



Workplace Level of Psychosocial Factors as Prospective Predictors of Registered Sickness Absence

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East Meets West - Job Stress Prevention in a Global Perspective



Why analyze workplace levels?

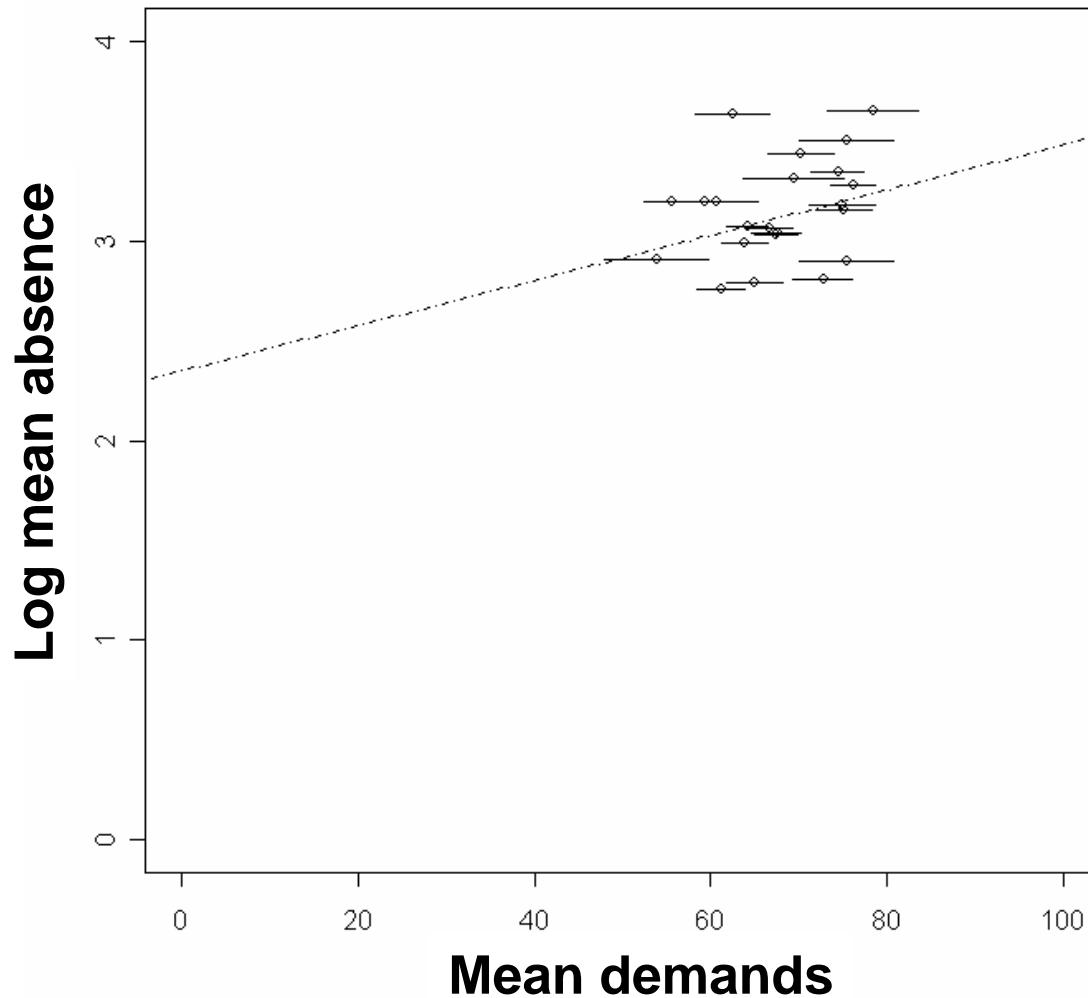
- Less subjective than only individual data
 - Workplace means as a proxy for external exposure assessment
- Contextual effects as well as individual
 - Workplace climate as well as individual perceived exposure could affect absence
- Explain differences between similar workplaces
 - Different absence and exposure levels at otherwise similar workplaces

