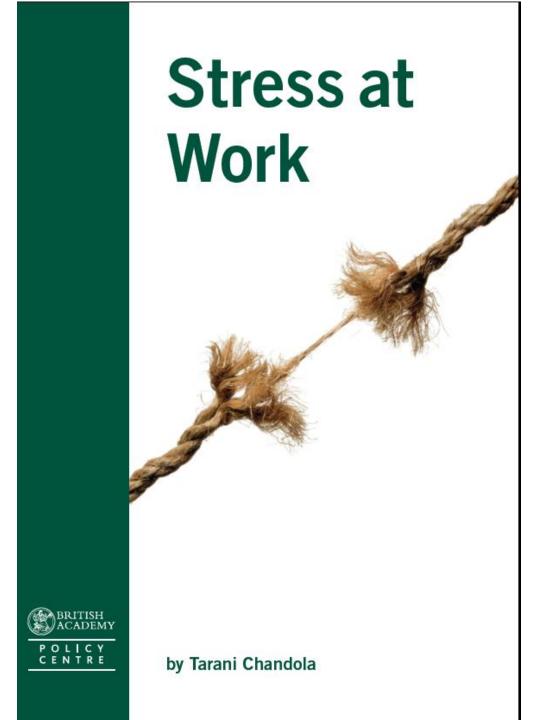
Work and Stress in Post-Recession Britain

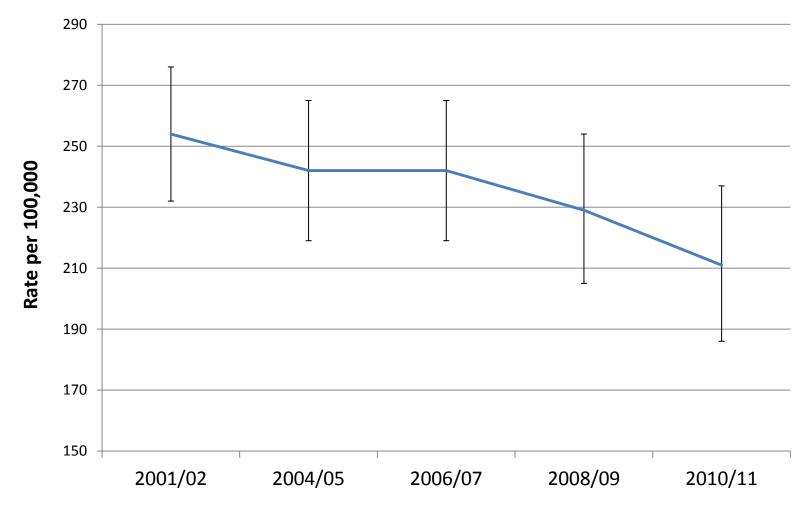
Tarani Chandola CCSR and Social Statistics University of Manchester



- Measuring work stress and trends
- Determinants
- Consequences
- Managing work stress

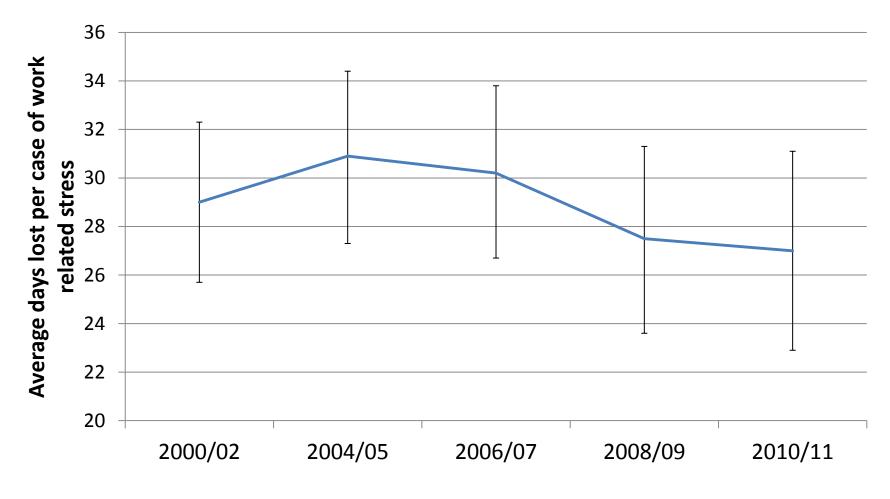
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Incidence of work-related stress in GB 2001/02-2010/11



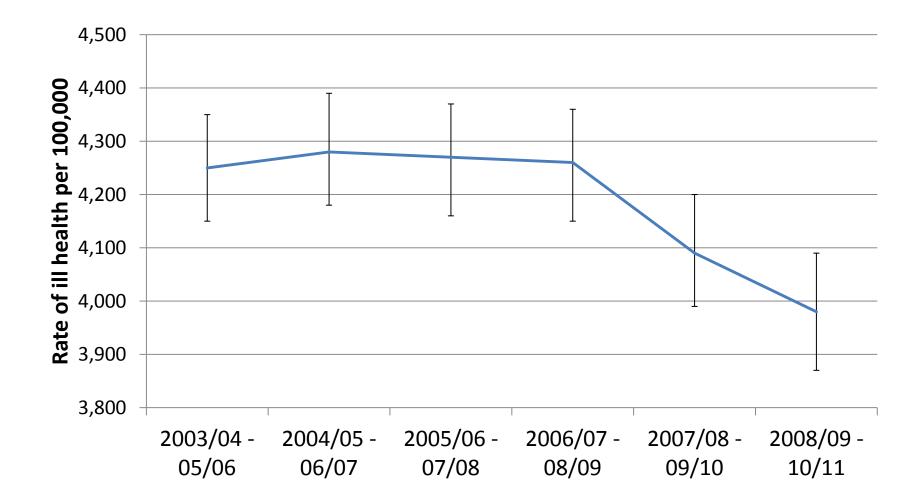
Labour Force Survey

Average days lost per case of work related stress 2001/02-2010/11



Labour Force Survey

Rate of (any) Ill-health per 100,000



Labour Force Survey

Work-related stress in the Labour Force Survey

Have you suffered from any illness, disability or other physical or mental problem that was caused or made worse by your job or by work you have done in the past?

