UPH UNIVERSITAS PELITA HARAPAN | TEACHERS COLLEGE

INSTITUTIONAL RESEARCH REPORT

SOCIO-ECONOMIC BACKGROUND AND ACADEMIC ACHIEVEMENT AMONG FIRST-GENERATION SCHOLARSHIP STUDENTS

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EXECUTIVE SUMMARY

This institutional research report examines the relationship between socio-economic background and academic achievement among first-generation college students (FG students) who are recipients of full reciprocal scholarships at the Faculty of Education, Universitas Pelita Harapan (FIP-UPH).

KEY FINDINGS

- FG students predominantly come from lower-income households, with limited parental education and are overrepresented in rural or underdeveloped regions (e.g., Papua, Maluku).
- Despite these challenges, FG students demonstrated competitive or even superior academic performance in certain cohorts (notably 2022 and 2024), highlighting their resilience.
- Factors such as type of secondary school, region of origin, entrance exam scores, and parental occupation and education were significant predictors of academic performance.
- Students from Sulawesi and Java, as well as public school graduates, showed higher GPA averages.
- Interestingly, maternal education level had a slight negative correlation with GPA in this sample, suggesting nuanced dynamics at play.

CONCLUSION

FG students have the potential to excel academically when supported effectively. This report serves as a strategic resource to inform institutional policies that promote educational equity, inclusion, and student success within higher education in Indonesia.

RECOMMENDATIONS

- Develop structured academic support programs (mentoring, bridging classes, enrichment).
- Implement continuous academic monitoring and predictive models.
- Strengthen collaboration among faculties, housing, and educational foundations.
- Conduct qualitative studies on resilience and motivation among FG students.
- Prioritize interventions for students from under-resourced schools and regions (3T areas).

BACKGROUND

First-generation students (FGS) are individuals who are the first in their families to pursue higher education. They often face various challenges, including socio-economic constraints, limited social capital, lack of familiarity with academic culture, and insufficient family support—factors that contribute to lower academic achievement and instability in their educational journey.

In the Indonesian context, FGS students typically come from lower-middle-class families, rely on scholarships, and experience limited access to academic preparation, financial support, and educational information. Studies have shown that maternal education, school background, and entrance exam scores significantly predict first-semester GPA. Meanwhile, institutional support such as mentoring, learning communities, and family-based approaches have proven to improve FGS engagement and persistence, particularly in their first year.

Despite these challenges, FGS students demonstrate strengths such as resilience and innovative thinking, which serve as assets in navigating higher education. However, there remains a lack of comprehensive research in Indonesia analyzing the combined influence of socio-economic background, parental education, and institutional factors on FGS academic outcomes.

This study, therefore, aims to describe the socio-economic background and compare the academic performance of first-generation and non-first-generation students receiving full reciprocal scholarships at the Faculty of Education, Universitas Pelita Harapan (FIP-UPH), as well as to quantitatively examine the predictive power of these variables on first-year GPA.

RESEARCH METHOD

This study applies a **quantitative approach** combining **descriptive-comparative** and **causal-comparative (ex post facto)** designs. The primary objectives are to describe the socio-economic backgrounds of first-generation (first-gen) and non-first-generation students, compare their academic achievements, and analyze the combined influence of background variables on first-year GPA.

The population consists of 893 active students at the Faculty of Education, Universitas Pelita Harapan (FIP-UPH), Tangerang. The sample includes 528 first-gen students (108 males, 420 females) and 365 non-first-gen students (85 males, 280 females), selected using stratified random sampling.

Data collection was conducted through a structured questionnaire covering socio-economic status, educational background, and first-year GPA. Additional data includes demographic characteristics such as region of origin, secondary school type, and chosen academic program.

