

Public Sector HRM: Does It Work?

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Draws on research with...

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 - John Forth (City University)
- Lucy Stokes (Competition and Markets Authority)
 - Dave Wilkinson (UCL)
 - Francis Green (UCL)

Motivation

- Concerns about
 - productivity in the public sector
 - the cost of delivering public services
- Desire to improve quality and efficiency with which public services are delivered
- What are the solutions?
 - Privatisation
 - Or tools that are commonly associated with the private sector
 - Including management practices
 - Human Resource Management
 - High-performance Working Practices
- But can HRM deliver in the public sector?
 - What's the theory?
 - What's the evidence?
 - What are the implications for 'going further' down this road?

Public Sector Productivity in the UK

- HM Treasury have commissioned [new review](#) to improve measurement and data
- [Experimental statistics](#) from ONS suggest growth of 0.2% between 1997 and 2019
 - Substantial cross-sectoral variance
- Current output is below pre-pandemic levels

Overview

- HRM can deliver for the public sector
- Public sector not always the laggard it's made out to be
 - Often leading the private sector
- In some areas HRM is less-well-developed in the public sector
 - may be good reasons since public sector setting is very different
- Clear evidence that HRM is associated with higher productivity and performance in the public sector
- But not so positive for employees
 - Not the 'mutual gains' identified in some of the private sector literature
- Public sector HRM doesn't always 'behave' as per theory based on private sector enterprise
- Sometimes good arguments for leaving public sector management as it is
- But I'm not sure that's going to happen

Remainder of the talk

- What is the public sector and why does it matter?
- What is HRM and how might it work in the public sector?
- What's the evidence?
 - [Bryson and White \(2024\)](#): public v private sector comparison
 - [Bryson and White \(2021\)](#): public sector only
 - Bryson and Green (2018): schools
 - Bryson, Forth and Stokes (2017): performance pay in public and private sectors
- Implications and the future

What is the public sector and why does it matter?

What is the public sector?

- State-owned economic activity
 - Local authorities, civil service, (most) health and social care, (most) education, (most) police and justice services, emergency services, security
 - State's response to demand for goods/services that markets find difficult to provide
 - No profit maximand but subject to law of scarce resources leading to rationing
- Can be hard to define
 - Public/private boundaries are contentious
 - Outsourcing
 - Private provision of public services
- Measurement error in some data sets
 - Some employees don't know whether they are public or private sector (Blanchflower and Bryson, 2010)

Why does it matter?

- Important in people's lives
 - Welfare provision, life chances, security, justice, labour market
 - And, for the 1/3 of employees working for it, livelihoods
- Costs quite a bit
 - Taxes, which people don't like
- Matters to functioning of the economy
 - Infrastructure
 - Efficient labour market
 - Productivity in both public and private sectors

Getting the best out of your public sector

- Issue came to fore in 1990s
 - UK not unusual – similar elsewhere (Esping-Andersen, 1996)
 - Longevity, in-migration
 - Greater expectations on education, health, consumption
 - Resistance to increased taxation
- **New Public Management** (LeGrand and Bartlett, 1993; Burke et al., 2013)
 - cost reduction, process innovation, marketization with implications for use of targets and incentives in public sector (Bach, 2009)
 - Public Service Productivity Panel: Makinson (2000) focus on team incentives
- Been using performance-based contracts to deliver public services through private and third sector providers for some time ([Rolfe et al., 1996](#))
 - But never to the extent used in the United States, eg. welfare-to-work providers

HRM:

