An Analysis of Effect of Stress on Self-Efficacy of Flight Trainees in Korea: Using Multiple Regression Analysis

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Abstract

Background: Most lives of modern people are full of stress. Stress management has become the essential element as well as the important part of health care for all. Among them, to student pilots who will have to control all the matters of aircraft and have responsibility for lives of passengers on board in the future, continuous stress is likely to cause problems in improving education quality and skills.

Aim: The goal of this study is to identify various stressors of student pilots, to analyze how the stressors affect their self-efficacy and to improve their flight training in the end so that they can become desirable pilots in the future.

Methods: In order to understand the effect of stress on self-efficacy of flight trainees, 218 men and 35 women were analyzed for frequency analysis, exploration factors analysis, technical statistics analysis, correlation analysis, and linear regression analysis using SPSS program 21.0.

Results: Academic problems, Relationships with friends and Future problems are important factors on self-efficacy of flight trainees. Not only do they make flight trainees stressful, but they also have a negative effect on self-efficacy, potentially resulting in poor flight performance.

Conclusion: Stress has had a negative effect on self-efficacy of flight trainees, which may result in the undesirable result of their future. We should try to reduce overall stress of flight trainees and improve their self-efficacy as much as possible. By doing so we can have a better future pilots and safer society.

Key Words: Stress, Self-Efficacy, Flight Training, Student Pilot, Multiple Regression

1. Introduction

Flight operations have been making tremendous development ever since the Wright brothers succeeded in 1903. From the first modern civil passenger aircraft, the B247 operated in 1933, the advent of the jet-engine passenger aircraft Comet influenced by world war 2, the B747 that started the popularization of air travel and to the B767 which is the 4th generation