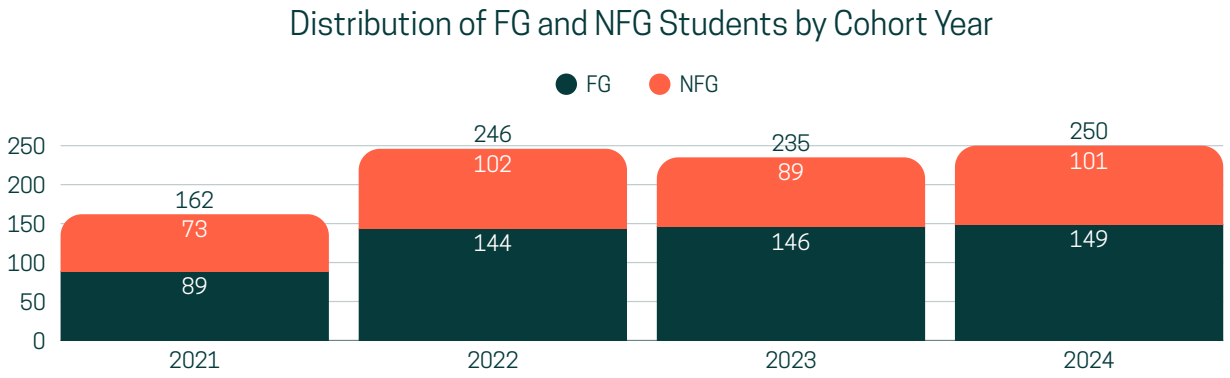
DATA ANALYSIS

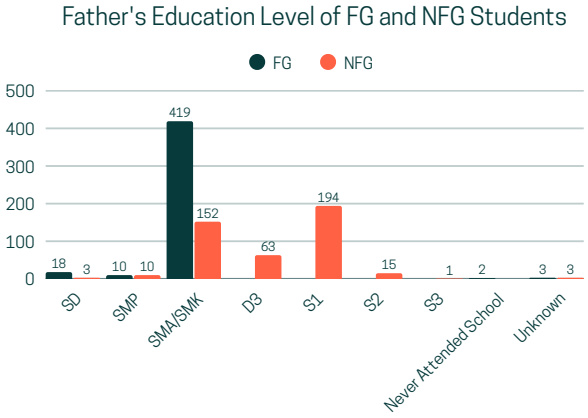
The regression model uses linear inference techniques to predict continuous outcomes and applies tools such as Mean Squared Error (MSE) to optimize the model's accuracy.

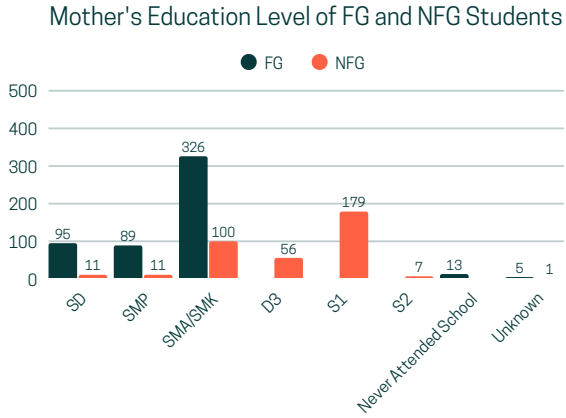
- **Descriptive statistics** using frequency tables and percentages to illustrate student backgrounds and academic performance.
- **Comparative analysis** to examine differences in GPA between first-gen and non-first-gen groups using visual data representation.
- **Multiple linear regression analysis** to test the simultaneous impact of independent variables (socio-economic status, parental education, entrance exam scores) on the dependent variable (first-year GPA). This non-experimental design is appropriate since the variables are historical and cannot be manipulated.

