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**EXPLORING THE EFFECT OF GROUP POLARISATION ON
PERCEIVED INVULNERABILITY IN GENERAL AVIATION PILOTS**

A thesis presented in partial fulfilment of the requirements for the degree of
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Seung Yong Lee

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ABSTRACT

Although both perceived invulnerability and group polarisation are well known psychological phenomena, there has not been any research conducted to examine the effect of group polarisation on the level of perceived invulnerability amongst general aviation pilots.

Two studies were conducted to measure the level of perceived invulnerability amongst general aviation pilots and to test whether the level of perceived invulnerability was affected due to group polarisation.

The first study tested 34 pilots. Although the majority of the pilots exhibited perceived invulnerability, there was no evidence suggesting that low level group interaction induced group polarisation leading to an increase in individual's level of perceived invulnerability.

The second study examined 78 pilots. Although the majority of the participants displayed perceived invulnerability, there was no evidence suggesting that high level group interaction resulted in group polarisation leading to an increase in individual's level of perceived invulnerability.

There was no evidence that the two experimental manipulations (low group interaction and high group interaction) differed in effectiveness, as the effect size between studies I and II did not significantly differ.

Although it is of some concern to general aviation safety that the majority of the pilots in both studies exhibited perceived invulnerability, the level of perceived invulnerability does not appear to be increased by a group polarisation effect. The latter finding is consistent with safe operations, having found no evidence that multi-crew operations lead to increased levels of perceived invulnerability. In addition to the implication of the current findings, limitations of the present study, possible areas for further research and recommendations are presented.

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ABBREVIATIONS

ACAS	Airborne Collision Avoidance System
AIDS	Acquired Immune Deficiency Syndrome
AOPA	Aircraft Owner and Pilots Association
ATP	Air Transport Programme
BFR	Biennial Flight Review
CAR	Civil Aviation Rule
FAA	Federal Aviation Authority
GA	General Aviation
GAO	General Accounting Office
HIV	Human Immunodeficiency Virus
ICAO	International Civil Aviation Organisation
IMC	Instrument Meteorological Condition
NTSB	National Transportation Safety Board
PPL	Private Pilot Licence
TCAS	Traffic Alert and Collision Avoidance System
VFR	Visual Flight Rules
VMC	Visual Meteorological Condition