

**ANALYSIS OF THE EFFECT OF ENTRY PATHWAYS ON
STUDENT ACADEMIC ACHIEVEMENT AT UIN SUNAN
GUNUNG DJATI BANDUNG: A STUDY ON THE CLASS OF 2022
AND 2023**

Tedi Priatna^{1,*}, Muhammad Amar Khana²

^{1,2}UIN Sunan Gunung Djati Bandung, Indonesia

*Email: tedi.priatn@uinsgd.ac.id

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ABSTRACT

This study aims to analyse the influence of admission pathways (SPAN PTKIN, UM PTKIN, and Independent) on students' academic performance at UIN Sunan Gunung Djati Bandung for the 2022 and 2023 cohorts. The research evaluates academic indicators such as GPA, credits taken, participation in seminars, and organisational involvement. Using a mixed-method design, quantitative data were collected through a questionnaire distributed to 560 students. Data were analysed with ANOVA and post hoc Games-Howell tests, while qualitative data explored students' perceptions. Results indicate no significant differences in GPA, credits taken, seminar participation, or organisational involvement among students from different admission pathways. However, significant differences were found in the intensity of the study between UM-PTKIN and independent pathways. These findings suggest that UIN Sunan Gunung Djati Bandung has successfully implemented an inclusive education system, ensuring equal opportunities for all students regardless of their admission pathway. This study provides a comprehensive analysis of the impact of admission pathways on student performance at PTKIN, contributing to the discourse on higher education inclusivity in Indonesia.

Keywords: Admission pathways; academic performance; higher education.

ABSTRAK

Penelitian ini bertujuan untuk menganalisis pengaruh jalur penerimaan mahasiswa baru (SPAN PTKIN, UM PTKIN, dan Mandiri) terhadap prestasi akademik mahasiswa di UIN Sunan Gunung Djati Bandung untuk angkatan 2022 dan 2023. Penelitian ini mengevaluasi indikator akademik seperti IPK, jumlah SKS yang diambil, partisipasi dalam seminar, dan keterlibatan dalam organisasi. Dengan menggunakan desain metode campuran, data kuantitatif dikumpulkan melalui kuesioner yang dibagikan kepada 560 mahasiswa. Data dianalisis dengan ANOVA dan uji post hoc Games-Howell, sementara data kualitatif mengeksplorasi persepsi mahasiswa. Hasil penelitian menunjukkan tidak ada perbedaan yang signifikan dalam hal IPK, jumlah kredit yang diambil, partisipasi seminar, atau keterlibatan dalam organisasi di antara para mahasiswa dari berbagai jalur penerimaan. Namun, perbedaan yang signifikan ditemukan dalam intensitas studi antara UM-PTKIN dan jalur mandiri. Temuan ini menunjukkan bahwa UIN Sunan Gunung Djati Bandung telah berhasil menerapkan sistem pendidikan inklusif, memastikan kesempatan yang sama bagi semua siswa terlepas dari jalur penerimaan mereka. Studi ini memberikan analisis komprehensif tentang dampak jalur masuk terhadap kinerja mahasiswa di PTKIN, yang berkontribusi pada wacana inklusivitas pendidikan tinggi di Indonesia.

Kata kunci: Jalur masuk; kinerja akademik; pendidikan tinggi

INTRODUCTION

Higher education has a strategic role in producing superior generations who are not only intellectually competent, but also have emotional and social intelligence to face global challenges. Students are expected to be able to develop critical thinking skills, analytical, and social sensitivity as provisions to contribute positively in society (Kezar, 2023). In Indonesia, higher education serves as a vehicle for ethical and moral character building, helping students to play their roles responsibly in the complexity of modern life (Iksal et al., 2024). As one of the state Islamic religious universities (PTKIN), UIN Sunan Gunung Djati Bandung shows a commitment to the quality of education that is inclusive and based on Islamic values. The institution provides opportunities for prospective students from various backgrounds through various admission channels, including the National Academic Achievement Selection of State Islamic Religious Universities (Seleksi Prestasi Akademik Nasional Perguruan Tinggi Keagamaan Islam Negeri-SPAN-PTKIN), the State Islamic Religious Universities Entrance Examination (Ujian Masuk Perguruan Tinggi Keagamaan Islam Negeri-UMPTKIN), and the Independent Pathway. These pathways are not only an academic entry point, but also an effort to maintain the diversity of potential in the higher education ecosystem. However, questions arise regarding how these admission pathways affect students' academic performance in a competitive environment.