**What is it and How Might it
Work in the Public Sector?**

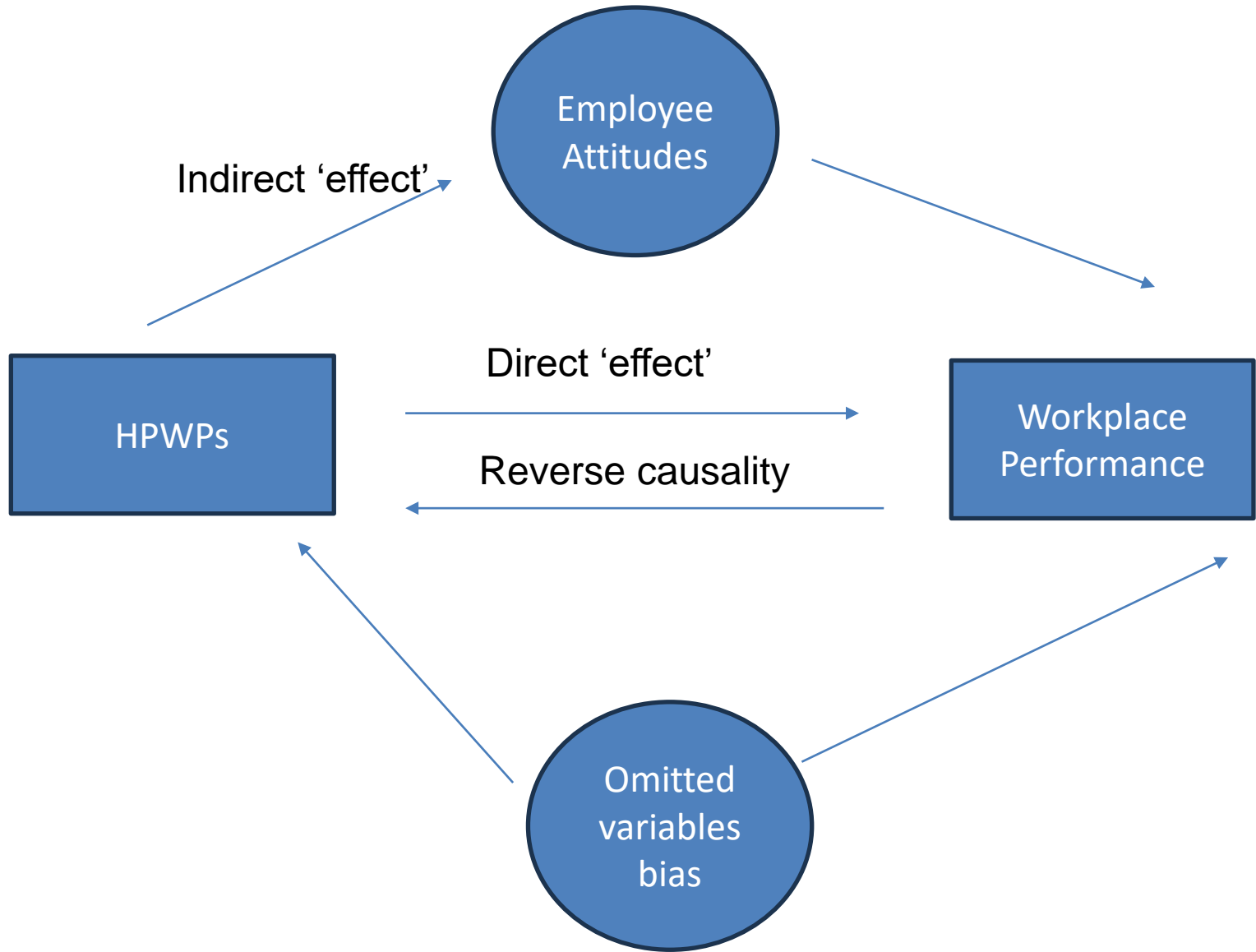
HRM Flavour 1

- HRM as technology

- Sits alongside capital, labour, intermediate goods in production function ([Bloom, Sadun and Van Reenen, 2017](#))
- Foundations in principal/agent theory
 - Difficulties observing worker effort -> shirking
 - Align principal/agent interests via incentives
 - Payment methods, appraisal, firing policies
- Squeeze out opportunities to shirk
 - Targets, monitoring, operational efficiency (JIT, TQM)
 - Taylorist job design -> sceptical about 'engagement'

HRM Flavour 2

- HRM as worker engagement
 - Employer relies on workers' tacit knowledge
 - Employee desires job enrichment
- Ingredients
 - Job control: devolve responsibility to individual or team to elicit tacit skills
 - Counter to scientific management (Walton, 1972; [1985](#); [Lawler, 1986](#))
 - Complementary incentives/supports
 - Organisation-level 'voice'; financial participation; performance pay; training; selection
- Mechanisms
 - Gift exchange; ability-motivation-opportunity (AMO) suggests performance returns via commitment/satisfaction
 - Debate over whether worker attitudes fully mediate HRM effect (Peccei and Van de Voorde, 2019)
- HRM -> HPWS (Appelbaum et al., 2000)
 - Mutual gains or 'intensification' ([Bryson, 2018](#))



HRM as Managerial Choice

- Managerialists and economists assume employers have some (albeit constrained) choice in how to configure the workplace and thus labour input
- Constraints
 - Top-down managerial hierarchies; quality of labour supply; managerial quality; governance and regulations
- Implications for public sector?
 - Role of statute, public policy, political intervention
 - Not profit-maximising
 - Increasing managerial autonomy (eg. Academy schools)

How might HRM work and for whom?

- **Universalist**
 - Sub-optimal investment, more = better
 - Intensity therefore matters
- **Contingent – “it all depends...”**
 - Internal fit (policies, practices, governance, labour)
 - External fit (market, competition)
- **Perhaps multiple equilibria**
 - optimise by doing different things
- **Is HRM a network good or a private good?**
 - Network: returns are increasing in N adopters
 - Private: rivalrous, private exclusive returns; value of being first mover

How to Specify HRM - Theory

- A technology with constant marginal returns
- Potential non-linearities, eg. if high-intensity HRM is a 'signal' of 'strong' system to workers (Bowen and Ostroff, 2004)
- Not necessarily a single latent variable
- So examine domains too
 - intensity within those domains
 - Interactions between domains (bundles) if complementarities

HRM Practices in Bryson and White (2024, 2021)

