



DUNEDIN SCHOOL OF MEDICINE
DEPARTMENT OF PREVENTIVE & SOCIAL MEDICINE

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BACKGROUND INFORMATION

Work stress precipitates depression and anxiety in young working women and men

The Findings:

Work-related stress can be a direct cause of clinical depression and anxiety among previously healthy young adults.

The Study:

This finding comes from the Dunedin Multidisciplinary Health and Development Study, which has followed a group of 1,000 children born in 1972-73 in Dunedin throughout their lives. Study members have been assessed at the ages of 3, 5, 7, 9, 11, 13, 15, 18, 26, and most recently at the age of 32, in 2004-05.

For this study, 406 women and 485 men were asked at age 32 about their work characteristics. Men reported higher psychological job demands, lower social support, and higher physical job demands than women.

High psychological job demands, such as long hours, tight deadlines, or pressure from supervisors, were found to be associated with clinical depression, anxiety, or both in both women and men.

Overall, women with high psychological job demands were 75% more likely to suffer from depression or anxiety than women with lower demands. Men with high psychological job demands were 80% more likely to suffer from depression than men with lower demands.

In addition, at age 32, 50 of the women and 52 men were diagnosed with depression, anxiety, or both for the first time in their lives. 45% of those new cases were directly attributable to high psychological job demands.

Why is this Important?

Workplace stress isn't going away: In both the USA and Europe, 30-40% of the workforce is exposed to workplace stress, and levels of stress appear to have been rising over the last two decades¹. Stress is a major cause of modern disease – it has been linked to both poor physical health and poor mental health.

This study shows that high levels of workplace stress may be an important contributor to common mental disorders, specifically depression and anxiety. Mental disorders are themselves a major cause of morbidity. The cost is counted in poor quality of life, reduced lifespan, social impairment and decreased productivity at work. High levels of workplace stress may therefore set off a vicious cycle leading to depression or anxiety, reduced workplace productivity, to even more stress.

What do we suggest? Company-wide decreases in work demands could help reduce rates of depression and anxiety among the workforce. Other studies of workplace intervention show that this approach works², though company-wide changes may sometimes be hard to put in place. At an individual level, developing coping skills and relaxation techniques may be an important step towards reducing stress, and therefore depression and anxiety levels³.



Background Information

How we measured workplace stress: Study members were asked about characteristics of their work. Measures included psychological job demands (i.e., time pressure, long hours), work decision latitude (i.e., amount of decision making control), work social support, and physical demands.

How we measured depression and anxiety: Clinically-significant depression and anxiety were assessed in face-to-face interviews and diagnosed using criteria established by the American Psychiatric Association, which identify mental health conditions that cause impairment and require medical treatment.

Stress and the Workplace – Legislation: New Zealand employment legislation formally recognises “physical or mental harm caused by work-related stress” in the 2002 Amendment to the Health and Safety in Employment Act of 1992.

In terms of employment legislation, “stress” by itself is not considered a medical diagnosis, but rather as a sign of an employee failing to cope with their work or environmental situation. “Stress” is seen as a potential indicator of emerging health problems. Employers are obligated to take reasonable steps to eliminate, isolate or minimise the risk of stress on the job, while employees have a responsibility to ensure their own safety at work.

Strengths of the Study: This is the first study of its kind to link high-pressure work environments to the development of mental health problems in previously well individuals. Researchers were able to link the workplace stress to diagnosable mental health disorders independent of other factors known to predict disorders, such as personality and socioeconomic status.

The workplace stress interviews were carried out at age 32, a time when young adults are settling into career paths but before they have selected out of stressful “climbing-the-ladder” jobs. It is also known to be a time when people are at elevated risk for developing psychiatric disorders⁴.

Limitations of the Study: As workplace stress levels and psychiatric disorders were tested at the same time, it is possible that depression may have influenced the answers given about work characteristics. The researchers did control for “negative reporting style” to account for this possibility.

The work was done on one specific birth cohort in New Zealand. Since New Zealand is comparable to other developed countries in terms of labour market, workplace stress levels, and anxiety and depression levels, the results found here should be applicable beyond New Zealand.

The study relies on study member self-reports of workplace stress, rather than independent external reports. However, other research has shown that self-reports of workplace stress are probably more accurate than reports by co-workers or supervisors⁵. In the area of mental health, individuals’ perceptions of their work environment are thought to be especially important.

¹ See <http://www.cdc.gov/niosh/stresswk.html> and <http://www.eurofound.eu.int/pubdocs/2006/78/en/1/ef0678en.pdf>.

² See Melin, B. et al, 1999, *Journal of Organisational Behaviour*.

³ See Beck, A.T. et al, 1979, *Cognitive Therapy of Depression* and Mino, Y. et al, 2006, *Psychotherapy and Psychosomatics*.

⁴ See Kessler, R.C., et al, 2005 *Archives of General Psychiatry*.

⁵ See Stansfeld, S.A. et al, 1999, *Occupational and Environmental Medicine*.



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