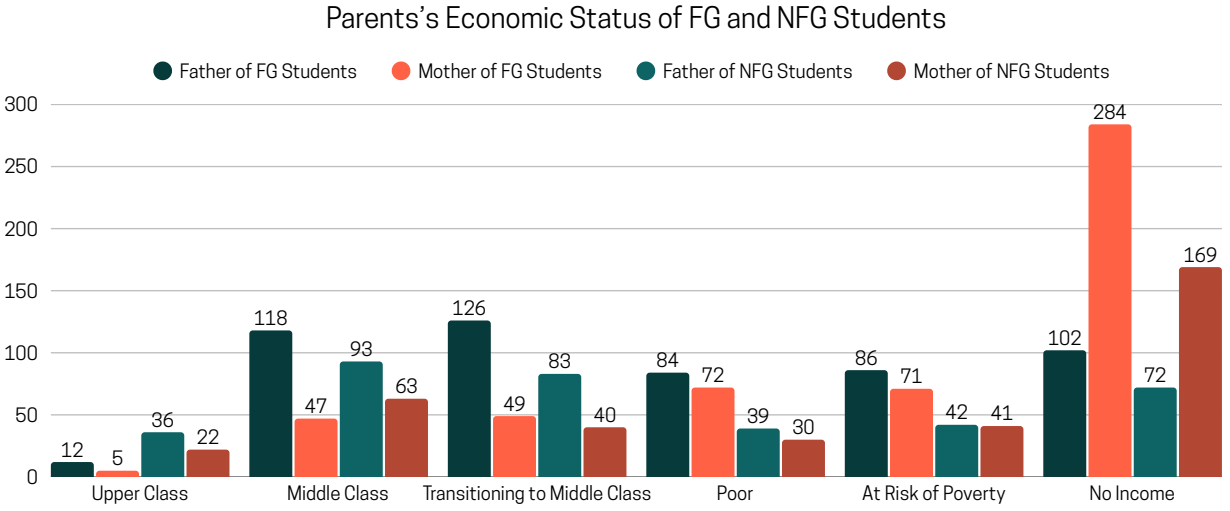
The findings aim to provide a data-driven basis for academic and policy interventions that support first-generation student success in higher education.

INFOGRAPHICS









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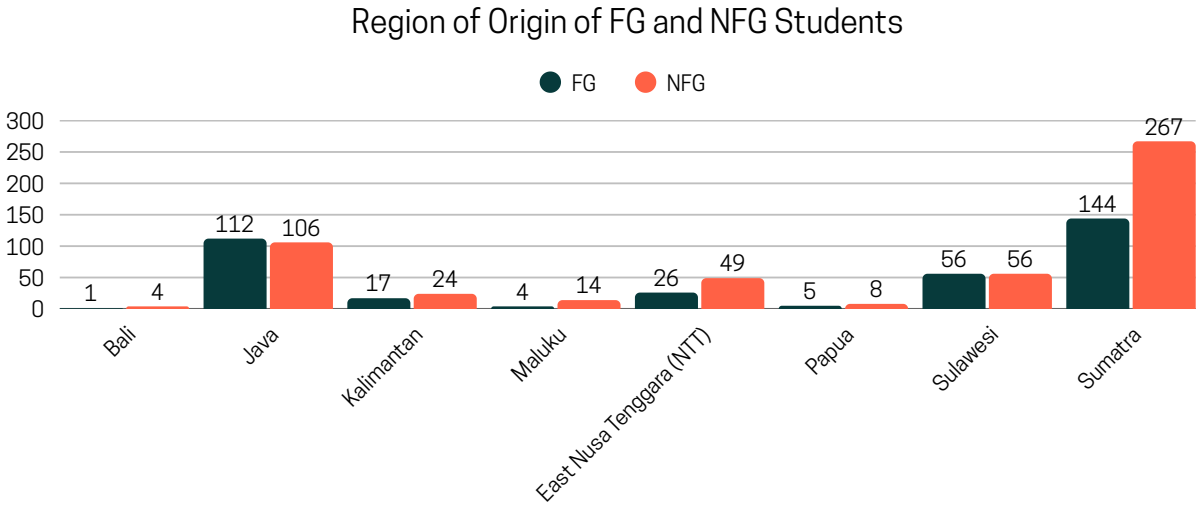