Domains	Mean	s.d.	range	KR20	Contents
Participation	7.90	1.86	1-10	0.69	Meetings are regular; <u>meeting frequency</u> ; <u>staff time in meetings</u> ; <u>briefing frequency</u> ; <u>staff time in briefings</u> ; subjects discussed in meetings (staffing, finance, investment); consultative committee; attitude surveys.
Team working	3.80	1.25	0-6	0.57	<u>Proportion in teams</u> ; training for team-working; teams have inter-dependence, make joint decisions, have product/service responsibility; quality circles used.
Development	5.42	1.41	1-8	0.60	'Investor in People' standard achieved; <u>proportion given workplace training</u> ; <u>proportion given off-job training</u> ; <u>proportion given cross-job training</u> ; <u>variety of training courses used</u> ; induction courses used; appraisal for managers; appraisal for all non-managers; employee development is part of workplace strategy; vacancies filled internally if possible.
Selection	5.54	1.56	0-8	0.62	Selection criteria: qualifications, skills, references, motivation, experience; use personality tests for manager jobs; use personality tests for non-manager jobs; use skill tests for manager jobs; use skill tests for non-manager jobs.
Incentives	1.85	2.05	0-8	0.81	Bonus for individual, group/team, workplace, organization performance; profit-sharing for non-managers; merit-based or performance pay; appraisals that affect pay differentials; incentives that affect pay differentials.
HPWP index	24.51	4.47	0-40	0.80	Sum of above items.

HRM Practices (Bryson and Green, 2018)

HRM Domain:	HRM measures for each domain:
Incentives (0,4)	Any performance pay; managers appraised; 100% non-managers appraised; non-manager appraisal linked to pay
Records (0,9)	Sales, costs, profits, labour costs, productivity, quality, turnover, absence, training
Targets (0,11)	Volume, costs, profits, ULCs, productivity, quality, turnover absence, training, job sat, client sat
Teams (0,4)	100% largest non-managerial occupation in teams; teams depend on each other to perform work; team responsible for products and services; team jointly decides how to do the work
Training (0, 5)	80% largest non-managerial occupation had on-job training lasts 12 months; workplace has strategic plan with employee focus; Investors in People Award; standard induction programme for new staff in largest non-managerial occupation; number of different types of training provided is above population median.
TQM (0, 3)	Quality circles; benchmarking; formal strategic plan for improving quality.
Participation (0,5)	Formal survey of employee views in last 2 years; management-employee consultation committee; workforce meetings with time for questions; team briefings with time for questions; employee involvement initiative introduced in last 2 years.
Selection (0,7)	References used in recruitment; recruitment criteria include skills; recruitment criteria include motivation; recruitment criteria include qualifications; recruitment criteria include experience; recruitment includes personality or aptitude test; recruitment includes competence or performance test.
HRM index (0,48)	Additive index

HRM in the Public Sector

- Traditionally viewed as distinctive (Farnham and Horton, 1996)
 - Paternalistic (staff well-being); collectivist (unionised); consciously ‘model employer’
 - Less concerned about efficiency/cost (Gould-Williams, 2004)
- Recent political pressures for change including adoption of private sector approaches to HRM (Gould-Williams 2004: 67)
 - Quasi-markets (Le Grand, 1991); competitive tendering;
 - Growth in performance-oriented practices (Bach et al., 2013: 324-327)
 - New Public Management (Bach et al., 2009; Barzelay, 2001)
 - Model employer practices persist (Bach et al., 2013: 327-8)
 - Between 2004 and 2011 big growth in job insecurity confined to public sector (van Wanrooy et al., 2013: 136)

Maybe Public Sector Workers are Different to Private Sector Workers?

- Ability-Motivation-Opportunity
 - Enhancement of organizational resources via employee ability and motivation, together with structures of opportunity by which able and motivated employees can achieve improved results
- Public sector workers motivated by ‘moral commitment’ that is more powerful than ‘calculative commitment’ driving commercial sector workers (Etzioni, 1975)
 - Mission-oriented (Besley and Ghatak, 2005)
 - Career-oriented (Lazear)

PUBLIC SECTOR HRM: EMPIRICAL EVIDENCE

Overview of recent literature

- Most studies are branch-specific or focus on one facet of HRM
 - Local government: positive effects of team-working on employee attitudes via trust (Gould-Williams and Davies, 2005) and performance (Gould-Williams and Gatenby, 2010)
 - Health-care: no quant research (Harris et al., 2007)
 - Hyde et al. (2013): qual assessment of how staff view HRM
- Some positive effects of performance-related pay
 - HM Customs and Excise: team incentives positive for productivity via task allocation (Burgess and Ratto, 2009)
 - Jobcentre Plus: team incentives positive for job placements but NS for customer service (Burgess et al., 2004)
 - Prentice et al. (2007): PP can be positive but limited by scheme design and gaming

Human resource management technology, workplace performance, and employee wellbeing in the British Public Sector

[Alex Bryson and Michael White \(2024\)](#)

Motivation

- Are high performance workplace practices (HPWPs) correlated with improved workplace performance and employee wellbeing? (mutual gains)
- How do results compare to workplace in the private sector?
- Do results in cross-section hold in panel analyses?