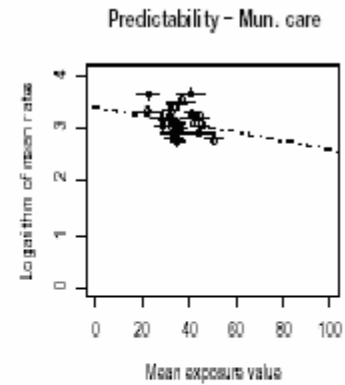
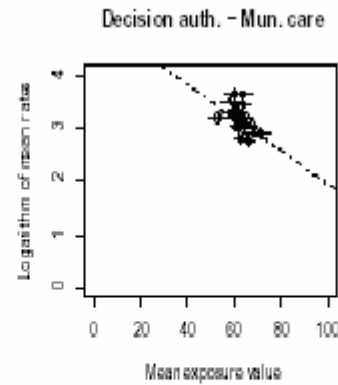
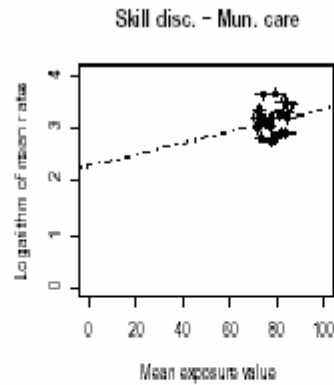
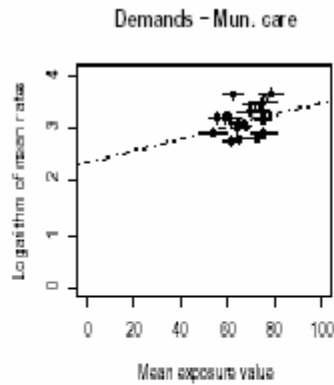
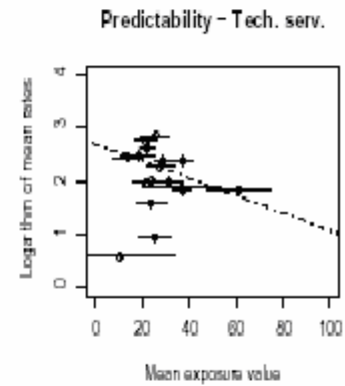
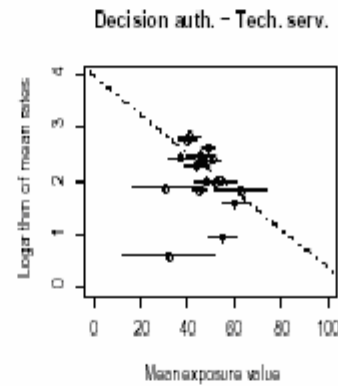
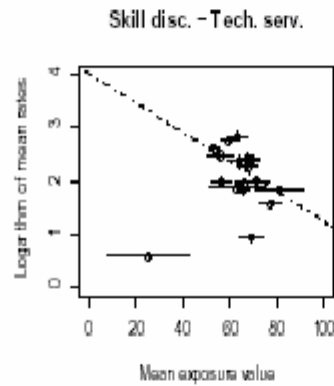
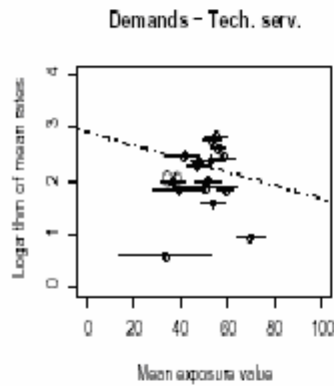
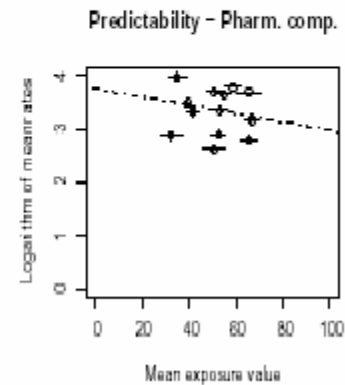
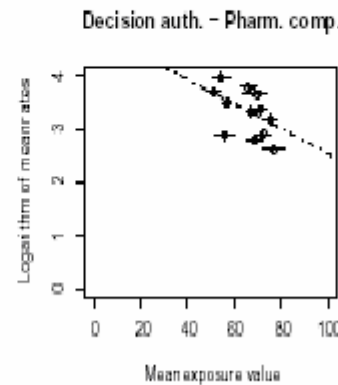
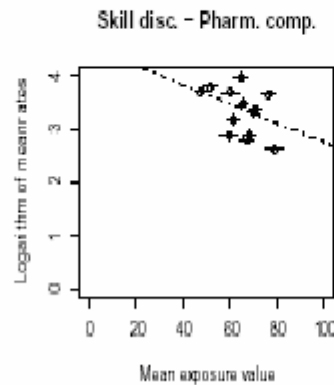
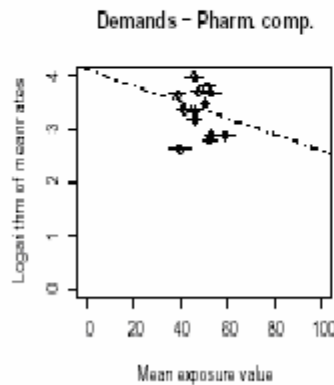
Workplace level exposure