How would you describe this illness?

bone, joint or muscle problems which mainly affect (or is mainly connected with) arms, hands, neck or shoulder, /...hips, legs or feet,/ ...back, breathing or lung problems,

skin problems,

hearing problems,

stress, depression or anxiety,

headache and/or eyestrain,

heart disease / attack, other circulatory system,

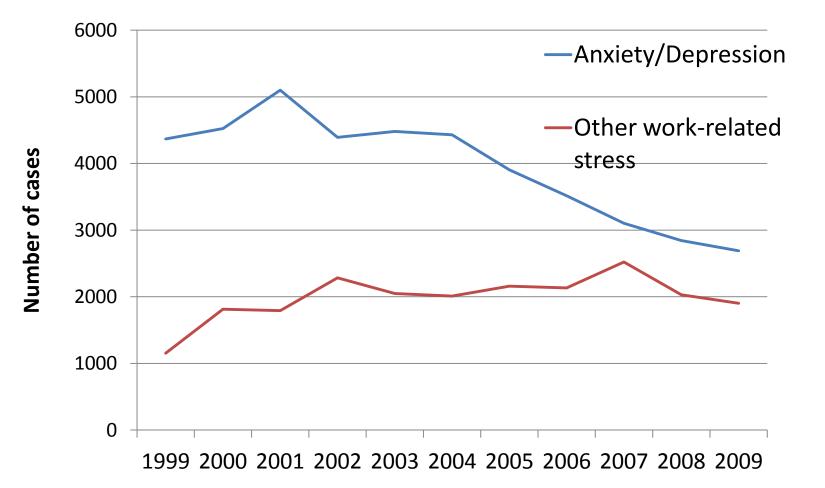
infectious disease (virus, bacteria)

other

Definition of work-related stress in the Labour Force Survey

- Individuals are asked to self-report any work-related illness they believe to have suffered over the previous 12 months
- Laypeople's ability and willingness to self-diagnose
- People may ascribe the cause of illness to work when there is no such link
- People may fail to recognise a link with working conditions when there is one
- Conflating work stressor with stress response

Number of cases reported by psychiatrists and occupational physicians to THOR database



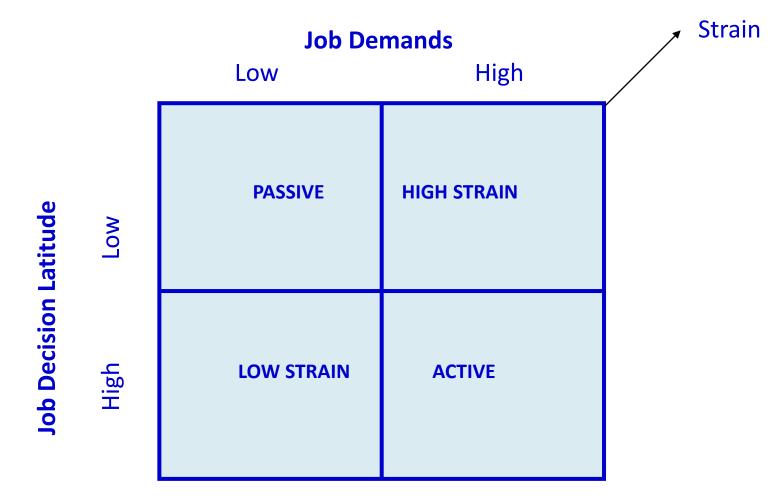
Models of work stressors

- Demand control model
- Effort Reward Imbalance model
- Management Standards model

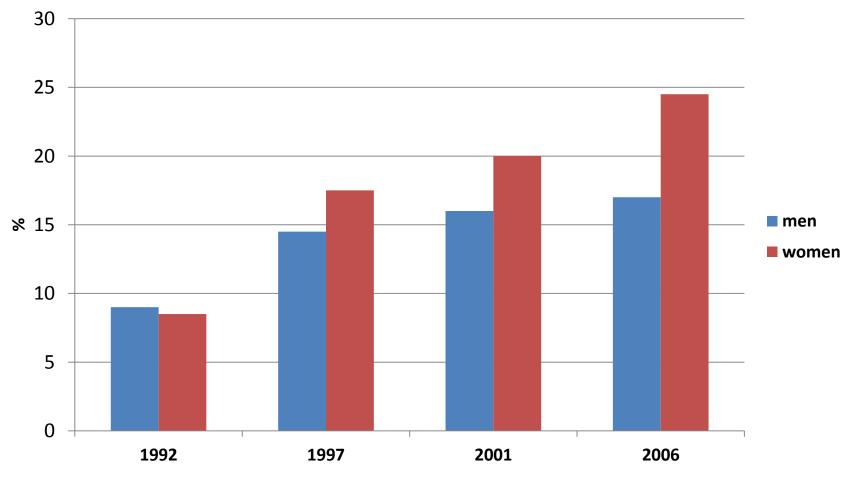
- Measuring work stress
- Trends
- Determinants
- Costs
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Job demand/control/strain model

