



Sleep and fatigue problems among Swedish commercial airline pilots: long haul versus short haul

Wessel M.A. van Leeuwen¹, Christer Ullvetter², Göran Kecklund¹
¹Stress Research Institute, Stockholm University, Stockholm, Sweden, ²Swedish Transport Agency, Norrköping, Sweden

Introduction

New EASA FTL (European Aviation Safety Agency flight time limitations) rules came into force February 2016 in order to protect airline crew against fatigue. This study evaluates the current severity of sleep and fatigue problems among Swedish commercial airline pilots with a special focus on the difference between those flying short haul (including domestic) and those flying long haul.

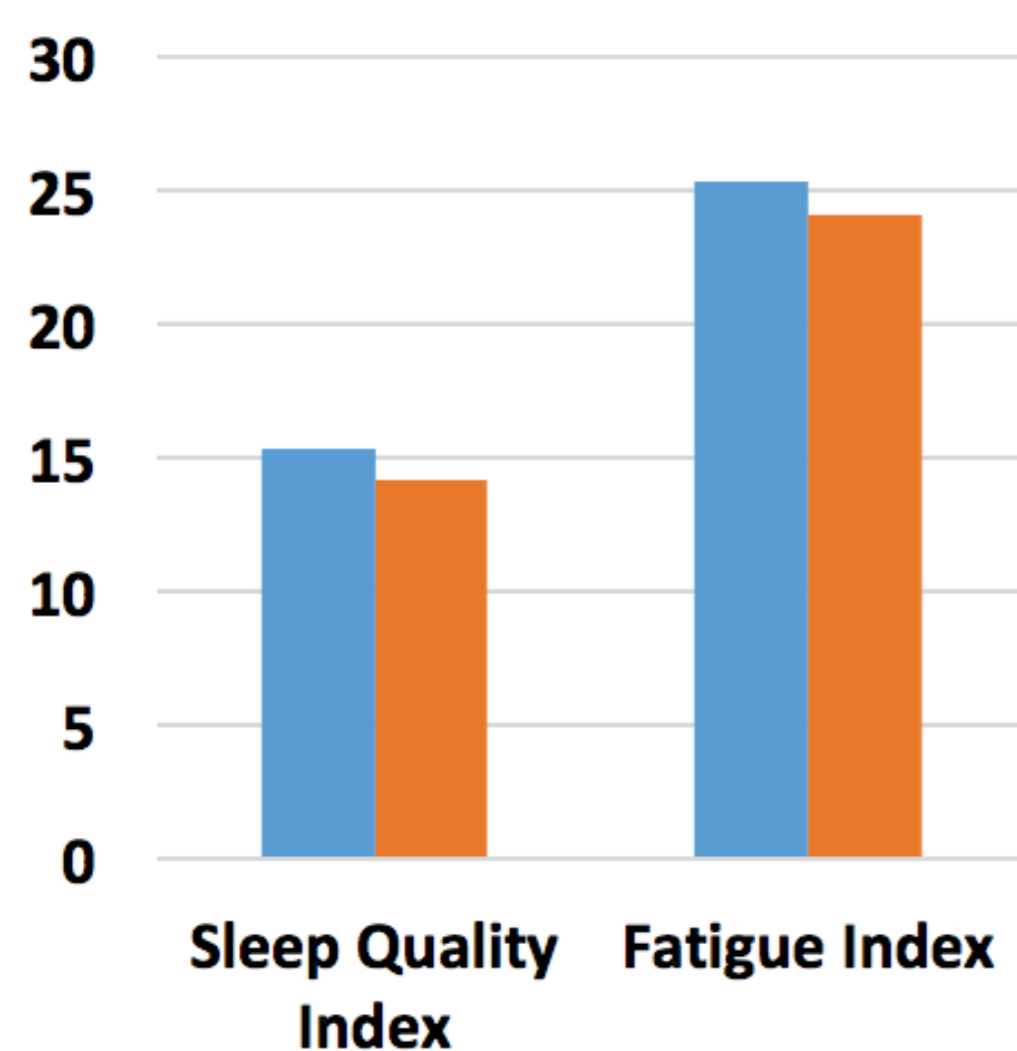
Conclusion

Our results raise concern about the amount of sleep and recovery Swedish pilots get. Fatigue levels are high and contribute to in-flight errors. Specific problems for short haul pilots are many flights within one work shift, and for long haul pilots the limited possibilities to adapt to multiple time zone crossings. It cannot be ruled out that this poses an even bigger problem in the rest of Europe and the world with a more congested airspace and less favourable working conditions than in Sweden.