- 52 workplaces (Municipal care, Technical services, Pharmaceutical company).
- Exposure contrast ?
- Demands, skill discretion, decision authority and predictability !
 - log of (age and gender adjusted) absence rates and mean level of exposure

Workplace variation in exposure and absence

Municipal care



Demands**Skill discretion****Decision auth.****Predictability****Municipal care****Technical services****Pharm. company****Christensen et al. (2005), In press, JOEM**

Workplace level effects

- Regression coefficient from weighted linear regression analysis (dashed line)
- Low statistical power (N=52).
- Multilevel Poisson regression used

Table 3: Effect of workplace levels of psychosocial factors on individual level sickness absence

		Model 1			Model 2		
	Org.*	RR**	95% CI	p	RR**	95% CI	p
Demands	Care	1.17	(0.97, 1.41)	0.13	1.22	(1.00, 1.48)	0.08
	Tech.	0.73	(0.54, 0.99)	0.06	0.82	(0.59, 1.12)	0.23
	Pharm	1.05	(0.66, 1.68)	0.83	1.09	(0.68, 1.74)	0.73
Skill discretion	Care	1.13	(0.87, 1.48)	0.37	1.10	(0.82, 1.48)	0.52
	Tech.	0.82	(0.65, 1.05)	0.15	0.81	(0.65, 1.00)	0.09
	Pharm	0.77	(0.62, 0.94)	0.04	0.74	(0.62, 0.88)	0.02
Decision auth.	Care	0.72	(0.53, 0.99)	0.06	0.71	(0.51, 1.00)	0.06
	Tech.	0.66	(0.51, 0.87)	0.00	0.66	(0.51, 0.86)	0.00
	Pharm	0.77	(0.60, 1.00)	0.08	0.77	(0.59, 1.00)	0.08
Predictability	Care	0.96	(0.80, 1.15)	0.66	0.94	(0.78, 1.14)	0.54
	Tech.	0.90	(0.71, 1.14)	0.39	0.93	(0.74, 1.18)	0.58
	Pharm	1.00	(0.77, 1.30)	1.00	1.03	(0.79, 1.33)	0.84

* : M: Municipal care, T: Technical services, P: Pharmaceutical company

** : Rate Ratios show effect of a ten point increase of the workplace mean.

Model 1 is controlled for control for age, gender, family status, intervention group assignment,

Model 2 is further controlled for smoking, alcohol consumption and BMI.

Workplace levels associated with low absence

- Decision authority in technical services (RR=0.66)
- Skill discretion in pharmaceutical company (RR=0.74)
- Similar, non-significant trends in other workplaces

Previous findings on individual data

- Decision authority
(RR=0.80 in women, 0.79 in men)
- Predictability in men (RR=0.79)
- Supervisor support in men (RR=0.81)

Summary

- Some variables show very little variation between workplaces
 - Only 4 of 7 meaningful to analyze
- Analyzing workplace means: low statistical power
 - $N = 52$ versus $N = 1,919$
- Multilevel analyses!
- Decision authority associated with absence on workplace *and* individual level
- Skill discretion on workplace but *not* individual level
- Predictability and supervisor support (in men) on individual level only