Methods

- Workplace-level analyses using linked employer-employee data from the Workplace Employment Relations Surveys 2004-2011
- Repeat cross-section, pooled years, plus panel analyses for 2 points in time
- Only workplaces with 50+ employees
- Separate analyses for public and private sectors
- Survey weighted back to population
- Partial correlations only

Dependent Variables

Variable	public sector			private sector		
	mean	s.d.	N	mean	s.d.	N
overall performance index	10.90	1.772	477	11.31	1.792	475
log median wage	2.56	0.284	545	2.41	0.436	519
change activity index	2.96	1.408	545	2.78	1.459	519
Satisfaction well-being (SWB)	24.61	2.37	524	24.83	2.19	498
Health well-being (HWB)	23.41	2.041	524	23.72	2.14	497
Organizational affective commitment (OAC)	11.35	1.16	524	11.25	1.14	497

Performance index: additive scale based on managerial perceptions of workplace financial performance, labour productivity, service (3,15)

Change index: N changes in past 2 years on developing new technology, new or enhanced services, altered working time arrangements, change to work organization, change to work procedures (0,5)

Satisfaction: mean employee satisfaction on eight non-wage metrics (5, 40)

Health wellbeing: mean job-related affect on six aspects of psychological health (Warr, 2007) (6, 30)

Organizational affective commitment: 3 measures from Lincoln-Kalleberg battery (3,15)

HPWPs – workplace means (wted) with standard errors

	Public	Private
HPWPs index	24.51 (4.470)	25.20 (6.236)
Participation	7.86 (0.112)	6.87 (0.195)
Teams	3.79 (0.092)	3.27 (0.094)
Development	5.31 (0.098)	5.00 (0.122)
Incentives	1.52 (0.109)	3.91 (0.276)
Selection	5.23 (0.108)	5.01 (0.110)
N	592	546

Results: HPWPs and Workplace Performance

	b	s.e.	t	N	R-squared
Public sector					
overall performance index	0.067	0.031	2.20*	461	0.085
log median wage	-0.006	0.0026	2.48*	523	0.606
change activity index	0.075	0.019	4.03**	524	0.137
Private sector					
overall performance index	0.324	0.087	3.70**	455	0.161
HPWP squared	-0.006	0.002	3.03**		
log median wage	0.0016	0.0032	0.50	498	0.757
change activity index	0.039	0.013	2.95**	498	0.251

Survey weighted regressions with robust standard errors

Controls: occupational composition; % female; % part-time; % non-permanent, age of establishment, size, union status, industry, recession-responses

* 5% significance ** 1% significance

Results: Quantifying HPWPs and Types of ‘Innovation’

(a) Public sector	probability of each change at		difference	t
Change type	lower quartile HPWP	upper quartile HPWP		
New technology	0.639 (0.0354)	0.739 (0.0366)	0.10	1.96*
New service	0.380 (0.0342)	0.492 (0.0397)	0.112	2.14*
Hours	0.321 (0.0331)	0.336 (0.0372)	0.015	0.294
(b) Private sector				
New technology	0.652 (0.039)	0.716 (0.041)	0.064	1.131
New service	0.384 (0.037)	0.567 (0.053)	0.183	2.831**
Hours	0.321 (0.037)	0.246 (0.038)	-0.075	1.41

Marginal probabilities are computed from univariate probit models, with the HPWP index first at the lower quartile value and then at the upper quartile value. All other variables are kept at their observed values. Standard errors of these predictive margins are in brackets. The probit estimates are obtained from survey-weighted analyses with robust standard errors

Results: HPWPs and Employee Wellbeing and Motivation

(a) Public sector analyses	b	s.e.	t	N	R-sq
Satisfaction well-being (SWB)	-0.008	0.018	0.43	505	0.321
Health well-being (HWB)	-0.005	0.029	0.16	505	0.182
Organizational affective commitment (OAC)	-0.005	0.012	0.44	505	0.392
(b) Private sector analyses					
SWB	0.0046	0.0257	0.18	477	0.203
HWB	-0.067	0.0222	3.00**	476	0.159
OAC – effect of HPWP HPWP	0.140	0.072	1.95+	476	0.293
OAC - effect of HPWP-squared	-0.0031	0.0015	2.03*		

Estimates from survey-weighted regression analyses with robust standard errors. Estimates shown are for models linear in HPWP, except for private sector OAC where a model with linear and quadratic terms in HPWP is shown

Results: HPWPs and Performance, Panel FE Estimates

(a) Public sector	b	s.e.	t	Nobs	R-sq. within	rho
overall performance index	0.087	0.026	3.32**	374	0.085	0.564
change activity index	0.087	0.022	3.89**	437	0.108	0.433
(b) Private sector						
overall performance index – HPWP	0.066	0.023	2.72**	394	0.156	0.623
change activity index	0.042	0.020	2.04*	437	0.078	0.450

Two-period unweighted linear panel regression analysis with fixed effects.
 Significance: * 5 per cent level; ** 1 per cent level. Rho is the proportion of residual error attributable to unobserved fixed effects.