(Karasek and Theorell)

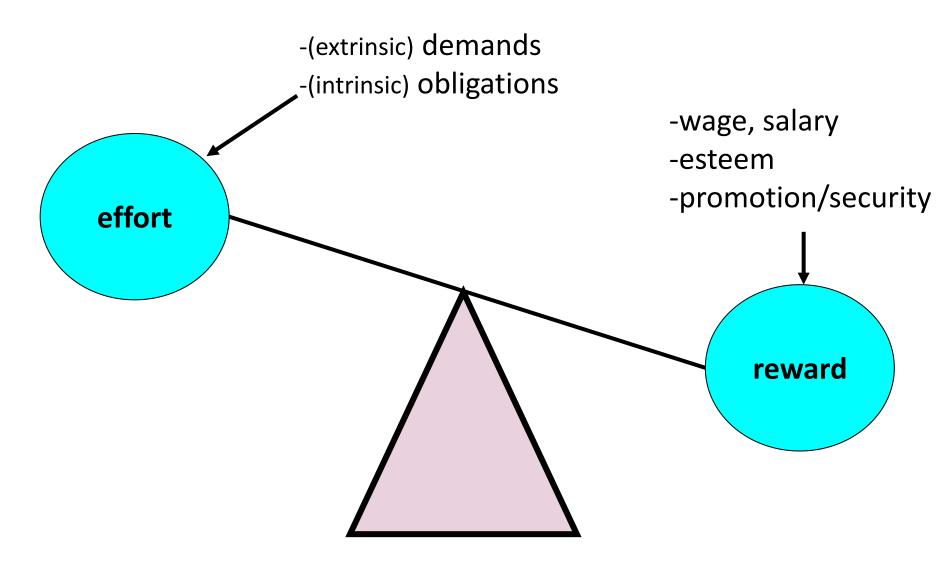


Percentage of employees in British Skills Survey with "highstrain" jobs, 1992–2006



Green 2009: Job Quality in Britain

Effort-reward imbalance at work



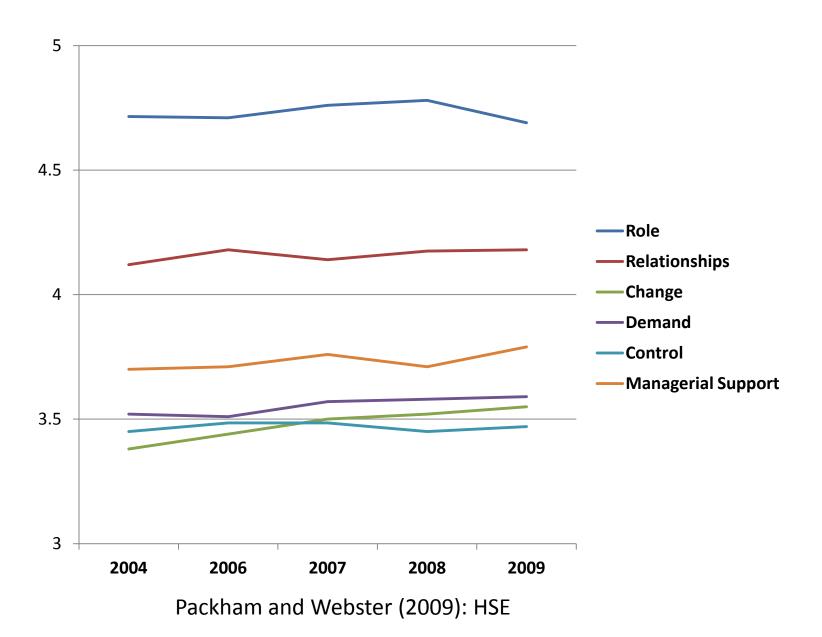
Siegrist, 1996

HSE Management Standards

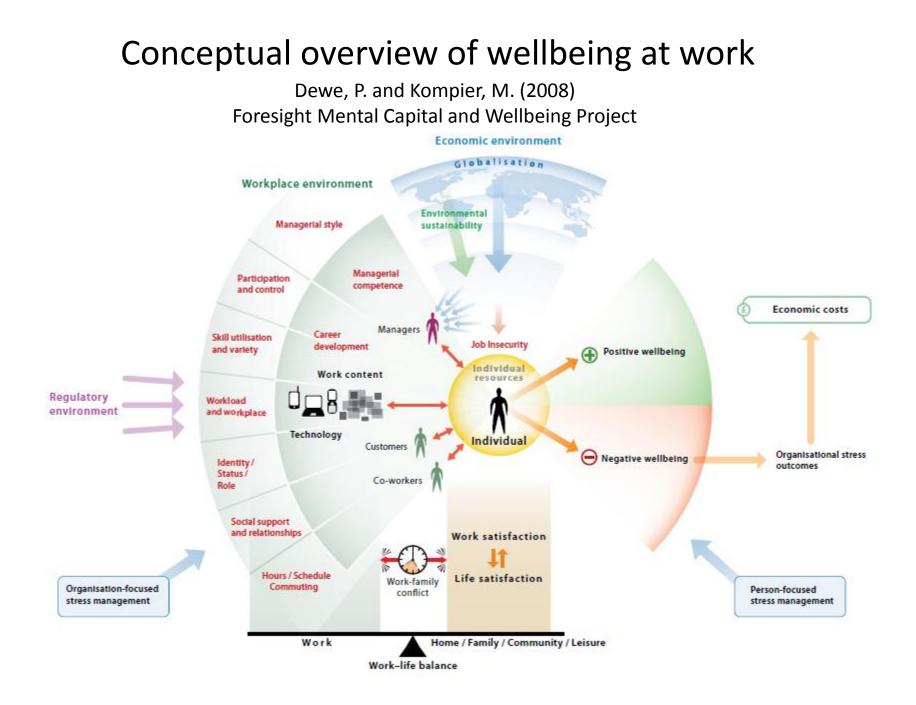
The six areas are:

