



FLAWS

in our
Lives

Fatigue Life and Work Strain

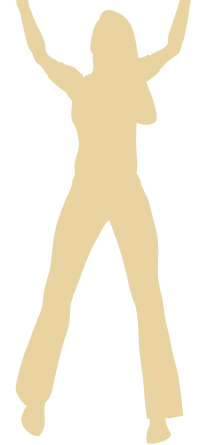
Strategies for safe, healthy work and balanced lives

This brochure summarises key findings from a study on the work factors that impact on wellbeing at work as indicated by sleep issues, fatigue and work-life interference.

Detailed findings are described in the report '**FLAWS in our lives: The Fatigue, Work and Life Strain in South Australia**' available from the Centre for Work + Life website unisa.edu.au/hawkeinstitute/cwl/research.asp

This study was undertaken as a collaboration between the University of South Australia Centre for Work + Life and Centre for Sleep Research unisa.edu.au/sleep, and was funded by SafeWork SA safework.sa.gov.au

FATIGUE REFERS TO FEELING
EXTREMELY TIRED OR
COMPLETELY EXHAUSTED



Why are sleep and fatigue important OHS issues?

There are very good reasons to consider sleep and fatigue an OHS priority. There is strong evidence from both laboratory and field research that having insufficient sleep and being fatigued at work increases the risk of workplace accidents and errors that affect the safety of workers, their colleagues and clients/patients, and the general public.

Indeed, fatigue has been linked to human errors that have contributed to major operational catastrophes, from the grounding of the oil tanker Exxon Valdez to the Challenger Space Shuttle disaster.

Sleep loss and fatigue have also been shown to increase the risk of various physical and mental health problems, including the development of health issues such as diabetes and obesity

There is more than a century of research in controlled laboratory studies demonstrating the negative impact of total or partial loss of sleep and disruption to the body clock, during time periods ranging from 24 hours to several weeks. Sleep loss and circadian disruption result in increased sleepiness, longer reaction times, reduced vigilance and attention, memory problems, difficulty with reasoning and decision-making and negative mood change. There is also evidence of links with increased collisions and off-road incidents. Recent research has demonstrated changes in hunger, satiety, food intake, and glucose metabolism.

What's work-life interference got to do with it?

Like sleep issues and fatigue, work-life interference is also indicative of the quality of working life.

Problems in any of these three areas can also be indicative that paid work is reaching too far into personal, family and social life, and impairing the individual's capacity to function effectively.

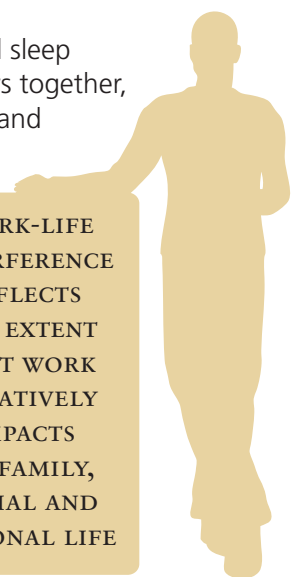
It is well established in Australian and international research that work impacts on life much more than life responsibilities and issues impact on work.

There has been little cross-over in research on work-life interaction and sleep issues and fatigue. In this study we consider all three of these indicators together, to help identify unhealthy work arrangements that impair functioning and wellbeing.

Work-life interference has been shown to affect a range of negative outcomes in the workplace such as increased turnover, reduced productivity and reduced job satisfaction and commitment. There is also good evidence for negative effects on physical and mental health, and family wellbeing.

We created the term the 'FLAWS', to capture this work-life perspective on the intersection of work and life circumstances that strain workers' capacity to function effectively and maintain their wellbeing. A high level of FLAWS indicates high work-life interference and frequent sleep issues or fatigue.

WORK-LIFE
INTERFERENCE
REFLECTS
THE EXTENT
THAT WORK
NEGATIVELY
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ON FAMILY,
SOCIAL AND
PERSONAL LIFE



Fatigue Life and Work Strain

Study background

As part of the Australian Work and Life Index (AWALI) survey, in March 2010, a sample of 854 South Australian employees were surveyed on their work arrangements, work-life interference, sleep issues and fatigue.