Findings

- HPWPs are positively associated with public sector workplace performance
 - Higher performance/productivity, lower wage costs, more innovation
- No association with employee wellbeing
 - Job satisfaction, job-related affect (Warr, 2007), organizational affective commitment (Lincoln-Kalleberg)
- No mediation via worker wellbeing/attitudes
- Consistent with HPWPs as management technology
- In private sector HPWPs also positively associated with performance and innovation, but not labour costs
- In private sector HPWP positive but ns for job satisfaction, hump-shaped relationship with commitment and negative for job-related affect

High performance work systems and the performance of public sector workplaces in Britain

[Alex Bryson and Michael White \(2021\)](#)

Summary

- Similar approach – WERS 2004-2011, cross-section and panel, 50+ employees, same HPWPs metrics but
 - Public sector only
 - Workplace performance and ‘innovation’ only
 - Introduces target setting (important in Bloom et al)
- HPWS positively correlated with workplace financial performance ratings and implementation of workplace change, and negatively correlated with labour costs
- But target setting – entered separately – are, as much as HPWPs, positively associated with these outcomes
- First difference panel estimates support the cross-sectional analyses
- Both HPWPs and target setting important for public sector performance

A Case Study: State versus Private Schools

[Bryson, A. and Green, F. \(2018\) "Do Private Schools Manage Better?", National Institute Economic Review, No. 243, R17-R26](#)

previously [IZA Discussion Paper No. 11373](#)

Motivation

- The government attributes some of the gap in student attainment between state and private schools to their management practices
- They have proposed private school 'sponsorship' of state schools to promote management practice 'learning'
- But there was no empirical evidence on this issue
- We undertook the first study of its kind using workplace-level data to investigate take-up of HRM practices and their correlation with school outcomes

Current Policy

- Andrew Adonis, Labour's Minister for Schools from 1998 to 2008 urged that successful private schools, whose "DNA" incorporated "independence, excellence innovation, social mission" should sponsor state academy schools (Adonis, 2012: 157)
- In 2013 there were 36 private schools involved in some form of sponsorship of state school academies, though only five were fully involved with managerial responsibilities
- Manifesto commitment to promote more of this

The Private Schools Sector

- Around 7% pupils in Britain go to private schools
- Their resources exceed those in state schools by around a factor of 2.5:4
- Private schools deliver substantial educational advantages as measured by achievements in public exams and access to high-ranking universities
- Earnings returns and social status higher after private school

HRM and Performance

- Extensive literature links variations in organisational performance with intensive use of HRM practices
- Some use experimental methods suggesting causal linkage
- Indications of a positive relationship between various management practices and performance in a school setting
 - United States: Fryer (2014, 2017) and Sun and Ryzin (2014)
 - Brazil: Tavares (2015)
 - Turkey: Argon and Limon (2016)
 - Bloom et al. (2015) across eight countries

Chief Hypothesis

- The high degree of autonomy enjoyed by private schools, combined with the pressures of competition for students and direct parental involvement, result in private schools having evolved a more intensive use of efficient management practices

Data

- Workplace Employment Relations Surveys 2004-2011
- Face-to-face interview with senior HR manager
- Nationally representative of workplaces with 5+ employees
- 406 schools of which 79 are private schools
- Detailed information on HRM at the workplace
 - Incentives
 - Record keeping
 - Targets
 - Team-working
 - Training
 - Total quality management
 - Participation
 - Selection
 - Overall score

Findings

- There is greater use of modern HRM practices in state schools, not private schools
- The differences persist controlling for potential confounding factors
- HRM intensity is positively associated with improvements in schools' financial performance and labour productivity, but only in state schools

Mean Scores for Management Practices in State and Private Schools

	State	Private
Incentives (0,4)	1.93	1.91
Records (0,9)	5.99	<u>6.89</u>
Targets (0,11)	2.63	2.36
Teams (0,4)	<u>2.81</u>	2.20
Training (0,5)	<u>3.53</u>	2.60
TQM (0,3)	<u>2.06</u>	1.13
Participation (0,5)	3.22	2.68
Selection (0,7)	<u>5.37</u>	4.89
HRM (0,48)	<u>27.55</u>	24.67

underlined figures denote statistically significant difference between the mean scores at a 95% confidence level or above

Table 3: School Performance and HRM in Private v State Schools

	Workplace Performance	Financial Performance	Labour Productivity	Quality of service/output	Log absence rate	% voluntary quits	Illness rate
Private school	-0.276 (0.75)	-0.070 (0.52)	-0.250 (1.30)	-0.121 (0.83)	0.071 (2.33)*	4.694 (2.22)*	1.677 (0.73)
HRM	0.621 (3.18)**	0.243 (3.75)**	0.271 (3.47)**	0.111 (1.44)	-0.057 (0.96)	-1.390 (1.60)	1.565 (1.37)
Interaction	-0.966 (2.97)**	-0.289 (2.70)**	-0.218 (1.33)	-0.111 (0.73)	0.009 (0.17)	-0.471 (0.21)	-1.579 (0.60)
R^2	0.25	0.26	0.30	0.21	0.12	0.41	0.39
N	335	370	341	385	319	384	406

