Work-related stress: scientific evidence-base of risk factors, prevention and costs

JEAN-PIERRE BRUN
PROFESSOR
DIRECTOR CHAIR ON OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT

WEB: http://cgsst.fsa.ulaval.ca

Stress cost: 42 billions USD
(Kalia, 2002)

Annual cost for mental health problem:
150 billions USD for entreprises
(Property and Casualty Insurance, 2002)

Stress cost: 300 billions USD for entreprises
(absentéisme, turn-over, baisse de productivité)
(Institut Américain du Stress, 2006)

WEB: http://cgsst.fsa.ulaval.ca
In Europe

Stress Cost: 20 billions € for EU.
(1999) 50 à 60% of all sickdays

Stress Cost: 2,9 billions € for economics cost
(1999) 6,6 billions € for human cost

Cost Job strain: 877 millions € in Sweden
(1992) 125 millions € in Danemark

0,07 % of GDP
0,7 % of GDP

SITUATION IN ABC Inc.

An average of 7.1 days lost per employee, for a total of 67,923 days

The lost days represent 289 full-time jobs annually

Direct costs of short-term sick leave are: $13,965,691

Indirect costs are estimated to be: $13,965,691 (ratio 1:1)

Around 35% of cases are associated with mental health problems

Direct and indirect costs associated with mental health problems are thus approximately $9.5 million
ABSENT AND WORKED SICK DAYS BASED ON LEVEL OF PSYCHOLOGICAL DISTRESS

Main Organizational Changes

- Increase in shift work (22%), night (18%) and weekend work (25%)
- Increase in part-time work (16%) and overtime (20%)
- Working very fast 55% (1977) to 68% (1997) (Theorell 1999)
- Never having enough time to finish work 40% (1977) to 60% (1997) (Theorell 1999)
- General intensification of work (fast pace, short delays, constant changes)
Organizational Risk Factors

- Demands relating to tasks and roles
- Degree of involvement in decision making
- Employee recognition
- Decision-making autonomy
- Relationships
- Environment and physical working conditions
- Work schedules

Scientific Evidence

- Great decision-making power reduces rates of absences and turnover (Bond and Bunce, 2001; Bond, Griffin, 1991; Wahlstedt and Edling, 1997).

- Decision-making power increases level of performance and job satisfaction and reduces financial losses (Bond and Bunce, 2001; McFadden and Demetriou, 1993; Wall et al., 1992).

WEB: http://cgsst.fsa.ulaval.ca
SCIENTIFIC EVIDENCE

- Lack of decision-making latitude and recognition increases the risk of cardiovascular diseases (Karasek, 1990, Marmot et al., 1997, Siegrist, 1996)

- A clearly defined role decreases absenteeism and lateness (Kammeyer-Mueller and Wanberg, 2003).

WEB: http://cgsst.fsa.ulaval.ca

---

SCIENTIFIC EVIDENCE

- Low workplace support increases the rate of absence (Melchior et al., 2003; Niedhammer et al., 1998; North et al., 1996; Vahtera et al., 2000).

- High support at work decreases the intentions to quit job (Brough and Frame, 2004; Houkes et al., 2003; Rhoades et Eisenberger, 2002)

WEB: http://cgsst.fsa.ulaval.ca
Abusive supervision is associated with an increase in absenteeism (Tepper et al., 2001).

High presence of interpersonal conflicts within a work team is associated with a reduction in performance (De Dreu and Weingart, 2003).

The manager-subordinate relationship is the most commonly reported cause of stress (e.g. Tepper, 2000; Curphy and Hogan, 1994)

Manager behaviour can have a significant impact on health outcomes of subordinates (e.g. Gilbreath and Benson, 2004; Offermann and Hellmann, 1996)
50 BEST EMPLOYERS 2006 (Source: Hewitt)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cintas Canada</td>
<td>Annual employee evaluation</td>
</tr>
<tr>
<td>2</td>
<td>Wellington West Capital</td>
<td>Committee for participation in decision</td>
</tr>
<tr>
<td>3</td>
<td>EllisDon Corp.</td>
<td>Autonomy and internal promotion</td>
</tr>
<tr>
<td>4</td>
<td>G&amp;K Services Canada</td>
<td>Employee recognition program</td>
</tr>
<tr>
<td>5</td>
<td>BC Biomedical</td>
<td>Job sharing</td>
</tr>
<tr>
<td>6</td>
<td>Bennett Jones</td>
<td>Culture of respect and trust</td>
</tr>
<tr>
<td>7</td>
<td>Microsoft Canada</td>
<td>Leave for volunteering</td>
</tr>
<tr>
<td>8</td>
<td>PCL Construction</td>
<td>Skills profiles</td>
</tr>
<tr>
<td>9</td>
<td>Envision Financial</td>
<td>Career planning</td>
</tr>
<tr>
<td>10</td>
<td>Edward Jones Canada</td>
<td>Profit sharing</td>
</tr>
</tbody>
</table>

WEB: [http://cgsst.fsa.ulaval.ca](http://cgsst.fsa.ulaval.ca)

DIFFERENCES BETWEEN T1 AND T2 (18 MONTHS) IN HIGH PSYCHOLOGICAL DISTRESS

- **Average**: 44.3% at T1, 36.8% at T2
- **Clerical**: 44.5% at T1, 36.6% at T2
- **Control**: 38.3% at T1, 36.2% at T2
- **Library**: 32.9% at T1, 47.4% at T2
- **Registrar**: 44.4% at T1, 38.9% at T2

Sample: ONLY respondents at T1 AND T2
RETURN ON INVESTMENT IN 18 MONTHS

WORKFORCE: 111 new employees (+3%)

PSYCHOLOGICAL SICK LEAVE: 191 cases (2003) ↓ 165 cases (2004) (-14%)


INSURANCE COST: $100,000 in one year ↓ 1.2 million total costs

WEB: http://cgsst.fsa.ulaval.ca

STRATEGIC ACTION

Establishing that the health of people is a corporate business decision criterion

(ISO standards, management values)
BIBLIOGRAPHY


