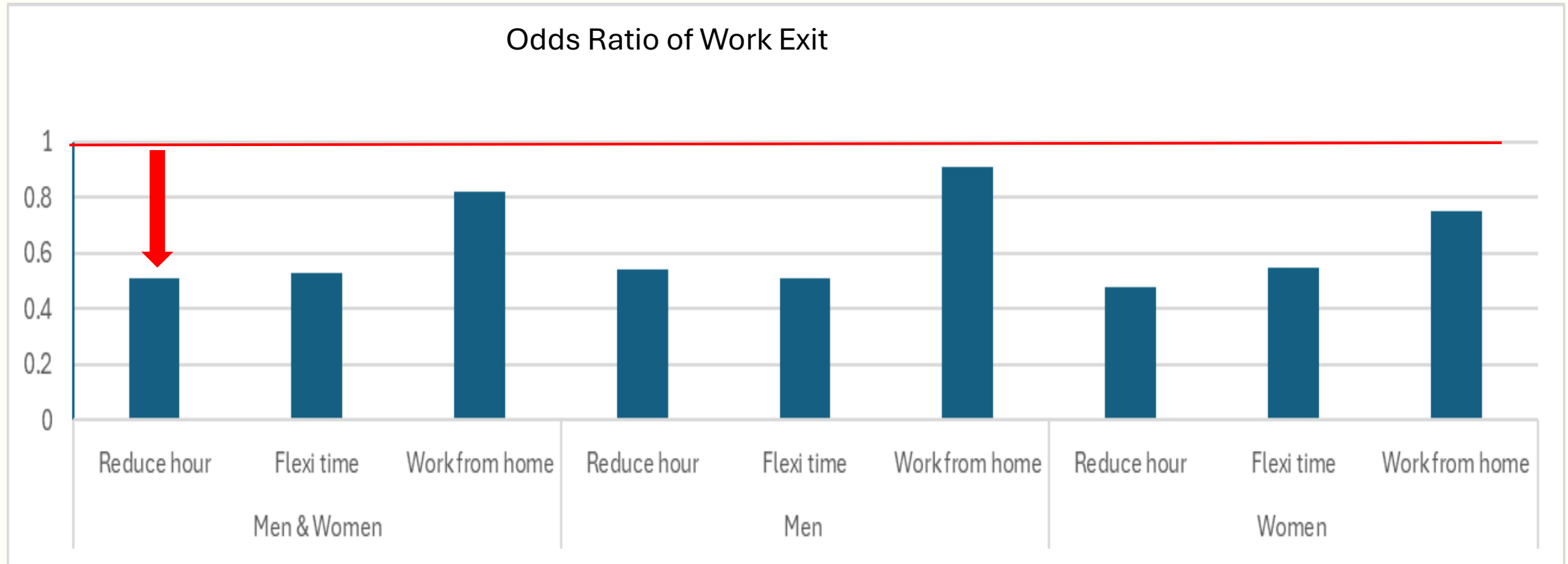
Flexible Working Arrangements by Demographic Groups



Data source: University of Essex, Institute for Social and Economic Research (2026). Understanding Society: Waves 1-15, 2009-2024 and Harmonised BHPS: Waves 1-18, 1991-2009. [data collection]. 21st Edition. UK Data Service. SN: 6614, [DOI: http://doi.org/10.5255/UKDA-SN-6614-22](http://doi.org/10.5255/UKDA-SN-6614-22)



Fixed effect results- influence on work exit



Data source: University of Essex, Institute for Social and Economic Research (2026). Understanding Society: Waves 1-15, 2009-2024 and Harmonised BHPS: Waves 1-18, 1991-2009. [data collection]. 21st Edition. UK Data Service. SN: 6614, [DOI: http://doi.org/10.5255/UKDA-SN-6614-22](http://doi.org/10.5255/UKDA-SN-6614-22)



Influence on health and well-being

Men only	GHQ		SF-12 MCS		SF-12 PCS		Overall life satisfaction		Satisfaction with leisure	
	Coeff.	P	Coeff.	P	Coeff.	P	IRR	P	IRR	P
Reduce hour	-0.229	0.044	0.242	0.218	0.199	0.308	1.01	0.507	1.01	0.215
Flexi time	0.220	0.057	-0.268	0.176	0.111	0.490	1.00	1.000	0.99	0.395
Work from home	0.148	0.227	-0.176	0.421	0.234	0.250	1.00	0.842	1.00	0.988

Data source: University of Essex, Institute for Social and Economic Research (2026). Understanding Society: Waves 1-15, 2009-2024 and Harmonised BHPS: Waves 1-18, 1991-2009. [data collection]. 21st Edition. UK Data Service. SN: 6614, [DOI: http://doi.org/10.5255/UKDA-SN-6614-22](http://doi.org/10.5255/UKDA-SN-6614-22)



Influence on health and well-being

Women only	GHQ		SF-12 MCS		SF-12 PCS		Overall life satisfaction		Satisfaction with leisure	
	Coeff.	P	Coeff.	P	Coeff.	P	IRR	P	IRR	P
Reduce hour	-0.105	0.126	0.274	0.018	0.006	0.954	1.00	0.801	1.00	0.886
Flexi time	0.290	0.006	-0.670	<0.001	0.176	0.271	0.99	0.532	0.98	0.041
Work from home	0.115	0.365	-0.300	0.168	0.270	0.152	0.99	0.715	0.99	0.263

Data source: University of Essex, Institute for Social and Economic Research (2026). Understanding Society: Waves 1-15, 2009-2024 and Harmonised BHPS: Waves 1-18, 1991-2009. [data collection]. 21st Edition. UK Data Service. SN: 6614, [DOI: http://doi.org/10.5255/UKDA-SN-6614-22](http://doi.org/10.5255/UKDA-SN-6614-22)



Sensitivity analysis

- Standard fixed-effects methods presume that effects of variables are **symmetric**: *The effect of increasing a variable is the same as the effect of decreasing that variable but in the opposite direction (0 to 1 same as 1 to 0).*
- **Asymmetric** fixed-effects models for panel data (Allison, 2019): each flexible working variable is decomposed into positive (0 to 1) and negative changes (1 to 0)
- I found there is one asymmetric association: Using reduced hours has a slightly stronger association with lowering the risk of exit from work(0 to 1) than increasing reentering work (1 to 0).





Summary of key findings

Among employees with long-standing illness or a diagnosed chronic disease

- The uptake of any FW arrangements is associated with **a lower likelihood of work exit**, particularly for reduced hours and flexi hours arrangements
- The effect size on work exit is slightly stronger for women
- **Reduced hours of work** arrangement is associated **with better mental health** outcomes for men & women
- But **flexi time** arrangement is associated with **worse mental health & satisfaction** outcomes for women
- In pre-pandemic waves, WFH is associated with worsening mental health.



Next steps?

- Look at the characteristics of WFH in pre-pandemic waves
- Differences by whether the illness is limiting or not.
- By different domains of health conditions



Acknowledgement: Heejung Chung, Constance Beaufils, Anne McMunn

Are there any questions?

Are there topics within this research that might be interesting to pursue further?

Thank you. Email: baowen.xue.10@ucl.ac.uk