Notes: (1) OLS models for private and state school performance. (2) Models pool cross-sectional data for 2004 and 2011. (3) Dependent variables are as follows: workplace performance: a response on financial performance, labour productivity and quality of service relative to other workplaces in the industry. Scale runs from 0 (below/a lot below average) to 4 (a lot better than average on all 3 items). The absence rate is the percentage of work days lost through sickness or absence at the workplace over the previous 12 months. The voluntary quit rate is the percentage of employees who left or resigned voluntarily in last year. The illness rate is the number of employees per 100 employees who have been absent in the last 12 months due to illness caused or made worse by their work. The injury rate is the number of employees per 100 who have sustained an injury at work in the last 12 months. (4) Managerial responses to the question “how would you rate the relationship between management and employees generally at this workplace?” with responses 1=poor/very poor to 4=very good. (3) All models contain controls as per Table 2. (4) t-statistics in parentheses. Statistical significance: * $p < 0.05$; ** $p < 0.01$

Implications

- No empirical support for the belief that private schools' comparative success is attributable in part to better management
- Instead in several domains of managerial practice, and in our overall index of good management, the private sector on average lags behind the state sector
- Only in the state sector is there a positive association between high management scores and performance
- No causality but our findings are consistent with earlier studies using quasi-experimental methods, both within schools and in other sectors
- But in subsequent work we find no association between HRM in schools and pupil attainment ([Bryson et al., 2023](#))

Performance Pay in the Public Sector

[Bryson, A., Forth, J. and Stokes, L. \(2017\) "How Much Performance Pay is there in the Public Sector and What Are Its Effects?", Human Resource Management Journal, 27, 4: 581-597](#)

Value of Pay for Performance (PP)

- Can raise productivity
 - Workers sort by ability (Prendergast, 1999; Lazear, 1986; 2000)
 - Via increased worker effort as workers are paid marginal product (Lazear, 2000)
 - Assumes workers able to influence output and that wage schedule steep enough to induce effort
- Aligns interests of principal/agent but
 - monitoring costs (Lemieux et al., 2009)
 - hard to link individual worker effort to output
 - complications with complex jobs
 - perverse incentives if multi-task jobs
 - Worker motivations/tastes
 - risk, competition, effort
 - Monetary rewards can prove counter-productive when workers are intrinsically motivated (Benabou and Tirole, 2003; Besley and Ghatak (2005); Burgess and Metcalfe (2000))

Basic Ideas in the Paper

- Characteristics of public sector jobs militate against use of PP
 - Multi-tasking; complex goods; multiple principals
- Worker preferences are heterogeneous across public and private sectors such that public sector workers may be less sympathetic towards PP and less responsive to it
 - Risk-averse (Pfeifer, 2011; Alesina et al., 2001)
- Public sector employees prefer career incentives to s-term PP to elicit effort
- Unions may block widespread use of PP in public sector -> prefer rate for the job
- Organizational benefits of PP are liable to be weaker in public sector because 'effects' unlikely to work through employee attitudes

Key Findings

- Half the 20 percentage point gap in PP between the private and public sectors is accounted for by differences in occupational composition
 - The gap falls to 8 percentage points when matching workers on their demographic and job characteristics
- PP is linked to positive job attitudes in the private sector but not among observationally equivalent public sector employees
- PP is negatively correlated with workplace performance in the public sector

