

Are High Performance Work Practices Disabling? Evidence from the 2011 Workplace Employment Relations Study

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Background to the project: disability-related disadvantage

- ◎ the proportion of people reporting a long-standing limiting impairment has continued to increase, reaching around 20 per cent of the UK working age population in 2012 (Annual Population Survey)
- ◎ disability-related disadvantage within the working-age population is extensive and enduring across developed countries (OECD 2007)
- ◎ disadvantage at work manifests as: an employment gap, currently in excess of 30 percentage points (Jones and Wass 2013) (greater than for any other disadvantaged group (NEP 2010:117)); a wage gap of 10 to 15 per cent (Jones 2006); gaps in reported wellbeing at work (Jones and Wass 2012); gaps in participation in work-based training (Fumagalli 2008) and working hours (Jones 2007)

- ⦿ raising disabled people's employment rates has been a consistent objective for successive governments (Smits 2004, ILO 2009)
- ⦿ much government policy has focused on the supply side: encouraging disabled people off disability benefits and into work via Work Capability Assessments, for example
- ⦿ our contention, however, is that current supply-side policies will not be effective unless employers become receptive to employing disabled people in larger numbers, and offer more supportive workplace environments for them
- ⦿ hence, more attention is needed on the demand side in terms of understanding the barriers that disabled people face in the workplace

Our starting point: Stone and Colella (1996)

- ◎ Three main explanations for the disadvantage experienced by disabled people:
 - personal characteristics: the attitudes of co-workers and managers (Lengnick-Hall, Gaunt, & Kulkarni, 2008).
 - legislative environment: e.g. accommodations for disabled people (Schur et al., 2014; Simm et al., 2007; Williams et al., 2008).
 - organizational characteristics: e.g. availability of flexible working practices (Schur et al., 2013).

Our research focuses on the organizational characteristics element of the model (in particular the impact of HPWPs on disabled people)

High Performance Work Practices and the management and organisation of work

- ◎ there are a number of ways in which employment outcomes for disabled people might be affected by High Performance Work Practices (HPWPs)
- ◎ the ‘positive effects hypothesis’:
 - *competency tests*: enable disabled employees to be assessed in a fair and impartial manner and not on the basis of stereotype
 - *teamworking/ functional flexibility*: provides disabled people with autonomy over how they perform job tasks and enable jobs to be shaped in line with the capabilities of disabled employees.
 - *performance appraisal*: could facilitate a discussion about shaping the job role and training requirements
 - *PRP*: disabled employees rewarded on the basis of the achievement of set criteria rather than on assumptions concerning their contribution

◎ the ‘negative effects’ hypothesis (Foster and Wass, 2013):

- *competency tests*: it may be hard for disabled applicants to demonstrate ‘competence’ on a standard test, especially if the test reflects a standard job design/description that contains assumptions about the ideal way in which job tasks should be performed.
 - *teamworking*: team working can be difficult for a disabled employee if everyone in the team is expected to perform to a particular standard.
 - *functional flexibility*: if this requires polyvalent skills and flexibility to perform a wide range of job roles as and when required, this may compromise people with activity or availability restrictions.
 - *performance appraisals*: may disadvantage disabled people should they fail to apply objective standards in measuring actual performance or focus on employee ability to fit in with standard organizational practice and organizational norms.
 - *performance-related pay*: activity restrictions may make it hard for a disabled employee to qualify for performance-related pay against a set standard.
- ◎ by evaluating these competing positive/ negative effects hypotheses, the analysis will contribute towards an understanding of how HPWPs impact on the disability gap in employment-related outcomes.