Each admission pathway at UIN Sunan Gunung Djati Bandung has different criteria and selection mechanisms, reflecting the need to attract potential students from various backgrounds. The SPAN PTKIN pathway emphasises students' academic performance during high school with recommendations from schools, UM PTKIN is based on written exams to measure academic ability directly, while the Independent Pathway provides additional opportunities through self-selection held by the university. Based on the 2022 and 2023 admission reports, there was an overall increase in the number of applicants from 91,292 to 109,439, with an increase in

passers from 9,127 to 9,465. The SPAN PTKIN pathway has the highest number of applicants each year, reaching 57,920 in 2023, but the pass rate remains low compared to the number of applicants. In contrast, the Independent Pathway showed higher pass rates, especially in 2022, with 3,564 students admitted. The significant increase in the number of students passing this selection, 338, indicates the university's success in attracting prospective students through various inclusive selection channels.

Previous research on student academic performance has discussed various aspects of admission pathways, which can be grouped into three main categories. The first is research highlighting the Selection Mechanism of Admission Pathways and Academic Achievement. Several studies highlight that selection mechanisms play an important role in determining the academic quality of students. Carrico et al. (2019) and Leithwood et al. (2020) explained that each entry pathway, such as the merit pathway (SPAN-PTKIN) or the written exam pathway (UM-PTKIN), reflects differences in standards and unique selection mechanisms, thus affecting students' initial abilities. Qudratullah (2014) proved that the admission pathway contributes to academic achievement with indicators of school origin such as SMA/K or pesantren. However, this study only focused on the Faculty of Science and Technology without considering other faculties. The main drawback of this category is that no study specifically discusses the comparison of student academic achievement in all faculties based on the entry path at PTKIN.

The second category is research related to internal student factors and their relationship with achievement. Internal factors, such as learning motivation and adaptability, are also considered to influence academic achievement. Sardjito et al. (2013) showed that there was no significant difference in GPA between PMDK and SPMB students, which was due to the similarity of learning motivation. Riezky (2016) added that the mental and physical stress felt by students can reduce academic performance, especially in students of the Faculty of Medicine. However, these studies lack

discussion of how these internal factors interact with student entry pathways in the PTKIN context. Thus, the research gap lies in the lack of studies on how entry pathways affect learning motivation and academic adaptation across faculties.

The third category is related to the effect of Educational Environment on Achievement Equality. Heywood (2000) and other studies have shown that uniform curriculum standards and academic demands in higher education can reduce initial differences caused by students' entry pathways. However, no research explicitly evaluates the effect of this educational environment equality in PTKIN. Research such as Sardjito et al. (2013) show that students from different pathways have the same opportunity to thrive in the academic environment, but further studies are needed to identify whether the educational environment actually eliminates initial disparities across all entry pathways in PTKIN.

To date, there have not been many studies that specifically address the academic performance of PTKIN students based on entry pathways, such as SPAN PTKIN, UM PTKIN, and Independent Pathways, especially with broader indicators such as GPA, participation in seminar activities, and study intensity. Previous research also tends to focus on specific faculties or internal factors of students without linking them to entry pathways. Therefore, this study aims to fill the gap by analysing the comparison of students' academic performance in all faculties based on entry pathways at UIN Sunan Gunung Djati Bandung, as well as evaluating the effectiveness of selection pathways in attracting high-potential students.