Performance Pay Incidence, January 2000-March 2013

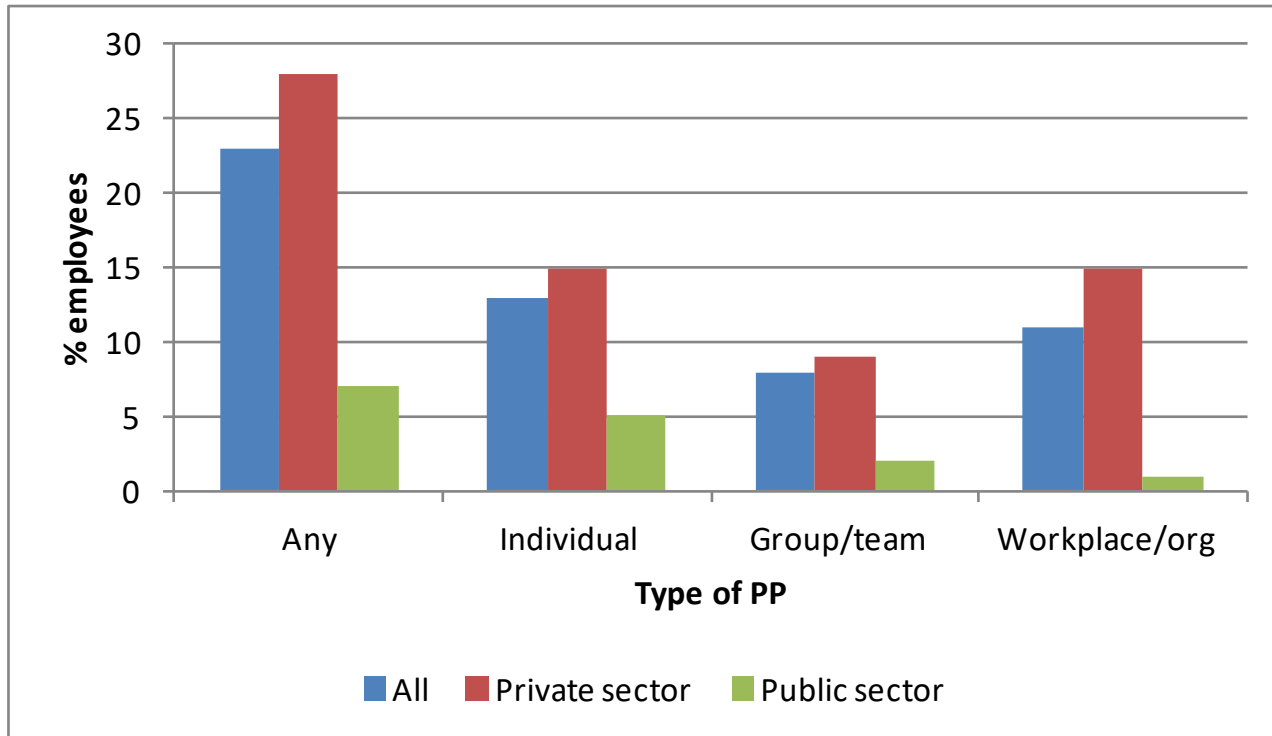
Sectoral Shares of All Base Pay and Bonus Pay, Monthly Wages and Salaries Surveys

	NACE Rev. 1.1 Section(s)	Share of all bonus pay (%)	Share of all regular pay (%)
Finance	J	39	7
Other private services	G-I, K, O	45	45
Production	A-F	15	21
Public services	L-N	1	26
Total		100	100

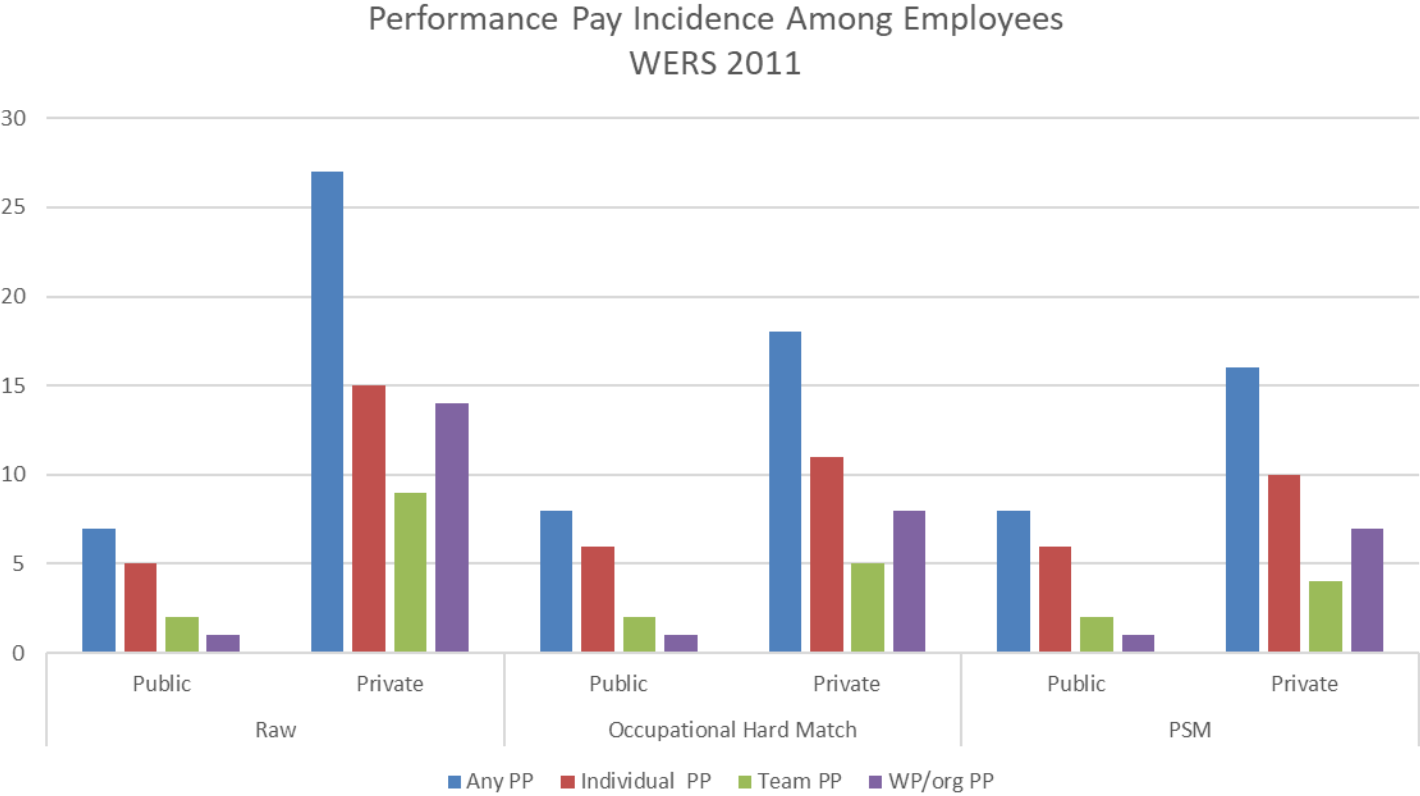
Source: Monthly Wages and Salaries Survey

