

Strategies Used by Air Passengers to Reduce Jetlag and Travel Fatigue

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Background

Long-haul air travel is growing with 2.4 billion passengers flying internationally each year.

This means an increasing need to mitigate jetlag and travel fatigue.

Understanding what passengers already do will inform the development of interventions.

Aim

To describe strategies currently used by passengers to cope with jetlag and travel fatigue.

Methods

Participants: Passengers aged 18+ on flights of 9-17 hours duration into and out of Australia.

Data collection: Online surveys completed 2 to 7 days after flight.

Ethical approval: University of Sydney Human Ethics Committee (Ref: 2018/812).

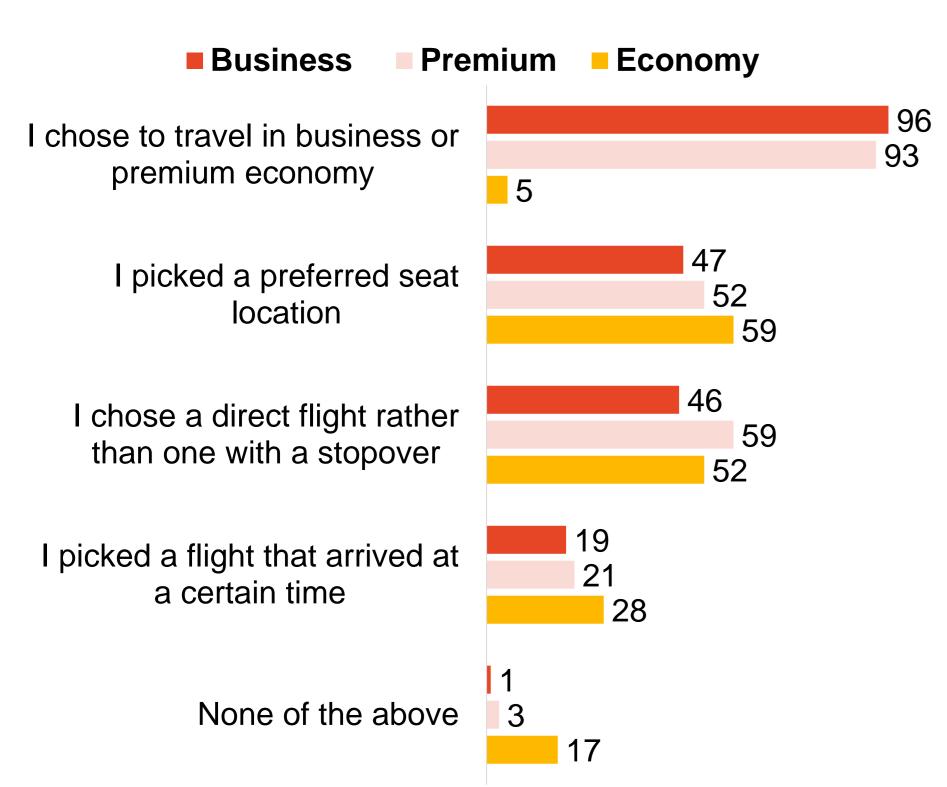
Results

N=463 participants aged 18 to 78 years (mean 49.6; SD 15.5). 57% female.

Responding reflected a typical **flight cabin** with 72% economy, 13% premium economy, and 15% business.

Purpose of travel: 45% for leisure/holidays, 35% visiting friends and family, and 17% for work/business/study.

Figure. Booking strategies used, by flight cabin (%).



Behavioural strategy	Before flight (%)	During flight (%)	After flight (%)
Altered sleep patterns			
I took naps	8	60	32
I slept more or less than usual	12	22	44
I went to bed and got up later or earlier than usual	17	8	50
Caffeine and alcohol			
I had caffeinated drinks	24	31	37
I avoided caffeinated drinks	12	21	10
I drank alcohol	20	38	23
I avoided alcohol	20	24	20
State of mind/comfort/relaxation			
I used ear plugs or headphones	6	54	10
I meditated or did relaxation exercises	6	10	8
Food intake			
I ate healthy foods	32	26	39
I ate lighter or heavier meals	15	31	24
I took vitamins or dietary supplements	15	9	16
Light exposure			
I went outdoors to get sunlight	24	N/A	47
I used a jetlag app	0	0	0
Physical activity			
I exercised or did other physical activities	23	5	25
I did yoga or stretching exercises	12	24	14
Compression stockings			
I wore compression stockings	3	30	3
Sleep aids			
I took prescription or over-the-counter sleep aids	2	12	7
I took melatonin	2	3	6
Any strategy	73	99	89
Guide to colours (%) 0 10 20 30 40	50 60	70 80	90 100

Other strategies reported:

- relaxation/reduction of stress
- hydration
- preparation before flight
- self-care and comfort during flight
- entertainment during flight
- adjustment to destination time during and after flight
- use of **other medications** (anticoagulants, travel sickness, lollies to equalise pressure)

Women were more likely than men to use light (58% vs 45%), alter food intake (73% vs 61%), and use compression stockings (38% vs. 21%).

Older ages were more likely to **wear compression stockings** (42% in 65-78 years vs. 14% in 18-24 years).

Conclusions

Nearly all passengers changed behaviour around flight, suggesting interventions around sleep, food/drink, and physical activity would be acceptable.

Use of circadian strategies for jetlag was low and suggests education of passengers may be helpful.