# Which workers are more vulnerable to work intensification?

Peter Boxall University of Auckland October 2015

## Goal and structure

- To discuss the findings on vulnerability to work intensification from two NZ surveys
  - which groups (occupational and other) are more vulnerable?
  - Le Fevre M, Boxall P and Macky K (2015) Which workers are more vulnerable to work intensification? An analysis of two national surveys. *International Journal of Manpower* 36: 966-83.
- Presentation structure:
  - (1) Concepts, theory and research
  - (2) The surveys, measures and methods
  - (3) Results
  - (4) Conclusions

## Concepts, theory and research

- Types of vulnerability in employment
  - life and limb: high risk to personal safety
  - precarious employment
  - low-paid and dead-end jobs
  - work intensification: in-work and extra-work pressures
- Causes of work intensification
  - Taylorist/lean-production environments
  - mis-judged downsizing
  - rising levels of 'people work' affecting managers and professionals

#### Relevant theory: the demand-control relationship



Source: Karasek, R. and Theorell, T. (1990) *Healthy Work*. NY: Basic Books, p. 32.

#### Surveys, measures and methods

Random telephone survey conducted in 2005 (n = 1004, RR = 34.2%) and 2009 (n = 1016, RR = 31.5%)

Frame: employees over 18 years with at least 6 months' tenure in an organisation with at least 10 employees

A reasonable mirror of the working population for testing group comparisons except that public sector and unionised workers are over-represented

Key methods: Anova and Manova

- Work intensity
  - Hours worked (imperfect on its own)
  - Role overload (6 items, 1-7 scale,  $\alpha$  = 0.87; 0.84)
  - Time demands (4 items, 1-7 scale,  $\alpha$  = 0.82; 0.85)
  - Composite variable of RO and TD ( $\alpha = 0.71$ ) with median split into low and high work intensity
- Well-being outcomes
  - Job satisfaction (single item, 1-7 scale)
  - Job-related stress (single item, 1-10 scale)
  - Fatigue (3 items, 1-7 scale,  $\alpha$  = 0.72, 0.71)
  - Work-life imbalance (6 items, 1-7 scale,  $\alpha$  = 0.90, 0.90)
- Occupational, employment and demographic variables

#### **Results: descriptive statistics**

	2005			2009		
Variable	Mean	SD	Mean	SD	t	р
Usual weekly hours	39.12	12.94	40.47	12.53	2.38	0.017
Role overload	3.54	1.42	3.54	1.60	-0.04	0.972
Time demands	3.26	1.68	3.14	1.75	-1.55	0.121
Job satisfaction	5.45	1.39	5.95	1.44	7.93	0.000
Job-related stress	4.97	2.16	5.48	2.20	5.24	0.000
Fatigue	3.30	1.50	3.00	1.53	-4.47	0.000
Work-life imbalance	2.49	0.98	2.41	0.89	-1.97	0.049

#### Work intensity: Anova comparisons

		2005		2009	
		Mean diff.	р	Mean diff.	р
professionals	cf. managers	0.384	0.074	0.382	0.041
	cf. technical and trades	0.399	0.009	0.629	0.001
	cf. clerical	0.759	0.000	0.561	0.001
	cf. sales and service	0.489	0.010	0.575	0.049
	cf. machine ops. etc.	0.515	0.005	0.704	0.000
No union at work	cf. union at work not member	-0.041	1.000	-0.125	0.869
union at work not member	cf. union member	-0.329	0.004	-0.324	0.010
male	cf. female	0.200	0.030	-0.023	0.825
private	cf. public	-0.169	0.097	-0.006	0.958
permanent	cf. temporary/fixed term	-0.071	0.685	-0.061	0.710
part-time	cf. full-time	-0.407	0.000	-0.320	0.007

MANOVA							
	2005			2009			
	Scale difference	η <sub>p</sub> ²		Scale difference	η <sub>p</sub> ²	р	
Union members c.f. non-union members							
Work-life Imbalance	0.114	0.006	0.049	0.156	0.010	0.009	
Job Stress	0.303	0.027	0.000	0.318	0.006	0.039	
Fatigue	0.004	0.000	0.972	0.092	0.001	0.389	
Job Satisfaction	0.027	0.006	0.049	0.026	0.000	0.803	

Full-time c.f. part-time								
	2005 scale diff	$\eta_p^2$	р	2009 scale diff	$\eta_p^2$	р		
Work-life imbalance	0.257	0.023	0.000	0.157	0.008	0.006		
Job Stress	0.353	0.026	0.000	0.658	0.019	0.000		
Fatigue	0.115	0.001	0.255	0.005	0.000	0.961		
Job Satisfaction	0.021	0.000	0.834	0.113	0.001	0.276		

MANOVA

MANOVA: private versus public-sector employees								
	2005			2009				
	Scale difference	$\eta_p^2$	р	Scale difference	$\eta_p^2$	р		
Work-life Imbalance	-0.093	0.004	0.048	-0.086	0.003	0.088		
Job Stress	-0.168	0.008	0.005	-0.285	0.005	0.034		
Fatigue	0.312	0.000	0.000	0.203	0.005	0.028		
Job Satisfaction	-0.031	0.009	0.249	-0.168	0.004	0.066		

MANOVA: Professional c.f. all others							
	2005 Scale difference	η <sub>p</sub> ²	р	2009 Scale difference	η <sub>p</sub> ²	р	
Work-life Imbalance	0.171	0.011	0.001	0.186	0.013	0.000	
Job Stress	0.412	0.004	0.035	0.555	0.017	0.000	
Fatigue	-0.157	0.003	0.109	-0.044	0.000	0.637	
Job Satisfaction	0.125	0.002	0.202	0.133	0.002	0.155	

### Conclusions

- those more vulnerable to work intensity are more likely to be union members
  - what impacts are unions having on work intensification?
- full-timers are more affected by work intensity than parttimers
- public sector workers are more stressed while private sector workers are more fatigued

- professionals are noticeably more stressed and their lives more imbalanced than other groups (including, it would seem, managers)
  - a growing degradation of professional work (increasing demands, declining discretion, as in the UK)?
  - increasing proportion of 'high-strain' jobs in professional work?
  - what are the societal implications?