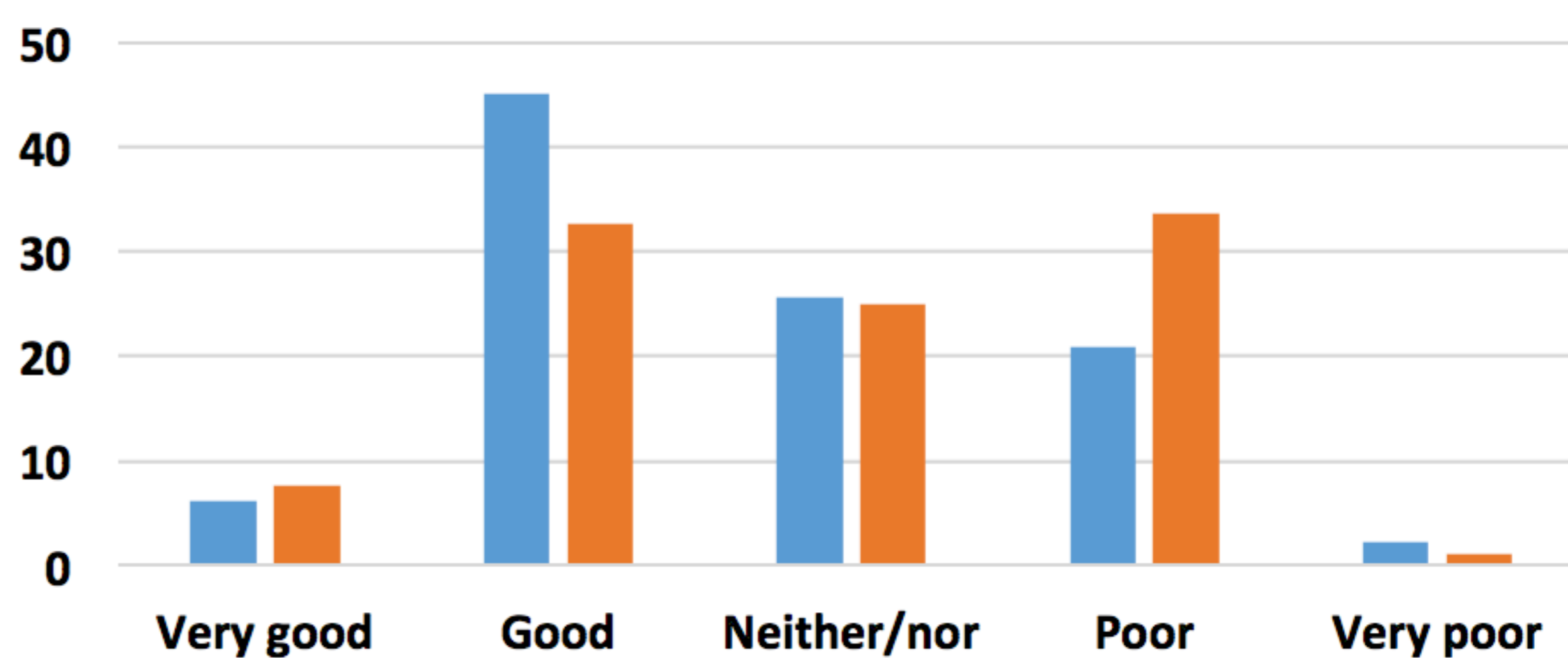
Results

Short haul vs Long haul

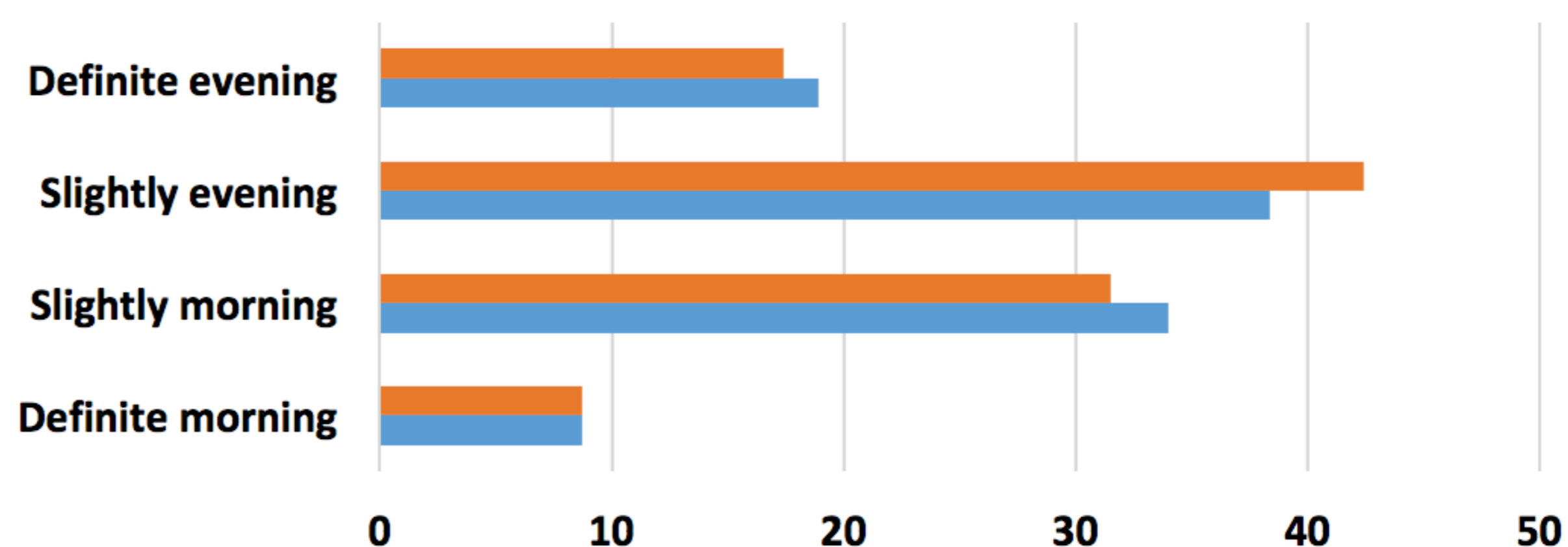