The study sample is representative of the broader working population across key social and employment demographics.

Main findings

Sleep issues and fatigue are common in the general working population

Fatigue is common in the general working population; 30% of employees frequently feel fatigued.

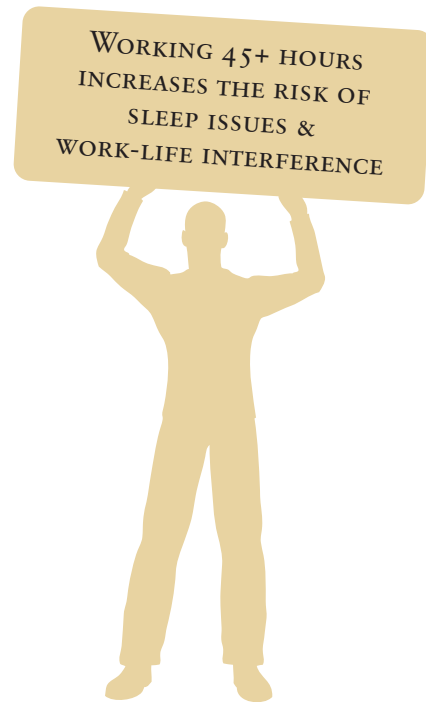
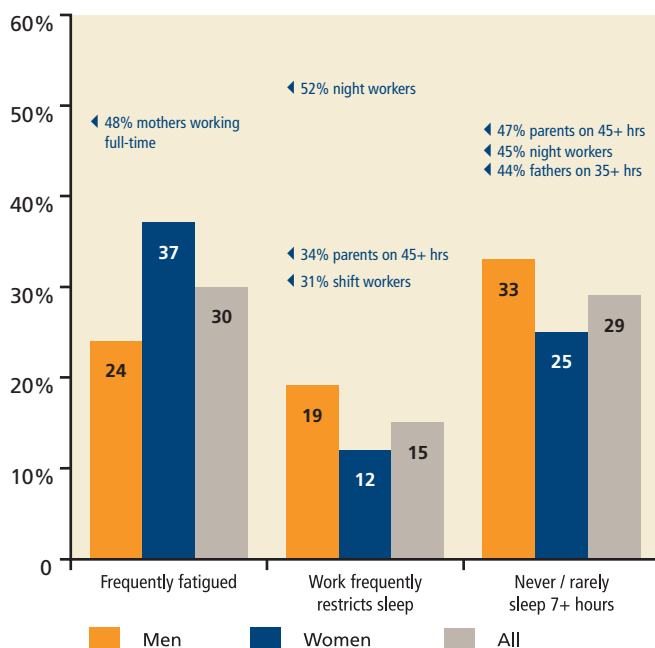
Women are more likely to report being fatigued than men, regardless of work hours or parenting status.

Regularly having seven or more hours of sleep is recommended for good health. However, 29% of employees report they never or rarely reach this benchmark.

When asked directly how often work causes them to have less sleep than they need, 15% of employees report this occurs frequently (often/almost always), and a further 24% report work 'sometimes' restricts their sleep.

Men are more likely to report sleep issues than women.

As the chart below shows, long hours, non-standard schedules (outside of 8am to 6pm) and working at night (between 10pm and 6am) increase the risk of sleep issues and fatigue.



Long daily and weekly hours are a key risk factor

The SafeWork SA Code of Practice on Working Hours identifies an increased risk of fatigue and other negative outcomes with a work day of longer than nine hours and a work week of longer than 40 hours.

In this study, long hours (45+) consistently increased the risk of negative outcomes in terms of:

- Work-related sleep restrictions (having less sleep than needed)
- Having insufficient sleep (less than seven hours)
- High work-life interference
- Increased likelihood of FLAWS (high work-life interference and frequent sleep issues or fatigue).

What are the specific work hours associated with sleep and fatigue problems? The pattern is clear – full-timers who rarely have sufficient sleep or frequently experience work-related sleep restrictions and fatigue work an average of 9 hours per day and 45 – 49 hours per week.