Data: Workplace Employment Relations Survey, 2011

- ◎ WERS is designed to be nationally representative of British workplaces with five or more employees in all industry sectors (with the exception of agriculture, hunting, forestry and fishing and mining and quarrying) when probability weighted to account for the complex nature of the survey design.
- ◎ the survey of managers comprises 2,680 observations with a response rate of 46.5 per cent. The survey of employees (sent to a random sample of up to 25 employees in each workplace) comprises 21,981 responses, with a response rate of 54.3 per cent.
- ◎ by linking the management and employee data, it is possible to explore the relationship between workplace characteristics (HPWPs) and disabled employees' experiences of employment

Dependent variable – workplace-level analysis

- ⦿ the proportion of the workforce that is disabled (continuous measure analysed using fractional logit model)
- ⦿ the data are from the survey of employees NOT the management survey. The estimate given by management respondents concerning the proportion of their workforce that is disabled is startlingly low (1.4 per cent). This is perhaps notable in highlighting the extent to which disability remains a hidden/ unrecognised feature in many workplaces
- ⦿ the survey of employees asks ‘Are your day-to-day activities limited because of a health problem or disability which has lasted, or is expected to last, at least 12 months?’. When collapsed into the main management survey, this gives a mean figure of 9.5 per cent

Dependent variables – individual-level analysis

- *job satisfaction* - eight items measured on a 5-point scale (where 5=very satisfied) ask employees how satisfied they are with different elements of their job (e.g. pay, training, scope for using initiative, sense of achievement) (Cronbach alpha reliability of 0.86).
- *perceptions of fairness* – ‘To what extent do you agree or disagree that managers here treat employees fairly’. Analysed as a single item on a scale of 1-5 where 5=strongly agree (mean 3.49)
- *anxiety-contentment* – ‘Thinking of the past few weeks, how much of the time has your job made you feel each of the following? Tense/ depressed/ worried/ gloomy/ uneasy/ miserable’ (on a scale of 1-5) (Cronbach alpha 0.91).

Independent variables

HPWP variable	Definition	Workplace mean
Teamworking	At least 60% of the largest occupational group (LOG) at the workplace are working in formally designated teams, in which team members depend on each other to do their job and team members jointly decide how the work is to be done	0.340
Functional flexibility	At least 60% of the LOG actually do jobs other than their own	0.217
Competency testing	A performance/ competency test is conducted in filling LOG vacancies	0.412
Individual performance-related pay	At least 60% of non-manual employees are paid by results, receive merit pay or their pay is linked to the outcome of their appraisal	0.419
Developmental performance appraisal	At least 60% of non-managerial employees at the workplace have their performance appraised at least annually, and the appraisal is linked to training	0.643
Count measure		2.03

Supportive/ non-supportive disability equality climates

- as mentioned earlier, whether HPWPs have enabling or disabling effects may depend on the broader environment. The existence of a supportive disability equality climate is measured as follows:
 - recruitment and selection either reviewed or monitored by disability
 - promotion either reviewed or monitored by disability
 - pay reviewed by disability
 - specialist recruitment procedures to encourage applications from disabled people
 - formal assessments conducted of the extent to which the workplace is accessible to employees or job applicants with disabilities
- combined into a scale from 0-5 (mean: 0.9. Only 9.9 per cent of workplaces have 3 or more of these practices in place).

Results 1: Relationship between HPWPs and the proportion of workforce that is disabled

	Proportion of workforce disabled (full sample)		Proportion of workforce disabled (supportive disability equality climate)		Proportion of workforce disabled (non-supportive disability equality climate)	
HPWP count measure		-0.279*** (0.099)		0.047 (0.112)		-0.318*** (0.109)
N	1629	1629	437	437	1191	1191

Notes: Coefficients given, standard errors in brackets

*** significant at 1 per cent

Fractional logit analysis

Controls include: organisation size, workplace size, single independent workplace, Standard Industrial Classification major group; national ownership; workplace age; public sector; union recognition; proportion of the workforce female, ethnic minority, aged 50 or older; proportion of workforce in each Standard Occupational Classification major group.

