

# [Abstracts for articles](https://assignbuster.com/abstracts-for-articles/)

[Literature](https://assignbuster.com/essay-subjects/literature/)

﻿
Abstracts for Articles
Article 1: Pilot Fatigue in Short-Haul Operations
Powell et. al. (2007) note that there is little research done on the subject of fatigue in short-haul pilots and their article seeks to evaluate how factors such as duty times, number of sectors, flight time and others effect fatigue levels. The research was conducted with pilots using self reporting surveys to judge their fatigue levels over a three month period in relation to factors that influence short-haul flights. From more 1370 pilot responses, the results show that the number of sectors flown and the duty length were the strongest factors that add to the fatigue experienced by pilots since these factors had a linear relationship with pilot fatigue. Time of day shows an interesting variance where fatigue levels were lower during midday but increased at later points in the day. Surprisingly, fatigue levels were higher when pilots had spent the night resting in a hotel rather than their homes. This has some implications of how travel affects pilots themselves and the possibility of reducing fatigue if pilots are not put up in hotels before they have to fly short haul flights. The results thus have implications for both the airline industry since they can be used to reduce and manage factors that increase fatigue and those researching optimal utilization of human resources since existing fatigue models can benefit from the research.
Article 2: Sleep, subjective fatigue, and sustained attention
The article produced by Petrilli et. al. (2006) discusses fatigue in pilots who work on the international circuits. The current system on commercial airlines works with work/rest factors and not sleep/wake factors which makes the study important since it investigates the amount of sleep pilots get because that directly affects fatigue and attention. Secondly, the study wanted to discover if sleep patterns and duty history affected fatigue and attention. The researchers worked with 19 pilots and monitored their activities through sleep and duty diaries, palmtop computer based psychomotor vigilance tests and self rated fatigue level surveys before and after each flight. The flights themselves were taken from Australia to Asia, Asia to Europe, Europe to Asia, and then back from Asia to Australia. The factors evaluated were the impact of stage of flight, flight sectors, amount of sleep in the last 24 hours, self reported fatigue, and the psychomotor response tests. The results show a reduction in fatigue levels comes from the amount of sleep in the past 24 hours and the sectors between the flights. Since reduction in pilot fatigue is an important consideration for international flights, the implications of this study show that there is support for commercial airlines to shift from the work/rest factors to sleep/wake factors for duty rosters.
Works Cited
Powell, D. et. al., 2007, ‘ Pilot Fatigue in Short-Haul Operations: Effects of Number of Sectors, Duty Length, and Time of Day’, Aviation, Space, and Environmental Medicine, vol. 78, no. 7, pp. 698-701.
Petrilli, R. et. al, 2006, ‘ The sleep, subjective fatigue, and sustained attention of commercial airline pilots during an international pattern’, Chronobiology International, vol. 23, no. 6, pp. 1347-1362.