Job Stress and Working Conditions: Ireland in Comparative Perspective

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EVENT
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Motivation

• Transformation from industrial production to services=> workers increasingly exposed to psychological risks
• Stress Anxiety Depression, second highest self reported work related illness in Ireland and EU.
• Long term health consequences
• Cost implications: employers/health system & wide economy. Estimates of £5.2 billion in the UK for the year 2013/14 EU15 (HSE).
Outline

1. Research questions
2. Data and measures
3. Working conditions and job stress
4. Summary and policy implications
Research Questions

- What is the level of job stress in Ireland?
- How do levels of job stress in Ireland compare to other countries?
- What working conditions are associated with higher job stress?
- Which sectors and occupations exhibit the highest levels of job stress?
- Implications for policy and practice
Theories of job stress

• Job Demand/Control model (Karasek, 1979): high demands combined with low control worst for wellbeing. Control (and support) can buffer effect of high demands.

• Effort reward imbalance (Siegrist, 1996). Mismatch between effort and rewards (e.g. pay, security, opportunities) leads to job stress

• Job demands-resources model (Demerouti et al. 2001).
  • Demands =‘those physical, social or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills’ become stressors when they exhaust employees’ physical and mental resources.
  • Wider range of resources can moderate demands e.g. social, psychological and organisational resources.
Conceptual Model of Causes & Consequences of Job Stress

Source: adapted from Eurofound 2010
Data and Measures

● **Data**
  - European Working Conditions Survey
  - Two latest waves 2010 and 2015
  - Ireland 1000 workers each year, 830 employees (ex self employed)
  - Information about employment status, work organisation, working conditions
  - Selected sample of employees for 10 western European countries representative of different employment regimes.

● **Job stress measure**
  - Combined subjective and stress reactions (anxiety, fatigue, sleep disturbance)
1. Subjective Stress Measure:
Which response best describes your work situation: you experience stress in your work?

- Always, 10%
- Most of the time, 17%
- Sometimes, 41%
- Rarely, 19%
- Never, 13%

Responses for 10 countries combined, 2010 & 2015.

2. Stress Reactions Measure

- Over the last 12 months have you experienced any of the following health problems? Yes/no
  - Overall fatigue
  - Anxiety
  - Insomnia or sleep difficulties (change in wording 2015)
  - Stress reactions **not** directly linked to work, no issue of attribution.

- Combined measure, reduce risk of non-work causes of reactions & more robust than single subjective measure
Measure of Job Stress

Subjective job stress
Always/most of the time
48%

At least one stress reaction:
Anxiety/Fatigue/Sleep Disturbance
17%

Responses for 10 countries combined, 2010 & 2015
Combined Job Stress by Country, 2010 & 2015

![Combined Job Stress by Country, 2010 & 2015](chart)
## Job Demand Indicators (I)
(additive scales: rescaled 0 to 1)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Component questions</th>
<th>Response categories</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time pressure</strong></td>
<td>• Does your job involve working at very high speed?</td>
<td>All the time to never</td>
</tr>
<tr>
<td></td>
<td>• Does your job involve working to tight deadlines?</td>
<td>All the time to never</td>
</tr>
<tr>
<td></td>
<td>• Do you have enough time to get the job done?</td>
<td>Always to never</td>
</tr>
<tr>
<td><strong>Emotional demands</strong></td>
<td>• Does your job require that you hide your feelings?</td>
<td>Always to never</td>
</tr>
<tr>
<td></td>
<td>• Does your job involve handling angry clients, customers, patients, pupils, etc.?</td>
<td></td>
</tr>
</tbody>
</table>
Job Demands by Country, 2015 (0=low to 1=high)

Time Pressure

Emotional Demand
## Further Job Demand Indicators (II) (additive indices: rescaled 0 to 1)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Component questions</th>
<th>Response categories</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effort-reward imbalance</strong></td>
<td>Considering all my efforts and achievements in my job, I feel I get paid appropriately</td>
<td>Strongly agree to strongly disagree</td>
</tr>
<tr>
<td><strong>Physical demands</strong></td>
<td>Tiring or painful movements, lifting or moving people, carrying or moving heavy loads, repetitive hand or arm movements</td>
<td>All of the time to never</td>
</tr>
<tr>
<td><strong>Bullying, harassment, violence etc.</strong></td>
<td>Unwanted sexual attention (last month), physical violence (last 12 months), bullying/harassment (last 12 months), sexual harassment (last 12 months), threats/humiliating behaviour (last month), discrimination at work (last 12 months), verbal abuse (last month)</td>
<td>Yes/No</td>
</tr>
</tbody>
</table>
# Job Resource Indicators
(additive scales; rescaled 0 to 1)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Component questions</th>
<th>Response categories</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Autonomy</strong></td>
<td>Are you able to choose or change your order of tasks?</td>
<td>Yes/No</td>
</tr>
<tr>
<td></td>
<td>Are you able to choose or change your methods of work?</td>
<td>Yes/No</td>
</tr>
<tr>
<td></td>
<td>Are you able to choose or change your speed or rate of work?</td>
<td>Yes/No</td>
</tr>
<tr>
<td><strong>Support</strong></td>
<td>Your colleagues help and support you</td>
<td>Always to never</td>
</tr>
<tr>
<td></td>
<td>Your manager helps and supports you</td>
<td></td>
</tr>
<tr>
<td><strong>Intrinsic reward scale</strong></td>
<td>Your job gives you the feeling of work well done</td>
<td>Always to never</td>
</tr>
<tr>
<td></td>
<td>You have the feeling of doing useful work</td>
<td></td>
</tr>
</tbody>
</table>
Job Resources by Country, 2015
(0=low to 1=high)

