

# International Students Sense of Belongingness and Motivation on Academic and Flight Performance



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## Introduction

Many factors can affect international students' success in flight training. Motivation, confidence, and internal achievement factors such as locus of control (LOC) and self-efficacy are important in successful learning and flight training. Moving to a new country, and a feeling of belongingness (social and academic club membership, engagement in social activities, confidence in English, etc.) might affect students' confidence, therefore affecting flight training performance.

**Purpose of the study:** find out if factors such as international students' sense of belonging, self-efficacy, involvement with the community, and academic performance are related to flight training performance.

Large schools can benefit greatly from worldwide recognition and a larger number of international students enrolling, and solutions can be found to ensure and reinforce international flight student success in the future.

Table 1. Descriptive Statistics for the Demographics of the Participants

Variable	<i>M</i>	<i>SD</i>	<i>Min.</i>	<i>Max.</i>
Age	21.42	2.29	19	28
Years in US	3.62	3.34	1	12
GPA	3.72	0.35	2.50	4.00
Clubs	1.68	1.70	0	6
Private Failures	0.26	0.56	0	2

## Methodology

Nineteen international students (13m, 6f) meeting the following criteria answered a 20-minute online survey.

- Pursuing the Aeronautical Science degree
- Licensed private pilots with or without an instrument rating
- Currently enrolled in the Embry-Riddle Aeronautical University (ERAU) flight training program in Daytona Beach
- Have completed their entire flight training at ERAU

68 total questions on demographics, academic, flight, and language experience, self-assessments, LOC scale, and self-efficacy scale.

Two-tailed Pearson's correlation coefficients, independent samples *t*-tests, and a regression model were computed.

**Dependent variable:** number of checkride failures in private pilot course.

**Independent variables:** international students' sense of belonging, attendance to social events on campus and with friends, academic, flight training, and English language confidence, involvement with the community, academic performance, self-efficacy, and locus of control.

## Results

Table 3. Descriptive Statistics for the Self-Assessments

Variable	<i>M</i>	<i>SD</i>	<i>Min.</i>	<i>Max.</i>
Sense of Belonging	5.79	1.47	2	7
Involvement	4.84	2.24	1	7
Campus Events	3.68	2.00	1	7
Friends Events	5.68	1.70	1	7
Academic Confidence	6.26	1.24	3	7
Flight Confidence	5.52	1.58	2	7
English Confidence	6.21	0.92	5	7

Significant correlations were found between:

- LOC and confidence in the English language;
- Self-efficacy and number of failures at the end of the Private Pilot course;
- Confidence in the English language and social involvement;
- Flight training confidence and social involvement.

## Conclusions

- Knowing the characteristics that motivate international students may have positive outcomes of successful flight training performance.
- Students who believe they hold more power over their destiny also display a higher level of confidence in their ability to achieve their goals.
- Students who have a low self-efficacy score tend to have 1 or 2 checkride failures, as opposed to 0.
- Males reported significantly higher levels of flight training confidence than females.
- A regression model showed that flight training confidence can be significantly predicted by students' self-assessed sense of belonging, academic confidence, and LOC.

## Recommendations

- Create more community-oriented clubs for international students.
- Provide international students with resources and knowledge of the country they are moving to.
- Set up mentorship programs that pair new international students with domestic students to help them become more familiar with their new environment.
- Collect more objective data from participants for further research.

Figure 1. Bar Graph of Participants' Continent

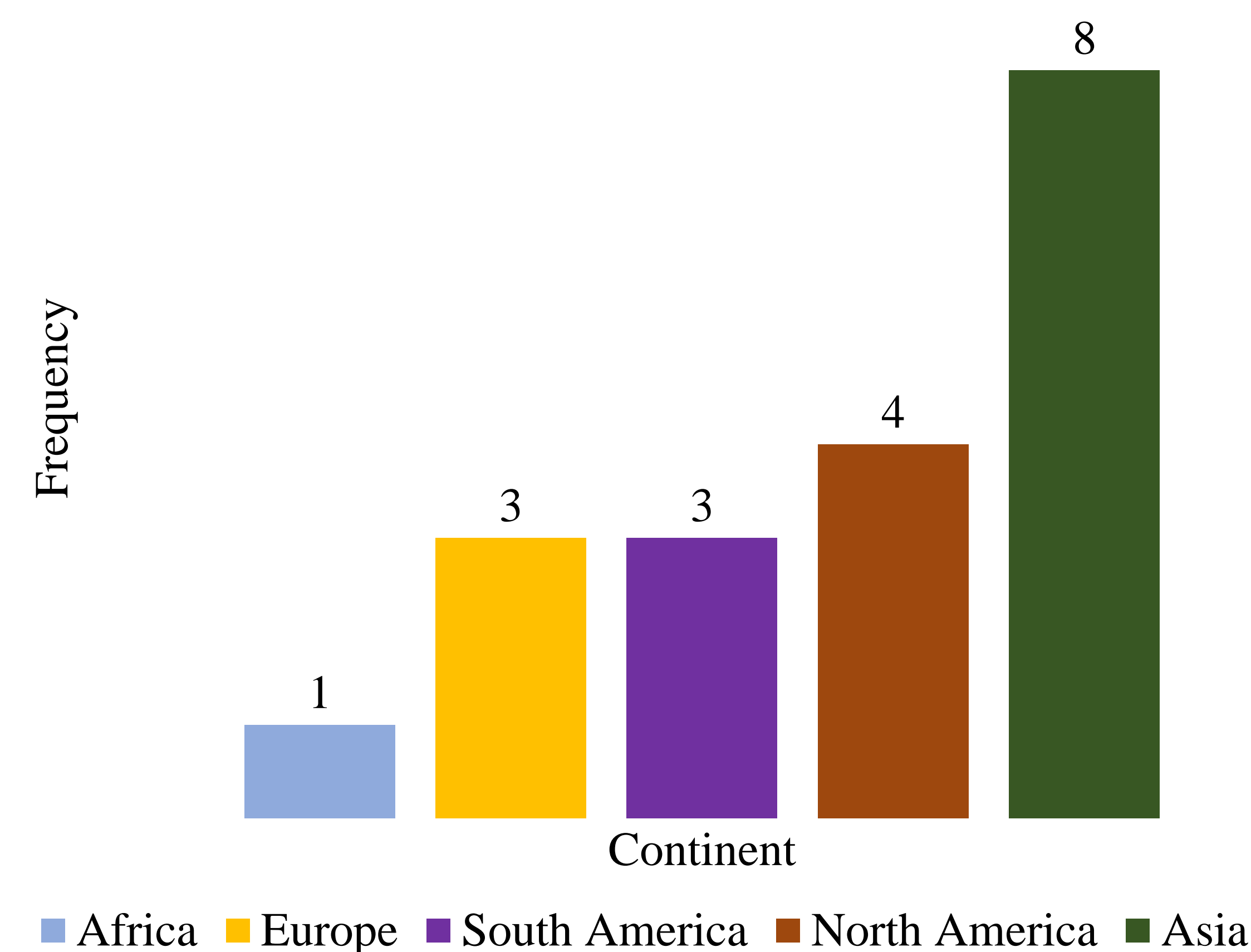


Table 2. Pearson Correlation Matrix for Private Failures

Private Failures	Pearson Correlation	Sig. (2-tailed)
Sense of Belonging	-.479	.038
Involvement	.079	.748
Campus Events	-.070	.775
Friends Events	-.431	.065
Academic Confidence	-.344	.149
Flight Confidence	-.290	.228
English Confidence	-.221	.363