

CORRELATES OF FLIGHT TIME LIMITATIONS, FATIGUE, AND EMPLOYMENT CONDITIONS IN AIRLINE PILOTS' MENTAL FITNESS

CORRÉLATS DES LIMITES DE TEMPS DE VOL, DE LA FATIGUE ET DES CONDITIONS D'EMPLOI DANS LA SANTÉ MENTALE DES PILOTES DES COMPAGNIES AÉRIENNES

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Introduction: Only after the Germanwings crash in 2015, EASA and aviation industry became aware that mental disorders and emotional stress in pilots can have disastrous consequences. Before that, fatal crashes like LAM470, EgyptAir990, and SilkAir185 were also caused by psychiatric disease and acute stress. Accident investigators also proved that pilot fatigue can have fatal consequences, like ColganAir3407, KoreanAir801 and ChinaAirlines006. This research focuses on the correlates of flight and duty times, fatigue, employment conditions in airline pilots' health and common mental disorders, depression, anxiety, and quality of sleep.

Methods: This cross-sectional study analysed demographic data and working conditions of mostly Europe-based pilots. The sample (N=166) consisted of 7.9% female pilots, the average age was 40.7 years (SD=10.64), with M=8766 flight hours (SD=5756). 50% of the airline pilots were captains, 50% were first officers. 65% of the airline pilots worked for legacy carriers, 25% for low cost carriers, 11.4% flew air cargo, 8.6% flew charter services. 7.14% of the professional pilots fly only short-haul (up to two hours), 54.3% short and medium-haul, 15% short- and long-haul, 22.9% fly only long-haul. 86.43% have an employment contract directly with the airline, 7.86% are employed by a manning agency, and the rest is "self-employed" (2.86%).

Results: The average number of duty hours in the last month was 117.2 (SD=42.36), containing 66.32 (SD=21.89) flying hours. All of the following measures were self-assessed: The average WHO5 score was 57 (SD=21), airline pilots' PHQ8 score (depression) was M=5.92 (SD=5.15). General Anxiety M=4.04 (SD=4.1), SRQ20 (CMD) M=3.81 (SD=3.9), PHQ-Stress M=5.04 (SD=3.6), Jenkins Sleep Scale M=1.93 (SD=1.24), Fatigue Severity Scale M=4.6 (SD=1.02). GLM results with these dependent variables will be presented.