- **Demands:** workload, work patterns, and the work environment
- **Control:** How much say the person has in the way they do their work
- **Support:** encouragement, sponsorship and resources provided by the organisation, line management and colleagues
- **Relationships:** promoting positive working to avoid conflict and dealing with unacceptable behaviour
- **Role:** Whether people understand their role within the organisation and whether the organisation ensures that they do not have conflicting roles
- **Change:** How organisational change (large or small) is managed and communicated in the organisation.

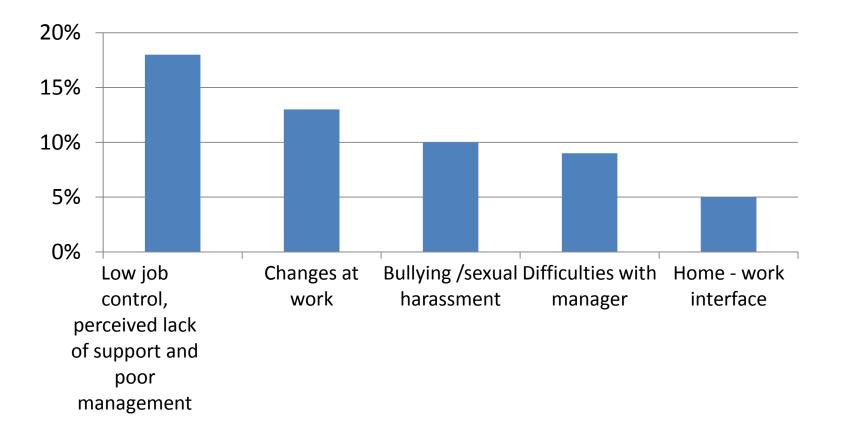
Trends in Management Standards Indicators



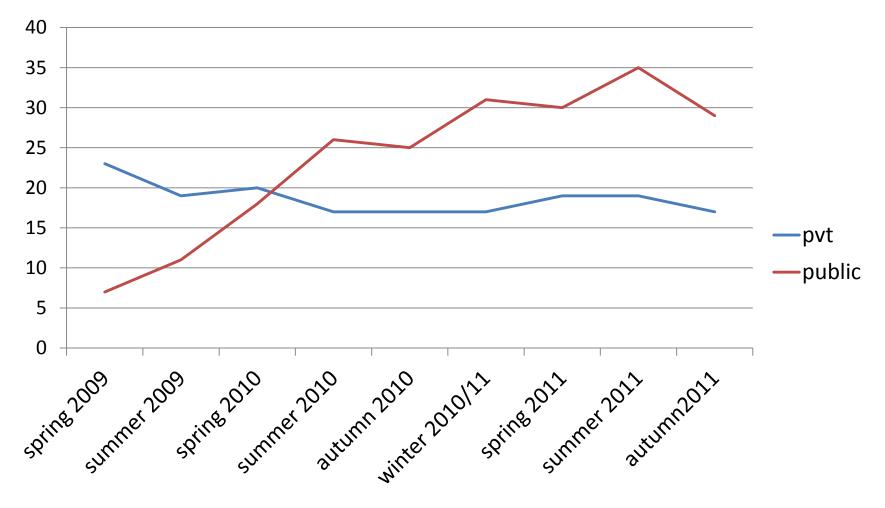
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- Determinants
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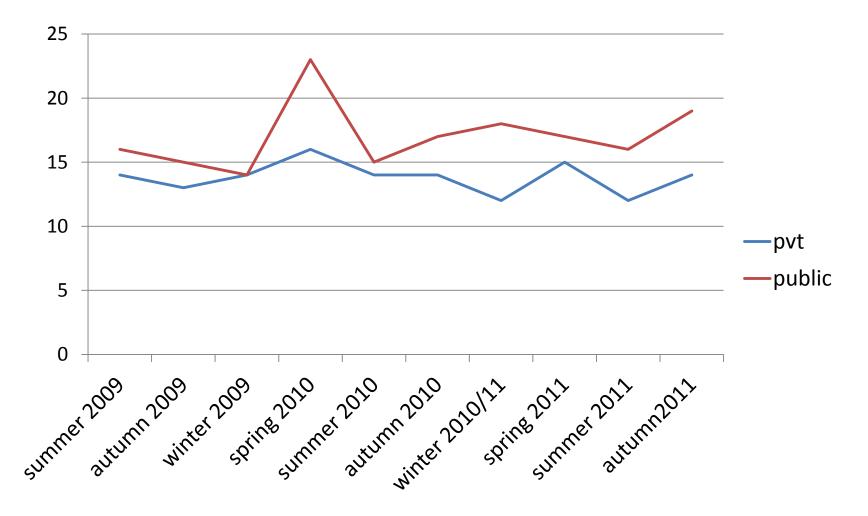
Percentage of cases of anxiety and depression reported by psychiatrists and occupational physicians to THOR database, by precipitating event 2007-2009