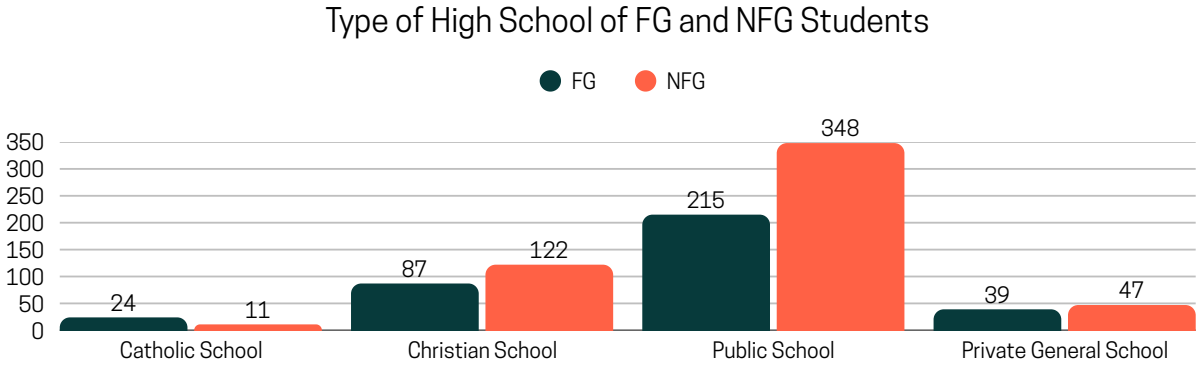

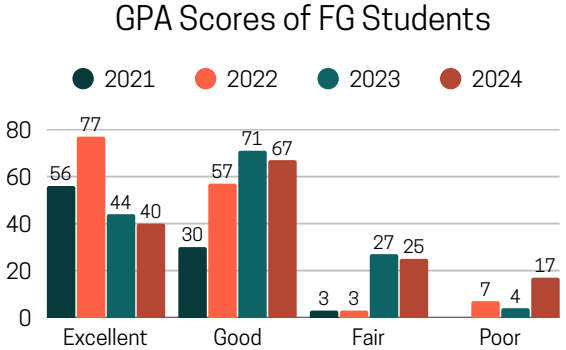

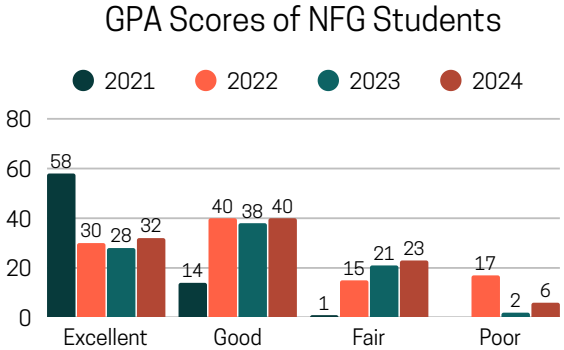

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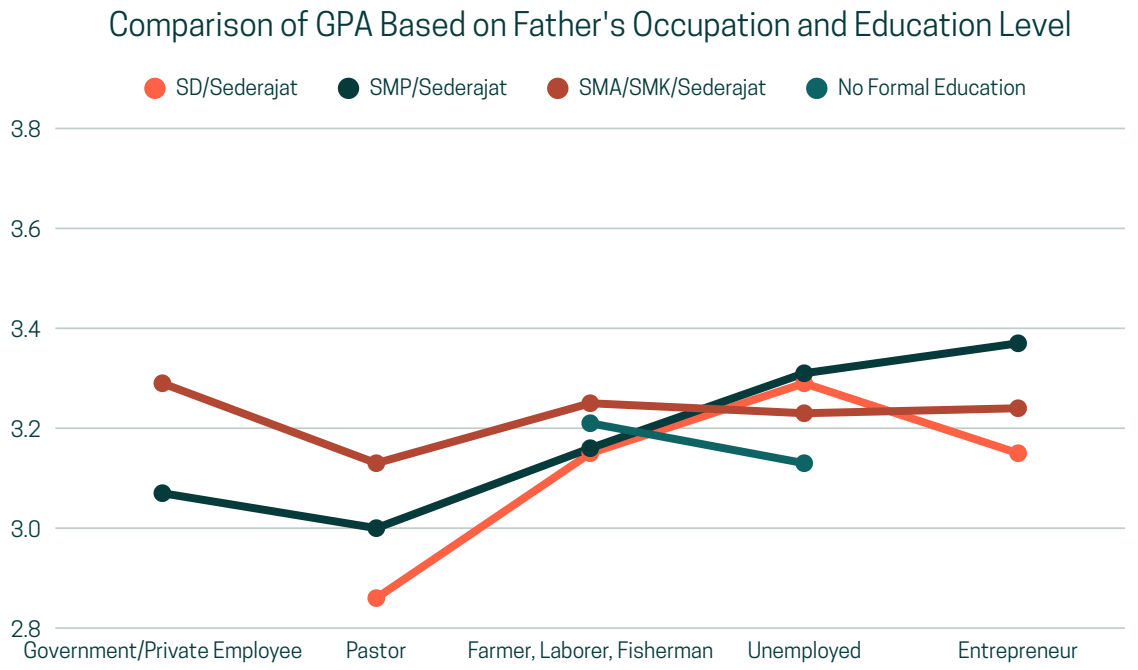

