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Anxiety as a Factor in Student Pilot Performance In a University Aviation Degree Programme

A thesis presented in partial fulfilment
of the requirements for the degree of
Master of Aviation
at Massey University

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Abstract

Student Pilots in a University Aviation Degree Programme are required to perform not only academically, but also in the mastery of practical skills associated with the flying and operation of light aircraft and flight simulators.

Flight training is a dynamic process during which the student pilot is subject to many pressures both physiological and psychological, many of which may be outside his or her immediate control. Considerations such as the expensive nature of flying training, weather constraints, workload, peer pressure, and an on-going requirement to achieve practicum and academic goals in an environment of continual examination, assessment, and testing, place a burden on the student pilot that is not encountered in the traditional university programmes. Considerable research has been done on anxiety in high school and tertiary educational settings but there is a lack of information about its application to aviation, particularly where the practical assessment and flight testing of student pilots are concerned.

This study examines the effects of anxiety on student pilot performance during flight training and flight-testing. To achieve this, questionnaires were developed from existing state and trait anxiety questionnaires and adapted for use in the aviation environment. This enabled the student's state and trait anxiety levels to be measured at different stages of their flight training and during flight-testing and helped identify specific areas of concern and anxiety causing factors. The results of the research confirmed that trait and state anxiety can be measured in student pilots and that test anxiety was also detectable. While no measurable effects of anxiety on hours to first solo or flight test scores results were obtained some evidence of the validity of the interactional model of anxiety was detected.

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