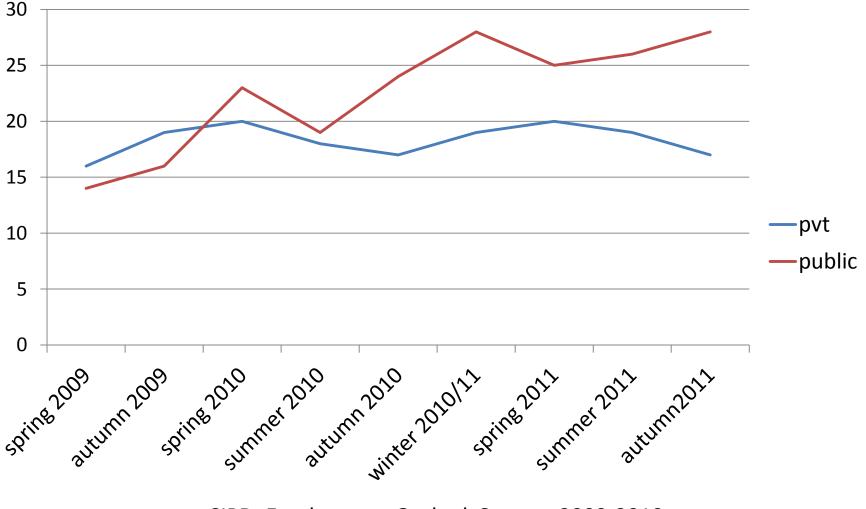
Percentage of employees who think they are likely to lose their job as a result of the current economic climate



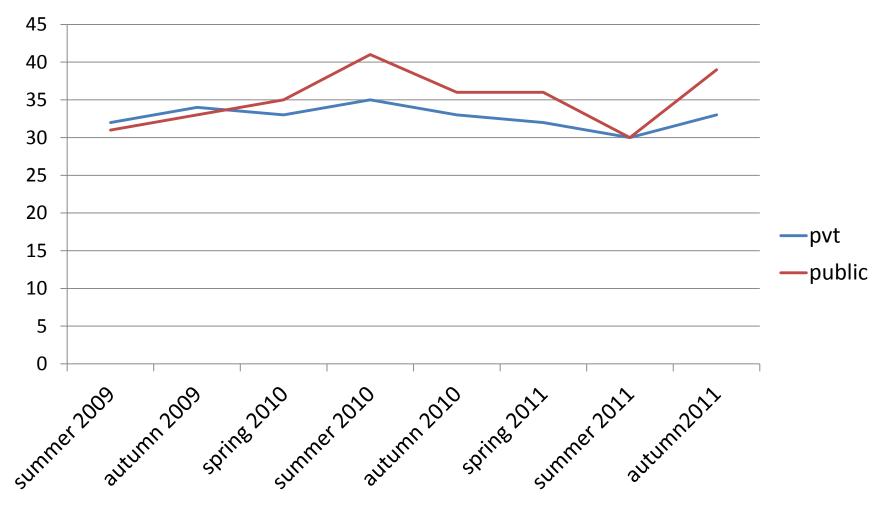
Percentage of employees feeling they are under pressure at work *everyday*



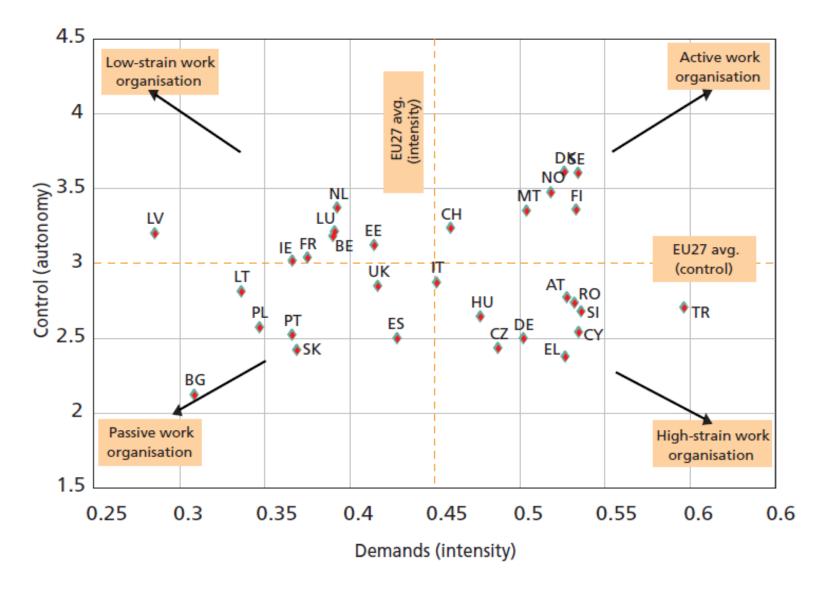
Percentage of employees who have noticed increased conflict at work between colleagues



Percentage of employees disagreeing their organisation provides support to manage their work-life balance