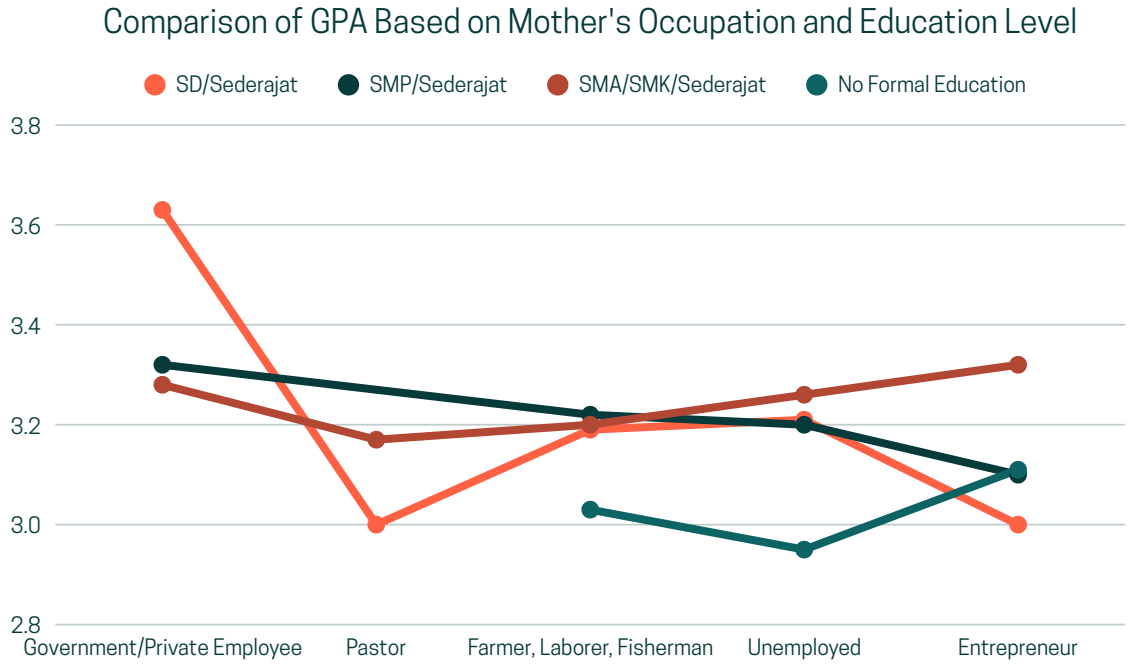

RESULTS AND DISCUSSION

Research reveals that **first-generation college students (FG)** in Indonesia face significant socio-economic challenges, yet in several contexts, they demonstrate **competitive academic performance**, sometimes surpassing their non-first-generation (NFG) peers.

01 — Socioeconomic Background

FG students typically come from families with **lower parental education**, **limited household income**, and **reduced access to basic services**, such as health insurance. Most FG students' parents work in informal sectors (e.g., laborers, farmers, pastors), and many are from **rural or underdeveloped (3T) regions** such as Papua and Maluku. They often attend **public or local private schools** with limited educational facilities.

In contrast, NFG students generally come from families with **higher educational attainment**, **formal employment**, better economic stability, and greater access to healthcare and quality education—mostly from more developed urban areas like Java and Sumatra.

02 — First-Year Academic Performance

Despite these disadvantages, **FG students show competitive academic outcomes**, particularly in their **first-year GPA**:

- FG students outperformed NFG students in the "very good" and "good" GPA categories for cohorts 2022 and 2024.
- Students from Java and Sulawesi had the **highest average GPAs**, with public school graduates consistently performing better. However, students from regions like Papua and Maluku showed **lower average GPAs**, indicating structural academic preparation gaps.

This academic achievement is notable, as FG students are often assumed to be at greater risk academically due to their background. Their success suggests resilience and the potential benefit of targeted support systems.

