



Ethnical Diversity in the Pilot Cadets Education: Study at Banyuwangi Indonesian Aviation Academy

Ahmad Hariri^{1*}, Parjan², Adolf A. Marantika³, Ikhwanul Qiram⁴

^{1,2,3} Akademi Penerbang Indonesia Banyuwangi, Indonesia

⁴ PGRI University of Banyuwangi, Indonesia



DOI : <https://doi.org/10.46245/ijorer.v3i4.227>

Sections Info

Article history:

Submitted: June 3, 2022

Final Revised: June 14, 2022

Accepted: June 27, 2022

Published: July 30, 2022

Keywords:

Cadets

Diversity

Education

Ethnic

Pilot



ABSTRACT

Pilot cadets take part in a series of education and training at an academy. Differences in the background of prospective cadets can affect the educational process and achievements achieved by the cadets. This study aims to analyze differences in the area of origin of the education and training outcomes of prospective pilot cadets. The study was conducted on 22 cadets of the Indonesian Aviation Academy Banyuwangi which were divided into 3 groups of regions of origin which generally had different levels of educational progress. The scores of the initial test results including the academic potential test, physical test and initial flight aptitude test were compared. Furthermore, comparisons were made for the initial flight aptitude test, flight aptitude test 1 and flight aptitude test 2. The results showed that education and training at the academy could improve the performance of the cadets but still resulted in achievement gaps due to their regional background. The results of the study can be used as a reference for the development of pilot education models. Further research can be done for deeper diversity or educational curriculum that is not yet optimal

INTRODUCTION

The rapid growth of global airlines in recent years has sparked an increasing demand for talented pilots to join the aviation industry (Valenta, 2018). Overall the world needs 200,000 pilots in 2018 (International Civil Aviation Organization (ICAO)). However, the process of obtaining a competency certificate as a pilot requires a high cost (FTEJerez, 2019). These conditions have encouraged pilot training and recruitment institutions to seek to improve training efficiency at an affordable cost but able to meet the standard needs of the aviation industry (Adanov et al., 2020). A pilot training report provides an overview of demographic differences in attrition rates, reasons for attrition, and an analysis of whether certain individual characteristics (e.g., test scores, prior flying experience) can account for differential rates of attrition (Schulker et al., 2018).

A pilot's work involves information processing operations that typically occur in real-world contexts when unexpected events occur: paying attention, diagnosing, and responding (Wickens et al., 2009). An aircraft cockpit system is an example of a complex human-in-the-loop system (Chen et al., 2021). The pilot's workload as perceived by the pilot can be studied based on the movement of the control inceptor which is manifested in the form of sticks and wheels (Babu, 2022). The development of the aviation industry fuels training effectiveness by working in the same way as real aircraft maneuverability (Jo & Kwon, 2017). The process of establishing a flight school organization in Indonesia is part of an effort to meet the needs of aviation human resources, especially pilots. However, of the 17 existing aviation high schools, there are still not enough human resources or experts to supply every existing airline.

ORIGINALITY REPORT

14%

SIMILARITY INDEX

13%

INTERNET SOURCES

8%

PUBLICATIONS

%

STUDENT PAPERS

PRIMARY SOURCES

1

www.ncbi.nlm.nih.gov

Internet Source

2%

2

www.pnas.org

Internet Source

2%

3

journal.ia-education.com

Internet Source

2%

4

www.amsterdamuas.com

Internet Source

2%

5

download.atlantis-press.com

Internet Source

1%

6

worldcat.org

Internet Source

1%

7

human-factors.arc.nasa.gov

Internet Source

1%

8

Kyriaki Messiou, Lien Thien Bui, Mel Ainscow, Barbara Gasteiger-Klicpera et al. "Student diversity and student voice conceptualisations in five European countries: Implications for

1%