Performance Pay Incidence, 2011

WERS (employees in workplaces with 5+ employees)



PP gap between public and private sectors halves when comparing 'like' employees in similar occupations



PP positive for job satisfaction and organizational commitment in the private sector but not in the public sector

	Employees receiving any PP	Employees receiving fixed pay only	Difference	Significance (<i>t</i> - stat)
Private sector				
Intrinsic job satisfaction				
Unmatched	0.097	0.026	0.071	3.33
Matched	0.097	0.043	0.054	2.31
Organisational commitment				
Unmatched	0.138	0.017	0.121	5.60
Matched	0.137	0.057	0.080	3.40
Public sector				
Intrinsic job satisfaction				
Unmatched	-0.238	-0.041	-0.197	4.40
Matched	-0.238	-0.233	-0.005	0.10
Organisational commitment				
Unmatched	-0.273	-0.035	-0.238	5.37
Matched	-0.270	-0.240	-0.030	0.62

PSM matching of PP with fixed pay employees, WERS 2011

'Effects' of PP on Workplace Performance in the Public Sector

	Workplaces with any PP	Workplaces with no PP	Difference	Significance (<i>t</i> -stat)
Additive workplace performance scale				
Unmatched	4.714	5.008	-0.295	1.93
Matched, ATT	4.723	5.053	-0.331	1.80
Matched, ATNT	4.569	5.029	-0.459	—

IMPLICATIONS FOR POLICY AND FUTURE RESEARCH

Overview of Existing Literature

- Total N studies is small for the UK/Europe
- More in the US but unclear how they translate
- Studies mainly in health, education and the civil service
- Few experimental studies
- Little evidence on cost effectiveness or value for money
- Scheme design seems to matter a lot
- Contextual factors seem to matter a lot
- What of longer-term impacts?

Big reforms are underway eg. teacher pay

- Abolition of fixed pay points within pay bands since 2013/14
- Changes to leadership pay from Sept '14
- [Burgess et al \(2022\)](#) find schools in 'better labour markets' respond by spending more on teachers, improving pay progression leading to higher teacher retention and improved pupil attainment
- Anders, Bryson, Horvath and Nasim on-going study. Effects of pay reforms on:
 - Teacher pay (entry wages, pay progression, variance within and across schools);
 - Teacher retention and entry to the profession
 - Teacher mobility across schools
 - Types of workers becoming teachers (leaving teaching)
 - Vacancy filling
 - School-level pay: variance within/between schools
 - Pupil attainment

We might expect something (Imberman 2015)

KEY FINDINGS

Pros

- + Incentives can effectively improve student performance if they are designed well.
- + In developing countries, paying teachers for student performance has been shown to be highly effective at low cost.
- + Incentives based on the collective performance of small groups of teachers strike a balance between loss of effectiveness from free-riding teachers and gains in effectiveness from teachers cooperating with each other.
- + Innovative incentive mechanisms based on loss rather than gain or on relative student performance show promise for high effectiveness but are yet to be rigorously evaluated.

Cons

- Overall, evidence on individual incentives in developed countries is mixed, with some positive and some negative impacts.
- In countries with high teacher salaries, incentives need to be large to elicit a response, which could make them too expensive for general use.
- Incentives based on the collective performance of large groups of teachers have been shown to have little impact on achievement and in some cases even generate negative impacts.
- There is no evidence that incentives tied to specific exams result in improvements in other measures of academic performance, suggesting a lack of general improvements in knowledge.

The Public Sector is Different

- Providers rarely die (not the United States)
 - Not really a market
- Workers are 'different'
 - Motivation, risk preferences, professionals
 - Output is hard to monitor
 - Complex jobs and multi-tasking
- Context is often different
 - Management quality
 - Procedural fairness
 - Unions
 - Governance
- Doesn't mean it can't work but it's likely to look different
 - Mimicking the private sector probably not appropriate