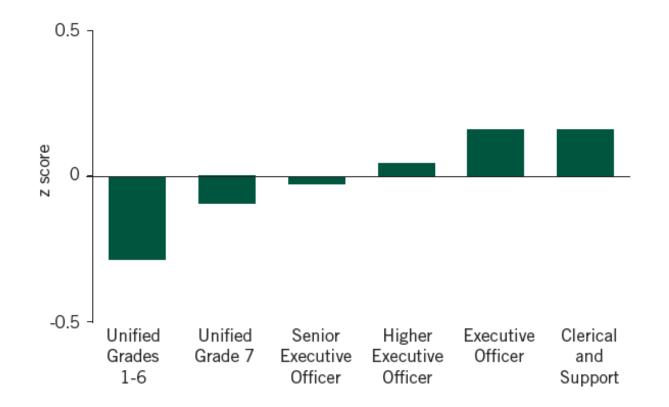
Job demands and control by country



Parent-Thirion et al. (2007): 4th European Working Conditions Survey

The occupational gradient in job strain in the Whitehall II study (note: a z score of 0 represents the mean job strain)

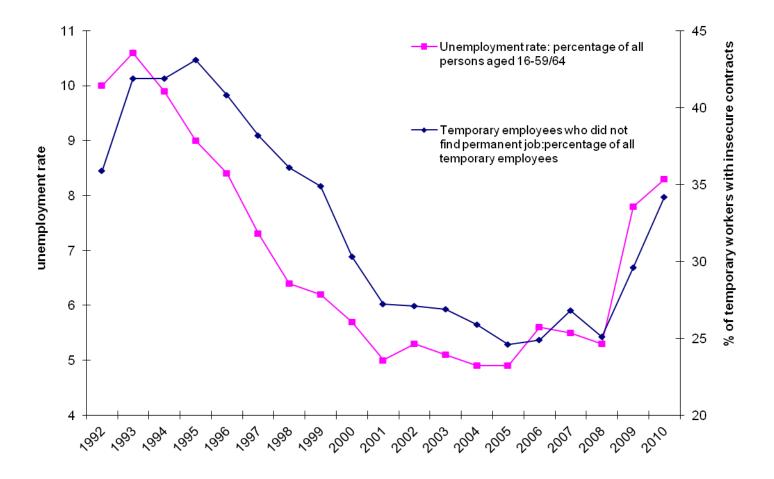
Jobstrain: (higher score=greater work stressors)



Chandola and Marmot 2010

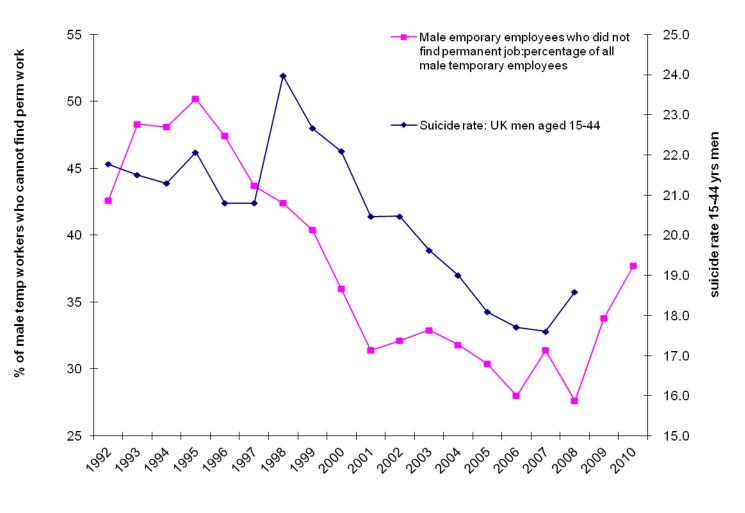
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Trends in unemployment rates and "job insecurity"



ONS: Labour Force Surveys- 1992-2010

Trends in male "job insecurity" and male suicide rate aged 15–44



ONS: Labour Force Surveys and UK Suicide Rates

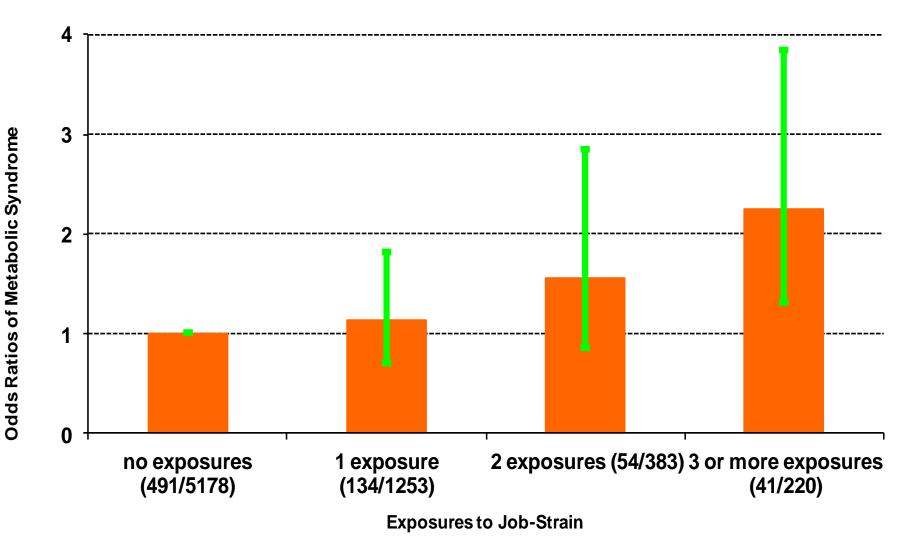
Work Stress and Cardiovascular Disease Risk

