# Do High Performance Work Practices Exacerbate or Mitigate the Gender Pay Gap?

Rhys Davies\*, Robert McNabb\*\* and Keith Whitfield\*\*

WISERD, Cardiff University

\*\*Cardiff Business School, Cardiff University





#### Introduction

- High performance work systems designed to attain/maintain competitive advantage through greater adaptability and higher employee commitment
- High Performance Work Practices include Quality Circles, Team-Working, Multi-tasking, Functional flexibility (Wood and De Menezes, 2008)
- Studies have examined the effect of these practices on organisational performance, earnings, well-being, commitment
- Implicit assumption is that high performance work practices promote gender equality – though not all subscribe to that view, (eg Dickens, 1998)

# Aim of Paper

To consider how the relative earnings position of women is affected by the nature of the work systems employers adopt

#### HPWs and the Gender Wage Gap

- ➤ HPWs are expected to be associated with a lower gender pay gap because they have a less arbitrary approach to wage determination, less gender segregation and greater regard for due process in HR matters
- > Dickens (1998) challenges this:
- Employee commitment, a key aim of HPWs, is often defined in terms of 'presenteeism'
  - Implicit assumption is that women, who have greater non-work commitments on average, are less committed
- While functional flexibility might be expected to reduce segregation, the new work systems are largely introduced for male-dominated core jobs
  - Women are left on the periphery (numerical flexibility, part time work, temporary employment)
- Gender stereotyping affects the criteria upon which employees are appointed and their performance appraised

# Hypotheses

- H1: Workplaces with high performance work systems will have a lower gender pay gap
- H2: Workplaces with high performance work systems will have lower gender segregation
- H3: Workplaces with high performance work systems will have more formal wage determination processes

#### Methodology

- Data from the 2004 Workplace and Employee Relations Survey
  - nationally representative data on the state of workplace relations and employment practices in Britain with at least five employees
  - Earnings data from employee questionnaire
- Sample is full-time employees in the private sector
- We define low, intermediate and high adoption workplaces based on based on measures of work enrichment; flexible work practices; skill acquisition; motivation; family-friendly policies; total quality management (Wood and de Menezes, 2008).

# Employment, Earnings and HPWs

	Work System			
	Low	Intermediate	High	All
Full Time				
Employees	26.3	43.8	29.9	9037
% Female	33.7	40.8	44.0	39.9
Hourly Earnings				
Males	9.71	11.30	11.90	11.01
Females	8.27	9.15	9.52	9.07
Differential	-14.8%	-19.1%	-20.0%	-17.6%

- Women earn more in HPWs (£9.52/hr) than LPWs (£8.09/hr) but men do better still (£11.90/hr compared to £9.71/hr)
- Higher gender wage gap in HPWs (20%) compared to LPWs (15%)

# Workplace and Job Segregation

	Low	Intmdte	High	Total
Job Segregation				
Thinking about the type of work you	u personally do	o, is it done	.(from Emp	oloyee Q)
only by men	19.4	11.9	10.8	13.6
mainly by men	24.9	23.9	20.8	23.3
equally by men and women	30.8	37.8	43.6	37.7
mainly by women	13.1	15.6	17.4	15.5
only by women	3.2	3.6	2.2	3.1
I am the only person	7.5	6.4	4.3	6.1
Missing	1.1	0.8	8.0	0.9
Total	100.0	100.0	100.0	100.0
Workplace Segregation				
% of males at the workplace (from	management (	Q)		
0-25% (Female dominated)	9.4	9.7	10.8	9.9
25-50% (Female intensive)	18.9	27.9	40.2	29.2
50-75% (Male Intensive)	22.8	26.9	21.1	24.1
75-100% (Male Dominated)	47.3	34.2	27.4	35.6
missing	1.6	1.3	0.5	1.2
Total	100.0	100.0	100.0	100.0

### Occupational Segregation: by gender

# Occupational Segregation

% of women in same SOC Sub-Major Group (derived from employee questionnaire)

	Low	Intermediate	High	Total
Men				
0-25% (Male Dominated)	38.5	35.0	34.4	35.9
25-50% (Male Intensive)	35.7	36.5	36.0	36.1
50-75% (Female Intensive) 75-100% (Female	23.6	26.2	27.6	25.9
Dominated)	2.2	2.4	1.9	2.2
Women				
0-25% (Male Dominated)	6.0	5.8	3.5	5.1
25-50% (Male Intensive)	22.0	23.6	25.2	23.8
50-75% (Female Intensive) 75-100% (Female	51.2	51.9	54.9	52.8
Dominated)	20.9	18.6	16.5	18.4

- Low performance workplaces tend to be male dominated
  - High male job and workplace segregation
- High performance workplaces tend to be more diverse
  - Lower job segregation with more jobs being done equally by men and women
- Occupational segregation little different between types of workplace
  - Men twice as likely to work in male-dominated occupations than women in female-dominated occupations
  - HPWs slightly less likely to have occupational domination

# HPWs, Segregation and the Gender Wage Gap

	Low	Intermediate	High			
Job Segregation						
Thinking about the type of work	you personally do,	is it done (employe	ee			
questionnaire)						
mainly by men	12.2%	3.1%	-7.1%			
equally by men and women	-19.3%	-18.5%	-18.4%			
mainly by women	-5.7%	-17.9%	-12.0%			
Occupational Segregation						
% of women in same SOC Sub I	Major Group (derive	ed from employee qu	estionnaire)			
0-25%	-9.6%	-6.4%	-11.5%			
25-50%	-11.3%	-14.2%	-8.8%			
50-75%	-17.5%	-17.3%	-18.3%			
75-100%	3.2%	-10.1%	-13.0%			
Workplace Segregation						
% of males at the workplace (from manager)						
0-25%	-12.0%	-12.9%	-10.6%			
25-50%	-16.5%	-13.8%	-16.8%			
50-75%	-16.2%	-20.2%	-18.2%			
75-100%	-10.6%	-13.4%	-14.2%			