Non-standard schedules, especially night work, are also a major risk factor

The other most consistent predictor of sleep issues, fatigue and work-life interference is working non-standard work schedules (outside of 8am to 6pm).

Night work is the greatest risk factor for these negative outcomes. Just over half of night workers (53%) report problems with both work-life interference and sleep issues/fatigue (high FLAWS).

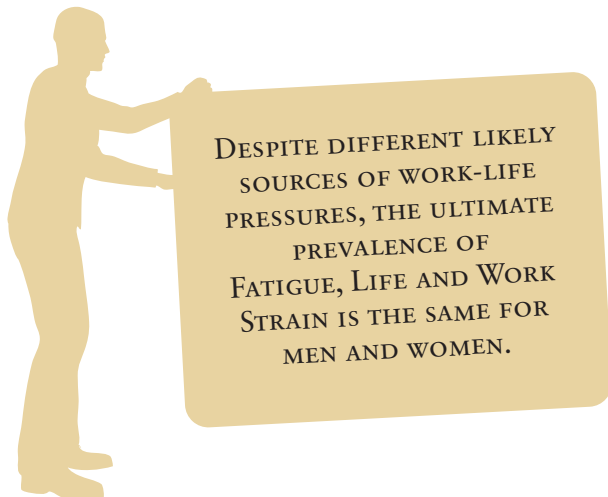
Different pathways, same destination: men and women have equivalent risk of Fatigue, Life and Work Strain (FLAWS)

In this study we created an overall measure of strain that examined the simultaneous experience of high work-life interference and frequent sleep issues or fatigue.

Nearly one-third (29%) of workers experience high FLAWS, with little difference between men and women.

This is an important observation, as men are more likely to be in employment arrangements that increase the risk of strain (ie longer hours, non-standard schedules). Despite this, the risk of high FLAWS is equivalent for men and women.

This most likely reflects the general trend for women to spend more time doing non-paid caring and domestic work in addition to their paid work.



Fatigue affects important work outcomes

Workers who experience fatigue identify a range of negative impacts on their work, home, personal and community life.

Fatigue was reported to negatively impact on a range of important work outcomes such as:

- productivity (47%) and quality of work (40%)
- safety travelling to and from work (27%)
- safety at work (18%).

Safety is a particular issue for workers on non-standard schedules (outside of 8am to 6pm).

- Nearly one quarter (24%) of these workers report fatigue affects their safety at work (15% of those on standard schedules)
- Around 30% are also concerned about the effects of fatigue on their safety travelling to and from work.

25% OF FATIGUED WORKERS ON NON-STANDARD SCHEDULES SAY SAFETY AT WORK IS AFFECTED

18% OF FATIGUED WORKERS ON STANDARD SCHEDULES ALSO SAY THIS

Fatigue also affects life at home, in the community and health

Life outside of work is also significantly affected by fatigue. The majority of fatigued workers reported negative effects on their:

- mood at home (67%)
- physical health (58%)
- family life (58%)
- hobbies and interests (58%)
- social life (57%).

Just over forty per cent also report their fatigue impacts on their mental health.

Parents quarantine work from the negative effects of fatigue, but their home life is more affected

Parents and those without children report similar rates of fatigue.

Parents 'quarantine' work from the negative effects of fatigue – they report similar effects on their work as those without children.

Perceived effects of fatigue on work outcomes:

	Parents*	Not parents	All
Productivity	47%	46%	47%
Quality of work	41%	40%	40%
Safety travelling to/ from work	29%	26%	27%
Safety at work	17%	19%	18%

*parents of children aged under 18 years

However, parents are more likely to say that fatigue affects their life outside of work (family life, mood at home and personal hobbies and interests).

OHS strategies to reduce the risk of sleep issues and fatigue

There is a range of strategies that can be implemented in policy and practice to reduce the risk of fatigue, sleep issues and work-life interference.

1. Develop policies and support cultures for flexible work practices that meet business and workers' needs

There is strong evidence that flexible work practices have a range of benefits, including improvements to motivation, productivity, absenteeism and turnover. There are also benefits for worker wellbeing (work-life balance, stress, health).