Karolinska Sleep Questionnaire (KSQ)



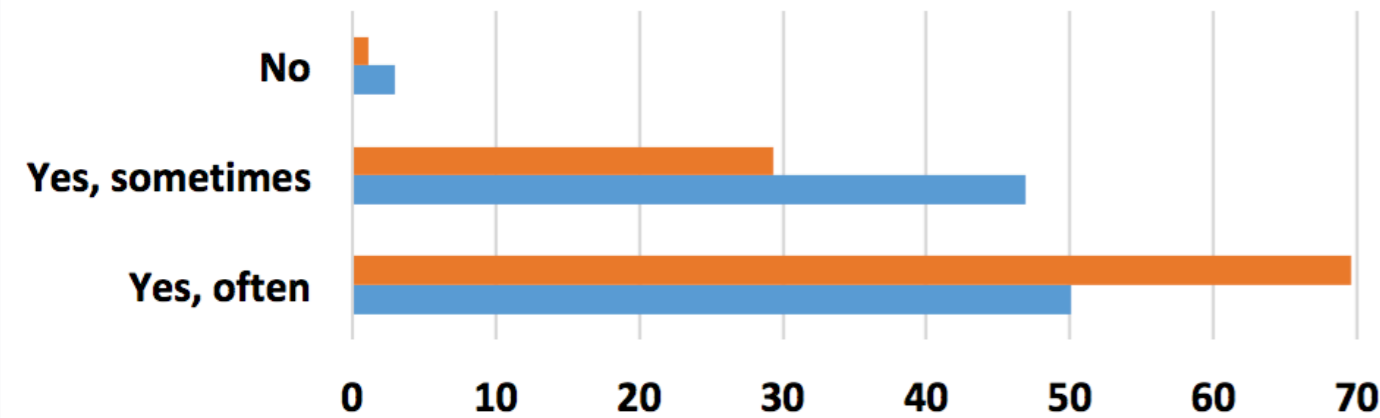
General Sleep Quality (%)



