Work stress has become a major concern in recent years because of its potential impacts on both employee well-being and performance. Detrimental outcomes associated with work stress include musculoskeletal disorders, coronary heart disease, reduced productivity and absenteeism.

Airline cabin crew are subject to a unique set of job demands at the same time that their industry is undergoing major change. Research at the University of Nottingham (UK) took a preliminary look at 3 questions for this occupation:

- What work factors are associated with stress-related outcomes?
- What factors moderate stress-related outcomes?
- What role is played by cross-cultural differences?

Information Gathering
In July 2003, interviews were held with UK-based cabin crew from several airlines. A questionnaire was compiled on the basis of interview findings and previous research. Members of a UK cabin crew union, Cabin Crew '89, helped amend the questionnaire before it was made available to all crew via the Internet at www.airlineworkstress.com.

Who Participated?
674 cabin crew from 35 airlines participated in the research. They came from 32 countries, the majority being from North America and Asia. 65% were female, and 50% had family care responsibilities outside of work.

The majority of respondents were experienced crew. 67% had been in the job for 8 or more years and over half had inflight management roles. Almost all worked for scheduled carriers, with 70% of crew flying 1-2 sectors per day, and having 1-3 standby duties per month.

Mental & Physical Health
We used 3 main individual indicators of work stress: the General Well-Being Questionnaire (GWBQ), which measures mental exhaustion; job satisfaction; and long term/chronic musculoskeletal pain (MSP).

- The average GWBQ score was 25. This is higher than found in the general population and suggests low levels of well-being. A score of 25 or more indicates being ‘worn out’ or experiencing aspects of mental exhaustion.
- Job satisfaction was generally low - only 38% ‘agreed’ or ‘strongly agreed’ that they were satisfied with their job.
- The incidence of MSP was particularly high. 87% reported MSP, of whom nearly two-thirds had been affected by it for over 3 months.

Organisational Impact
Overall levels of sickness absence and company commitment were poor. 1 in 5 crew said they were frequently absent from work due to illness, whilst 61% reported a desire to leave. The impact of mental exhaustion was also evident: 30-56% of crew reported frequent forgetfulness, difficulty in making up their minds, or ‘doing things rashly’.

![Participants Chart]
Work Stressors

Similar to some other jobs, 2 key factors were associated with work stress outcomes – high work ‘demands’, and low work ‘control’. Supervisor support was linked with job satisfaction.

- ‘Demands’ included 12 aspects of work such as workload, physical demands, experience of rude / aggressive passengers, and missing meals. 83% of crew reported high demands.
- ‘Control’ included 8 aspects of work such as having enough resources, choice over work practices, being informed, and having one’s performance assessed fairly. 47% of crew reported low control.
- ‘Supervisor support’ referred to 4 leadership items. 56% reported low support.

The table below neatly summarises these effects. It shows the associated risk of a flight attendant reporting aspects of low well-being under certain working conditions.

<table>
<thead>
<tr>
<th>Working Conditions</th>
<th>Stress-related Indicators</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>‘Worn Out’ 2-3x</td>
</tr>
<tr>
<td>High Demands</td>
<td></td>
</tr>
<tr>
<td>Low Control</td>
<td>2x</td>
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<tr>
<td>Low Supervisor Support</td>
<td>--</td>
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</tbody>
</table>

Other factors

- Length of service had a minor moderating influence on the perception of stress. Crew with longer service consistently reported less stress than more junior crew.
- Economy cabin service was associated with lower well-being than business cabin service.
- No differences were found in stress indicators between male/female crew, supervisory levels, routes flown, or between those with/without home carer duties.

Cross-cultural perspectives

- Cultural values investigated concerned having an individual or a group orientation. Crew with higher group orientation tended to report less mental exhaustion, whilst those with greater self-reliance tended to report having more.
- Reliable differences were found for nationality. Scandinavian crew were significantly less likely to report mental exhaustion than crew from all regions except Asia. However, this may reflect work practices rather than cultural values. Further research is required.

Conclusions

Many flight attendants work in ‘high strain’ environments and report low levels of well-being. Strong associations have been found between airline work practices and several stress-related indicators.

We should aim to identify the possible impact of specific work practices on crew health, decision-making, and performance. This knowledge could then promote targeted improvements with benefits for both crew and carriers alike.

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For Further Information

✈ James Morley-Kirk  (jmk@airlineworkstress.com)
✈ Professor Amanda Griffiths  (amanda.griffiths@nottingham.ac.uk)

Considerations

When relating these findings to particular situations, we should be mindful of certain limitations:

- Results are based on a sample of English-speaking crew from many airlines.
- Relatively little information was gathered from junior crew or short-haul carriers.