This study aims to analyse and compare the academic achievement of students admitted through SPAN PTKIN, UM PTKIN, and Independent PTKIN pathways at UIN Sunan Gunung Djati Bandung. The main objective of this study is to identify whether there are significant differences in students' academic achievement based on admission pathways, as measured through indicators such as cumulative grade point average (GPA), number of credits taken, involvement in seminar activities, organisational

participation, awards, scholarships, and study time. By overcoming the shortcomings in previous studies that were limited to certain faculties or not specific to the PTKIN context, this study makes a new contribution by providing empirical data that is more comprehensive and focused on all faculties at UIN Sunan Gunung Djati Bandung. The results of this study are expected to address gaps in the literature related to the effectiveness of student selection pathways, provide insights into the relationship between admission pathways and academic achievement, and offer recommendations for universities to develop more inclusive and data-driven admission strategies.

This study hypothesises no significant difference in students' academic performance based on their admission pathway, namely SPAN PTKIN, UM PTKIN, Mandiri, and other pathways. This is based on the assumption that once students are admitted to UIN Sunan Gunung Djati Bandung, they undergo a uniform learning process, including curriculum, teaching quality, and access to educational facilities. These factors are thought to equalise any initial differences among students from different selection pathways. Moreover, the literature shows that academic success is influenced more by individual motivation, learning environment, and social support than the initial selection mechanism (Heywood, 2000; Riezky, 2016; Sardjito et al., 2013). Therefore, this hypothesis predicts that variables such as GPA, number of credits, study intensity, participation in self-development activities, and organisational involvement will not show significant differences among students from different admission pathways. This will be tested through data analysis to understand the extent to which internal factors and the educational environment dominate students' academic outcomes.

RESEARCH METHOD

This research focuses on students of UIN Sunan Gunung Djati Bandung batch 2022 and 2023 as the unit of analysis. The research subjects consisted of students admitted through three new student admission

pathways, namely SPAN PTKIN, UM PTKIN, and Independent Pathway. This study aims to analyse the differences in academic achievement among students admitted through these pathways. The main focus is on academic indicators such as Grade Point Average (GPA), number of Semester Credit Units (SKS) taken, study intensity, and participation in self-development activities.

This research uses a mixed-method design, a combination of quantitative and qualitative approaches, to gain a more comprehensive understanding. The quantitative approach was used to measure significant differences in academic achievement based on certain indicators through statistical tests. The qualitative approach was applied to explore students' perceptions of the admissions system and the factors that influence their achievement. The choice of these methods was based on the need to answer the research questions with robust numerical data while providing deeper context and insights.

Primary data sources were used in this study, which were obtained directly from students through questionnaires. Respondents totalled 560 students who were selected using purposive sampling technique. Respondent criteria include students who are accepted through one of the three new student admission pathways (SPAN PTKIN, UM PTKIN, or Independent Pathway) and are actively studying in semesters 3 and 5. Other supporting data comes from the new student admission report of UIN Sunan Gunung Djati Bandung in 2022 and 2023.

Data collection was conducted by survey through a questionnaire designed to measure academic indicators, such as GPA, number of credits, study intensity, participation in seminars or training, organisational involvement, and awards. The questionnaire included closed-ended questions on a Likert scale as well as some open-ended questions to capture students' perceptions of the admissions system. The questionnaire was distributed online using a digital survey platform to ensure efficiency and accessibility.

Data were analysed using ANOVA (Analysis of Variance) test to identify significant differences between groups of students based on admission pathway. Furthermore, Games-Howell post hoc analysis was applied to compare groups pairwise with greater accuracy, especially in data that did not fulfil the assumption of homogeneity. The results of the quantitative analyses were complemented by qualitative interpretations of the open-ended responses to provide additional insights into student perceptions. This combination of methods ensured valid and in-depth research results to answer the research objectives.