Results 2: Relationship between disability, high performance work practices and work-related outcomes (full sample)

	Job satisfaction		Fair treatment		Anxiety-contentment	
Disabled	-1.667*** (0.175)	-1.988*** (0.439)	-0.201*** (0.036)	-0.266*** (0.088)	-2.086*** (0.158)	-2.360*** (0.371)
HPWP count measure	0.071 (0.064)	0.059 (0.064)	0.023* (0.012)	0.020 (0.013)	0.118** (0.050)	0.108** (0.051)
Disabled x HPWP		0.133 (0.161)		0.027 (0.032)		0.113 (0.134)
Level 1 intercept	2.490	2.490	0.091	0.091	1.299	1.300
Level 2 intercept	27.322	27.319	1.014	1.013	23.067	23.065
N	13761	13761	12301	12301	14247	14247

Notes: Coefficients given, standard errors in brackets. Mixed effects multi-level model.

*** significant at 1 percent.

Workplace characteristics controlled for: organization size; workplace size; single independent workplace; SIC major group; national ownership; workplace age; public sector; union recognition; proportion of workforce female, ethnic minority and aged 50 or over. Individual characteristics controlled for: SOC major group; pay; marital status; age; tenure; highest qualification; part-time; temporary/ fixed term contract; union membership; ethnicity; gender; dependent children.

Results 3: Relationship between disability, high performance work practices and work-related outcomes (supportive environments)

	Job satisfaction		Fair treatment		Anxiety-contentment	
Disabled	-1.844*** (0.288)	-0.206** (0.914)	-0.057 (0.060)	-0.188 (0.186)	-2.029*** (0.264)	-2.245*** (0.769)
HPWP count measure	-0.000 (0.104)	-0.009 (0.101)	0.044** (0.021)	0.038* (0.022)	0.160* (0.089)	0.151* (0.090)
Disabled x HPWP		0.079 (0.307)		0.049 (0.065)		0.079 (0.260)
Level 1 intercept	1.457	1.459	0.048	0.048	0.292	0.293
Level 2 intercept	26.984	26.982	1.003	1.003	23.895	23.893
N	4246	4246	3683	3683	4380	4380

Notes: Coefficients given, standard errors in brackets. Mixed effects multi-level model.
 *** significant at 1 percent ** significant at 5 percent.

Controls as in table 2.

Results 4: Relationship between disability, high performance work practices and work-related outcomes (non-supportive environments)

	Job satisfaction		Fair treatment		Anxiety-contentment	
Disabled	-1.581*** (0.222)	-2.040*** (0.511)	-0.278*** (0.044)	-0.261*** (0.101)	-2.142*** (0.196)	-2.354*** (0.428)
HPWP count measure	0.074 (0.077)	0.057 (0.077)	0.015 (0.015)	0.016 (0.015)	0.076 (0.060)	0.068 (0.062)
Disabled x HPWP		0.205 (0.198)		-0.007 (0.039)		0.095 (0.162)
Level 1 intercept	2.590	2.592	0.099	0.099	1.596	1.597
Level 2 intercept	27.344	27.338	1.010	1.010	22.545	22.543
N	9515	9515	8618	8618	9867	9867

Notes: Coefficients given, standard errors in brackets. Mixed effects multi-level model.

*** significant at 1 percent.

Controls as in table 2.

Discussion/ conclusion

- ◎ Overall, we have found the following:
 - i) high HPWP workplaces tend to employ fewer disabled people (especially where there is a negative environment for disability in the form of fewer disability EO practices being used)
 - ii) disabled people report poorer job security, lower levels of fairness at work and poorer levels of well-being than the non-disabled
 - iii) there is no evidence to suggest that HPWPs have a different effect on disabled employees than on non-disabled employees (irrespective of whether the workplace has a positive or negative environment for disabled people)

- ⦿ no support for the ‘positive effects hypothesis’ that HPWPs will reduce the gap between disabled/ non-disabled people.
- ⦿ BUT - only partial support for the ‘negative effects hypothesis’.
- ⦿ one interpretation is that disabled people are less likely to be hired/ are more likely to have problems staying in work in HPWP workplaces, but for those who do get hired (or are able to remain in work should they become disabled) HPWPs do not have negative effects.
- ⦿ this in turn suggests that disabled people who get into/ remain in work in high HPWP workplaces are those with the sorts of disability that do not preclude them from participating fully in such workplaces (i.e. better skills/job match).