RESULTS AND DISCUSSION

03 — Predictive Factors of Performance

Research employed **multiple linear regression analysis** to examine predictors of GPA. Key findings include:

- **Region of origin**, **type of school**, **parental education and income**, and **entrance exam scores** were significant predictors of GPA.
- Students from **Sulawesi and Java**, **public schools**, and those with higher entrance exam scores had higher predicted GPAs.
- Entrance exam scores (Bahasa Indonesia and TPA) contributed positively but modestly, supporting the idea that basic academic readiness matters.

Interestingly, maternal education showed a slight negative effect in the model, indicating possible complex influences, while the highest positive predictor came from the Sulawesi region.

04 — Institutional Implications

Studies emphasize the need for **targeted academic and policy interventions** to support FG students, especially those from the most vulnerable backgrounds:

- Institutions should implement **early intervention strategies** such as mentoring, academic bridging programs, and first-year learning communities.
- It is essential to adopt an **asset-based approach** that recognizes FG students' perseverance, motivation, and aspirations—rather than viewing them from a deficit perspective.
- Data-driven tools, including predictive modeling, can assist in **early risk detection** and designing support strategies tailored to FG students' needs.

FG students are not a monolithic group that is always academically behind. Despite structural disadvantages, many succeed when provided with the right support. Mapping their background and performance is essential to developing a more i**nclusive and equitable higher education** system in Indonesia.

CONCLUSION

The findings emphasize that **first-generation college students (FG/FGCS)** in Indonesia generally come from **lower socio-economic backgrounds**, with limited parental education, lower income, and fewer resources such as health insurance or access to quality secondary education—especially for students from **rural or underdeveloped regions** (3T areas like Papua and Maluku). Despite these structural disadvantages, **FG students demonstrate competitive and even superior academic performance** in certain cohorts (e.g., 2022 and 2024), and students from regions such as **Java and Sulawesi** show stronger academic preparedness.

Both studies also highlight that **academic readiness is closely linked** to factors such as:

REGION OF ORIGIN

TYPE OF SECONDARY SCHOOL

PARENTAL EDUCATION AND OCCUPATION

ENTRANCE EXAM SCORES

These variables were significant predictors of academic performance, with state/public school graduates and students from urban regions performing better on average. The results underscore the **importance of institutional support systems**, as FG students possess the potential to succeed academically when provided with the appropriate guidance and resources.

RECOMMENDATIONS

Based on the findings, the following actions are recommended for educational institutions and policymakers:

01 — Academic Support Programs

Develop structured support programs for FG students, such as **tutorials**, **matriculation/enrichment classes**, **academic mentoring**, **pastoral counseling**, and **access to learning resources** (including digital tools and health services).

02 — Data-Driven Monitoring

Conduct **regular evaluation** of academic performance across student cohorts (FG and NFG) to inform **adaptive and targeted interventions**, using tools such as **predictive analytics models** for early detection of academic risks.

03 — Holistic Collaboration

Promote **cross-departmental and institutional collaboration** among faculties, student housing (e.g., MYC dormitory), and educational foundations (e.g., YPPH) to build **inclusive and equitable academic ecosystems**.

04 — Qualitative Follow-Up Research

Conduct further **qualitative research** to better understand the **non-cognitive factors** (e.g., motivation, resilience, social-emotional support) that contribute to the academic success of FG students.

05 — Targeted Equity-Based Interventions

Address regional academic gaps by strengthening **matriculation and remedial programs** for students from 3T areas and under-resourced schools, with emphasis on **early mentoring** and **social support systems**.

06 — Utilization of Predictive Models

Apply predictive analytics (e.g., **linear regression models**) to map academic risks and design **tailored academic guidance systems**, as supported by the regression accuracy (MAPE ~6%) found in research.

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Research Team

Budi Wibawanta
budi.wibawanta@uph.edu

Novel Priyatna
novel.priyatna@uph.edu

Imanuel Adhitya Wulanata Chrismastianto
imanuel.wulanata@uph.edu

Reisky Megawati Tammu
reisky.tammu@uph.edu

Yanuard Putro Dwikristanto
yanuard.dwikristanto@uph.edu

Neneng Andriani
neneng.andriani@uph.edu

Yogi Saputra
yogi.saputra@uph.edu

Jessica Florensia Irene
jessica.irene@uph.edu