Autonomy

Support
Statistical Model of Job Stress Ireland 2010–2015

- Logistic regression to estimate the likelihood of an event

- Dependent variable: risk of job stress; value of 0 (No) or 1 (Yes).
- Non-work characteristics (e.g. family status) are controlled.
- Report the likelihood (odds ratio) of experiencing job stress for each characteristic by taking account of all other characteristics.
- Odds ratio: If OR >1 means more likely than a reference group; If OR <1 means less likely than a reference group.
## Logistic Regression on Job Stress (Odds ratios)

<table>
<thead>
<tr>
<th>Demands &amp; resources</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>2.34***</td>
</tr>
<tr>
<td>Female; age; age of children</td>
<td>n.s.</td>
</tr>
<tr>
<td>Difficulty making ends meet</td>
<td>n.s.</td>
</tr>
<tr>
<td>Time pressure 0-1</td>
<td>10.36***</td>
</tr>
<tr>
<td>Emotional demand 0-1</td>
<td>21.28***</td>
</tr>
<tr>
<td>Bullying/harassment 0-1</td>
<td>8.28***</td>
</tr>
<tr>
<td>Effort reward imbalance 0-1</td>
<td>4.26***</td>
</tr>
<tr>
<td>Perceived insecurity 0-1</td>
<td>n.s.</td>
</tr>
<tr>
<td>Physical demand 0-1</td>
<td>n.s.</td>
</tr>
<tr>
<td>+40 hours (ref 36-40 hours)</td>
<td>2.12*</td>
</tr>
<tr>
<td>Autonomy 0-1</td>
<td>n.s.</td>
</tr>
<tr>
<td>Support 0-1</td>
<td>n.s.</td>
</tr>
<tr>
<td>Intrinsic reward 0-1</td>
<td>n.s.</td>
</tr>
<tr>
<td>Shift work/night work</td>
<td>n.s.</td>
</tr>
</tbody>
</table>
Which sectors are most stressful? Ireland 2010 & 2015

<table>
<thead>
<tr>
<th>Sector</th>
<th>2010</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>0%</td>
<td>5%</td>
</tr>
<tr>
<td>Retail etc.</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>other inc agric</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>Transp./commun</td>
<td>12%</td>
<td>13%</td>
</tr>
<tr>
<td>Finance etc.</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>Hotel/Rest. etc.</td>
<td>14%</td>
<td>15%</td>
</tr>
<tr>
<td>Education</td>
<td>16%</td>
<td>16%</td>
</tr>
<tr>
<td>Manuf. min/elec</td>
<td>18%</td>
<td>18%</td>
</tr>
<tr>
<td>Pub admin etc.</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>Health etc.</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5%</td>
<td>12%</td>
</tr>
</tbody>
</table>
Which Occupations are most stressful? Ireland 2010 & 2015

- Craft: 6%
- Routine: 7%
- Plant/machine op.: 9%
- Serv./Sales: 11%
- Clerical: 13%
- Managers: 14%
- Profess.: 16%
- Tech./assoc prof.: 20%
- Total: 13%

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Summary

• Working conditions with strongest association with job stress:
  • High job demands (emotional demands, time pressure, bullying/harassment/violence)
  • Weaker influence of job resources (autonomy, support, intrinsic reward) on job stress

• Sharp increase of job stress in Ireland from 2010 to 2015 but still among the lowest across EU10.
Policy Implications (1)

• Job stress important issue for employers/employees
  • Employees mental health included in the Irish health and safety regulation
  • In Ireland 50% firms do not have enough information for the assessment of psychological risk & less than 45% Irish firms have and action plan to prevent job stress (EU-OSHA, 2016).

• Managing high job demands
  – Need for action in relation to psycho-social risks at organisational level: formal policies and organisational culture
  – EU and national initiatives on job stress and bullying/violence (Eurofound and HSA) awareness, guidelines, stress audit tools
Policy Implications (2)

- Enhancing worker resources
  - Some evidence that support moderates negative effect of high emotional demands => implementation of a supportive organisational environment highly relevant in activities with high emotional demands.

- Special attention to higher risk sectors and occupations
  - Health sector/ hospitality/education (high emotional demand); manufacturing (time pressure, long working hours)
  - Managers (time pressure, long working hours); professionals (above average emotional demand, bullying/harassment/violence)
Thank You