Systematic reviews of the association of work stress with heart disease

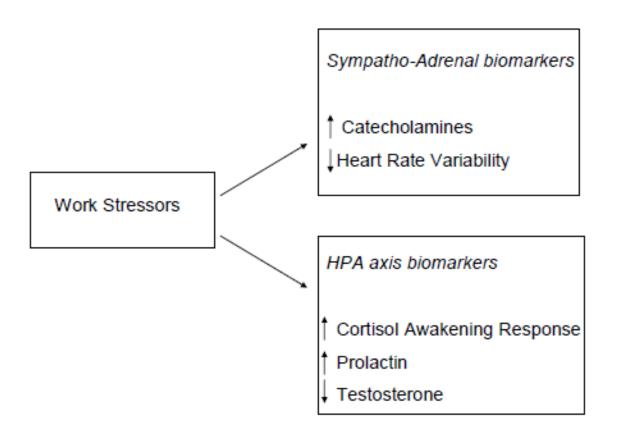
1st author	year	papers	analysis	Effect on CHD
Eller	2009	33	sys review	Moderate evidence for job demands, iso-strain, low support
Kivimaki	2006	14	meta-analysis	50% excess relative risk among employees reporting work stress
Netterstrøm	2005	35	sys review	23 studies show an association with work stress
Kuper	2002	13	sys review	10 studies show an association with work stress

Chandola Stress at Work (2011)

Risk of Metabolic Syndrome by duration of exposure to work stressors



Systematic review of psychophysiological biomarkers of workplace stressors



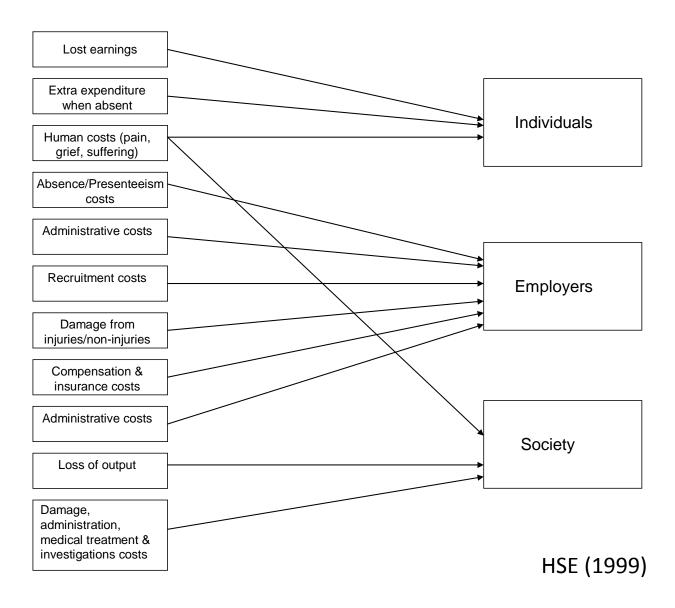
Chandola et al. Neurosci Biobehav Rev. (2010)

Longitudinal studies on work stress and sickness absence

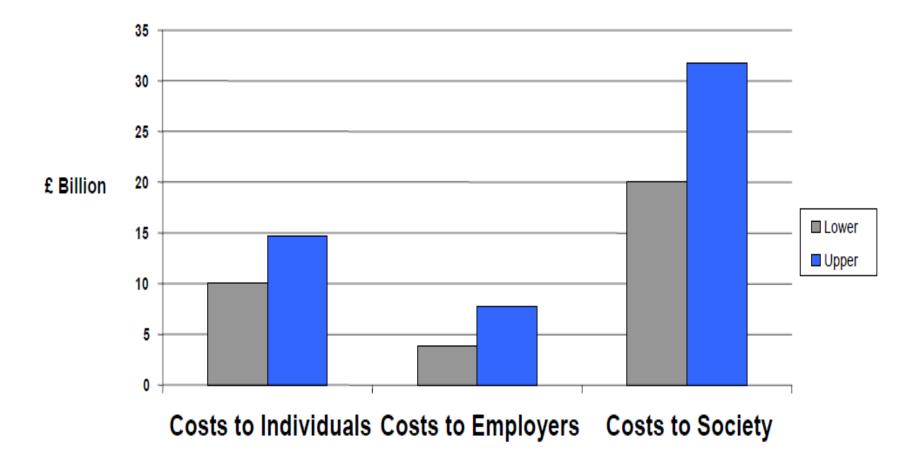
1st author	year	sample: women, men	exposure	increased relative risk
Roelen	2009	109w, 217m	low reward	m: 56%
Virtanen	2007	6663w, 1323m	job strain	w: 17%, m: 41%
Ala-Mursula	2005	12127w, 4012m	job strain	w: 27% , m: 21%
Ala-Mursula	2005	12127w, 4012m	effort-reward imbalance	w: 21% , m: 41%
Westerlund	2004	24036w+m	moderate downsizing	7%
Vahtera	2004	16521w, 5909m	major downsizing	18 extra sickness absence days
Kivimaki	2000	764w+m	major downsizing	117%
Vahtera	2000	530w+m	decreased job control	30%
Vahtera	2000	530w+m	decreased work support	30%
Vahtera	2000	530w+m	increased job demands	10%

Chandola Stress at Work (2011)

Eeconomic costs to individuals, employers and society of workplace accidents and work related ill health