Flexibility can be offered and supported in a variety of ways such as:

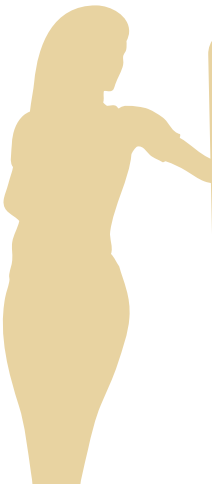
- reduced hours
- working from home
- flexitime
- variable start and finishing times.

If the daily working arrangements cannot change, perhaps consider flexible and overlapping blocks of work with different arrangements, such as:

- compressed working weeks
- extended leave options.

Men and women both need, and benefit from, these types of flexible work practices. Men are less likely to request flexibility and more likely to have their requests rejected. Policies and programs to encourage and support men to change their work hours and arrangement to suit their needs should be considered a priority. Examples include:

- Providing 'partner specific' forms of leave
- Further supporting and encouraging partners' right to request flexible work arrangement to meet parenting and other caring responsibilities, including reducing hours of work.



IN 2009 73% OF AUSTRALIAN WOMEN WHO ASKED FOR FLEXIBILITY HAD THEIR REQUEST FULLY GRANTED
SIGNIFICANTLY FEWER MEN – 62% - HAD THEIR REQUESTS FULLY GRANTED

AWALI 2009

2. Implement policies and practices to limit long work hours

Consistent with the SafeWork SA Code of Practice on Working Hours, this study found that working 45+ hours significantly increases the risk of negative outcomes for fatigue, sleep and work-life interference. These outcomes, in turn, are associated with reduced productivity, community and workplace safety.

It is recommended that policies and work practices are designed to fit within an upper limit of no more than 45 weekly hours (on average, including overtime).

Initiatives to address long hours require a holistic approach that examines the factors that encourage or require long hours such as workloads, performance expectations, implicit and explicit rewards for long hours (ie links to promotion and other rewards) and organisational culture (see below).

3. Increase supports and resources that enable women to engage in paid work without compromising their health and wellbeing

Business can address the high rates of reported fatigue by women in the workforce and reduce the impact on productivity, health and safety at work by:

- Providing access to flexible work arrangements that extends to all women (and men), regardless of their parenting status
- Developing and supporting workplace initiatives and programs that encourage supportive work-life cultures, including reasonable expectations of workload and working hours
- Providing or supporting links to school holiday programs
- Supporting better access to high quality affordable childcare (eg onsite or subsidised childcare).

4. Develop and support a safe workplace culture

Public promotion and management support for policies and procedures are necessary but not sufficient to ensure safe work practices. Addressing workplace culture is crucial. Cultures that support safe shift scheduling practices, flexibility and reasonable work hours can be facilitated in a range of ways including training and support for managers and supervisors, and inclusion of work and wellbeing outcomes in staff reviews (eg check working hours in employee performance reviews, establish KPIs for supervisors/managers).



FLAWS

For more information:

For more information on this study and other research and policy resources on work-life balance, go to the UniSA Centre for Work + Life website: unisa.edu.au/hawkeinstitute/cwl/research.asp

The full FLAWS report, which provides more detailed findings and discussion, is also available from the Centre for Work + Life website to download.

There are a range of practical resources for employees and employers on work-life balance at the SafeWork SA work life balance website: safework.sa.gov.au/worklifebalance

The Work + Family Roundtable produces a range of policy and research resources on work-life balance: familypolicyroundtable.com.au

For more information on sleep, fatigue and other human factors and safety research go to the UniSA Centre for Sleep Research website: unisa.edu.au/sleep

The SafeWork SA Code of Practice contains a number useful guides and tools to assist employers and workers to identify and manage work hazards that increase the risk of sleep issues and fatigue: safework.sa.gov.au/show_page.jsp?id=8773

The National Employment Standards set out minimum entitlements that apply to all employees with regard to work hours, flexibility, leave entitlements and termination/redundancy: fairwork.gov.au/employment/conditions-of-employment