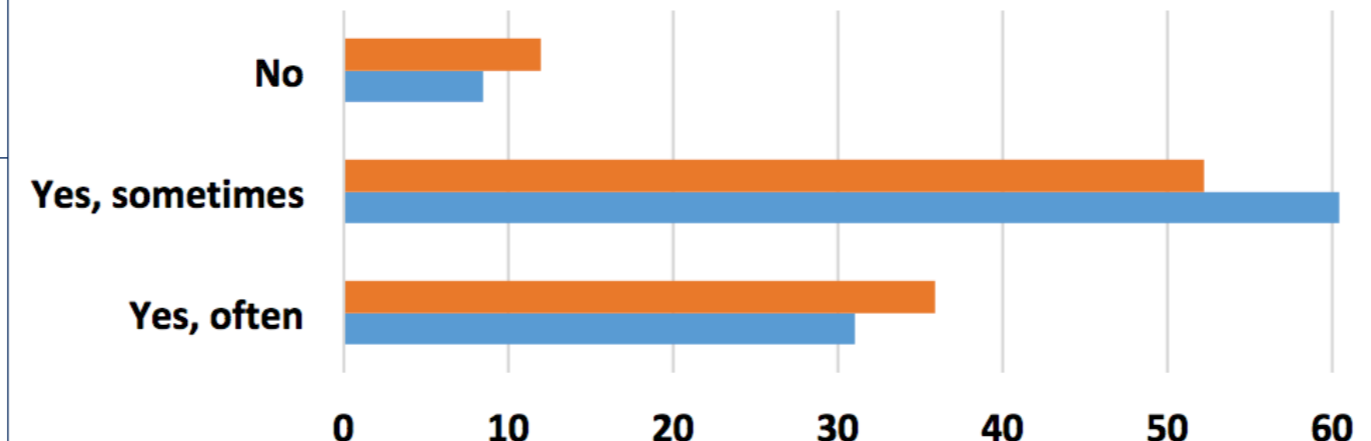
Percentage morning or evening type



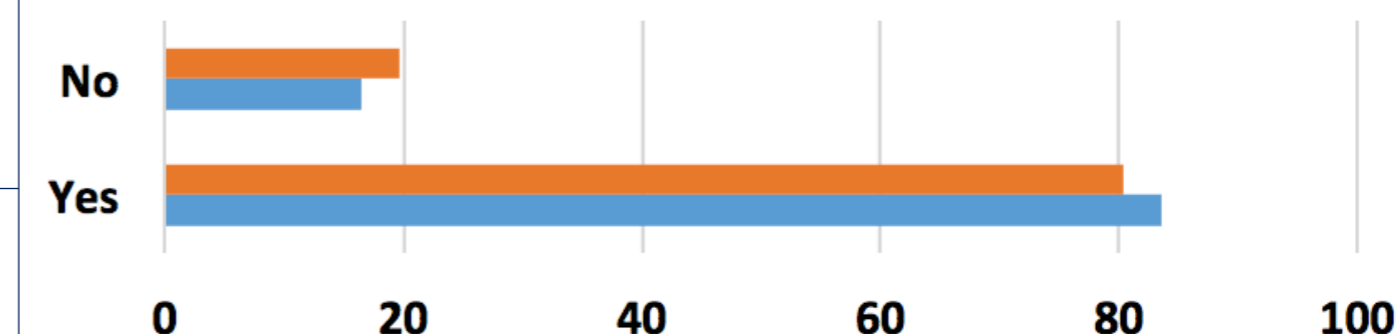
Do your working times disturb sleep? (%)



Do your working times lead to severe fatigue? (%)



Do you make errors in the cockpit due to fatigue? (%)



Method

598 (out of 975 invited) member pilots of the Swedish Airline Pilots Association completed a web survey with questions about working conditions, sleep, health and fatigue (92 long haul pilots and 419 short haul pilots). Of these, a random selection of 60 pilots took part in a field study lasting 2 weeks with sleep and work diaries being recorded as well as actigraphy to measure sleep (problems) and fatigue.

CONTACT