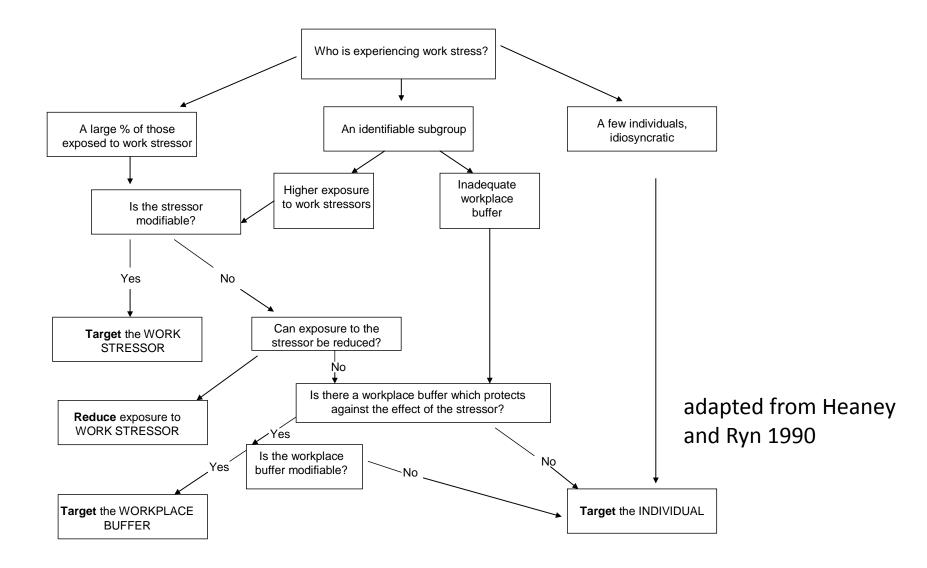
Costs to Britain of workplace accidents and work-related ill health



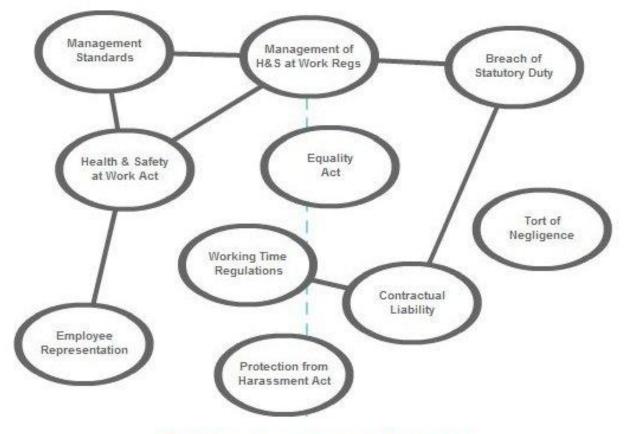
Pathak (2008): HSE Discussion Paper Series

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Choosing a Target for Work Stress Intervention



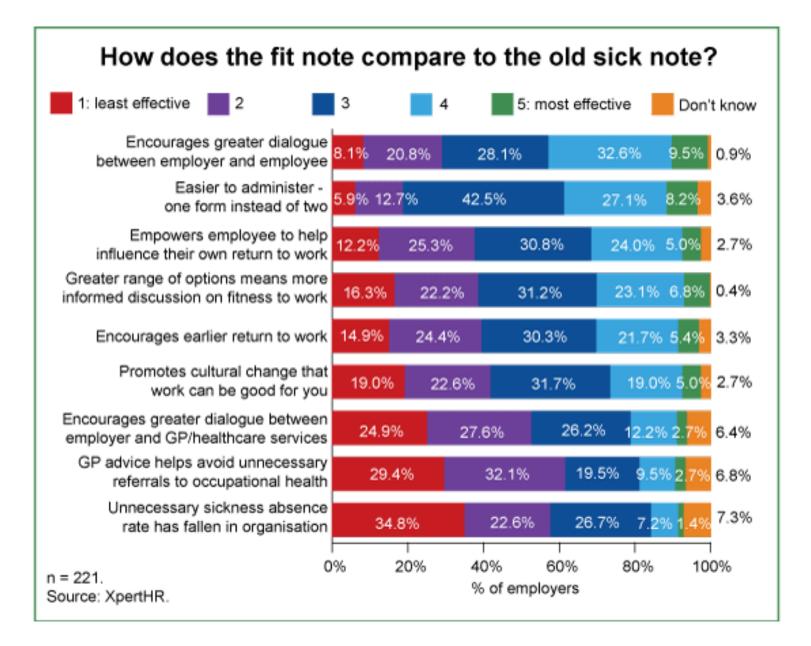
Work Stress and the Law



Click to launch the Wizard

http://www.jehealth.org/services/stress-law-wizard/

Patient's name	Mr, Mrs, Miss, Ms		
I assessed your case on:	1 / /		
and, because of the following condition(s):	2		
I advise you that: 3	you are not fit for work. you may be fit for work taking account of the following advice:		
If available, and with v	our employer's agreement, you may benefit from:		31.7% of
a phased return to			employers say
altered hours	5 workplace adaptations		this section is
Comments, including fu	nctional effects of your condition(s):	left blank	
	SAMPLE		A further 44.4%
This will be the case for	0		say this section
	Image: 1 to to to the second secon	/	is infrequently
(Please delete as applical	ole)		completed
Doctor's signature			
Date of statement	/ /		
Doctor's address			
			Source: XpertHR survey
	N	ed 3 04/10	



Source: XpertHR survey

Job Creation AND Job Quality