- Women do better/less badly relative to men in segregated jobs, occupations and workplaces – particularly in LPWs
- Gender Diversity is NOT associated with more gender equality

#### Accounting for the Gender Wage Gap

To identify the structure of the gender wage gap and the role of workplace characteristics as a source of this gap, we estimate:

$$\ln w_{ij} = \alpha + \sum_{h} \beta_{hij} S_{hij} + \sum_{n} \Theta_{n} X_{nij} + \sum_{k} \Phi_{k} Z_{kij} + \varepsilon_{ij}$$

- where  $w_{ij}$  is the hourly wage of person i in the j-th establishment,  $S_{hij}$  are the three measures of segregation (job, occupation, workplace),  $X_{nij}$  is a set of personal attributes and  $Z_{nij}$  is a set of establishment characteristics
- Two stages:
  - Regressions based on combined male/female data to establish the size of the gender differential between different work practices and how it is sensitive to inclusion of additional controls
  - Decomposition technique applied to male/female specific models to breakdown the average gender pay gap into component parts (Oaxaca and Ransom, 1994).

# Oaxaca Decomposition

- > Divides gender pay gap into:
- Proportion due to Male Advantage (that due to an advantage for males on given attributes)
- Proportion due to Female Disadvantage (that due to disadvantage for females on given attributes)
- Proportion due to Attributes (that due to difference in level of attributes between males and females)

# Estimating the Gender Wage Gap

Gender Coefficients	Low	Intrmdte	High
Model 1: Gender Only	-0.1720	-0.2201	-0.2404
Model 2: Gender and Personal Characteristics	-0.1473	-0.1508	-0.1500
Model 3: Gender and Workplace Characteristics	-0.1538	-0.1823	-0.1846
Model 4: Gender, Segregation Model 5: Gender, Personal and Workplace	-0.1130	-0.1269	-0.1287
Characteristics	-0.1277	-0.1198	-0.1100
Model 6: Gender, Personal, Workplace and			
Segregation	-0.0907	-0.0757	-0.0724
% of Gender Differential Explained Model 1: Gender Only			
Model 2: Gender and Personal Characteristics	14.4%	31.5%	37.6%
Model 3: Gender and Workplace Characteristics	10.6%	17.2%	23.2%
Model 4: Gender, Segregation	34.3%	42.3%	46.4%
Model 5: Gender, Personal and Workplace	05.00/	45.00/	E4 00/
Characteristics  Model 6: Conder Personal Workplace and	25.8%_	45.6%	54.3%
Model 6: Gender, Personal, Workplace and Segregation	47.3%	65.6%	69.9%

# Decomposing the Gender Wage Gap

Decomposition	Low	Intmdte	High
Wage Gap (Log Points)	-0.1720	-0.2201	-0.2404
Model 5- Gender, Personal & Workpla	ce Characteris	stics	
xbarm*(bm-bt) - Male Advantage	20.1%	17.6%	15.1%
xbarf*(bt-bf) - Female Disadvantage	37.1%	25.3%	19.3%
bt*(xbarm-xbarf)- Attributes	42.8%	57.0%	65.6%
Model 6- Gender, Personal, Workplac	e & Segregation	on	
Male Advantage	9.8%	7.9%	7.7%
Female Disadvantage	17.5%	11.1%	10.1%
Attributes	72.7%	80.9%	82.2%

# Contribution of Segregation to Gender Gap

	Male	Female		
	Advantage	Disadvantage	Attributes	Total Gap
	xbarm*(bm-bt)	xbarf*(bt-bf)	bt*(xbarm-xbarf)	
Low				
Job segregation	0.0130	-0.1578	0.0506	-0.0942
Workplace segregation	-0.0019	0.0048	0.0162	0.0190
Occupational segregation	0.0017	-0.0014	0.0311	0.0314
Overall Decomposition	0.0169	0.0302	0.1257	0.1727
Intermediate				
Job segregation	0.0199	0.0006	0.0303	0.0508
Workplace segregation	0.0132	0.0140	0.0275	0.0546
Occupational segregation	0.0011	-0.0444	0.0347	-0.0086
Overall Decomposition	0.0173	0.0243	0.1766	0.2182
High				
Job segregation	0.0176	-0.0111	0.0168	0.0233
Workplace segregation	0.0260	0.0208	0.0351	0.0819
Occupational segregation	0.0046	-0.0734	0.0485	-0.0202
Overall Decomposition	0.0185	0.0242	0.1968	0.2394

- A higher proportion of the gender differential can be explained by observable attributes in HPWs than LPWs
- Suggests that pay determination is more formal in HPWs

#### Conclusions and Implications

- HPWs are associated with higher pay for men and women, on average, and a higher gender wage gap
- > HPWs are characterised by less segregation
- > The gender pay gap is higher in diverse workplaces
- Gender wage differences are more strongly "explained" by differences in attributes in HPWs
- There is a need for high performance work practices to be complemented with equal opportunities monitoring to enable the economic benefits of HPWs to be more evenly distributed – compulsory <u>HR</u> audits in <u>all</u> sectors?
- It seems that Linda Dickens was right all\_along......