RESULTS

Descriptive Analysis of Respondents' Characteristics

Respondents in this study were students of UIN Sunan Gunung Djati Bandung class 2022 and 2023, with a total of 560 students. Based on the data displayed in Figure 1, 299 respondents came from semester 3 with a percentage of 53%, while 262 respondents were in semester 5 with a percentage of 47%. Thus, the majority of respondents are in semester 3.

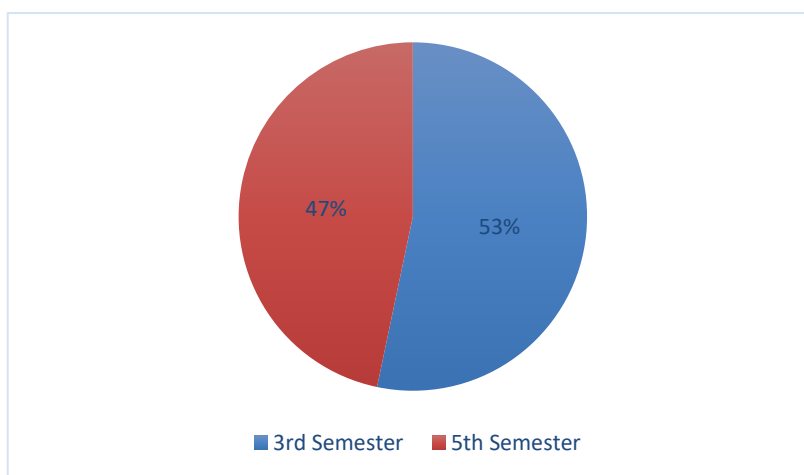


Figure 1 Characteristics of Respondents Based on Semester

Characteristics of respondents based on year of entry were obtained to identify the distribution of the number of students in each batch. Based on the data in **Figure 2**, 299 respondents came from batch 2023 with a

percentage of 53%, while 262 respondents came from batch 2022 with a percentage of 47%. This data shows that there are more respondents from batch 2023 than batch 2022.

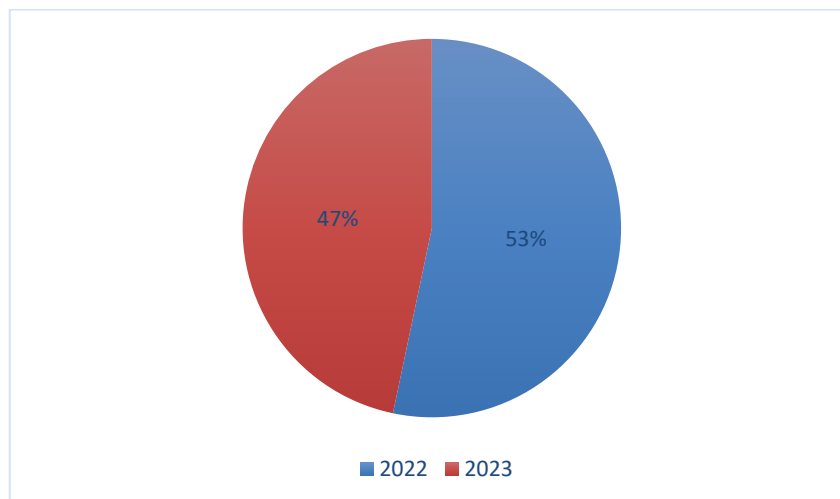


Figure 2 Characteristics of Respondents Based on Year of Entry

Respondents from Faculty of Ushuluddin totalled 37 students (5%), Faculty of Tarbiyah and Keguruan totalled 130 students (23%), Faculty of Sharia and Law totalled 21 students (4%), Faculty of Da'wah and Communication totalled 15 students (3%), Faculty of Adab and Humanities totalled 6 students (1%), Faculty of Psychology totalled 228 students (41%), Faculty of Science and Technology totalled 28 students (5%), Faculty of Social and Political Sciences totalled 28 students (5%), and Faculty of Economics and Islamic Business totalled 68 students (12%). Based on this data, the Faculty of Psychology has the largest number of respondents, while the Faculty of Adab and Humanities has the smallest number of respondents.

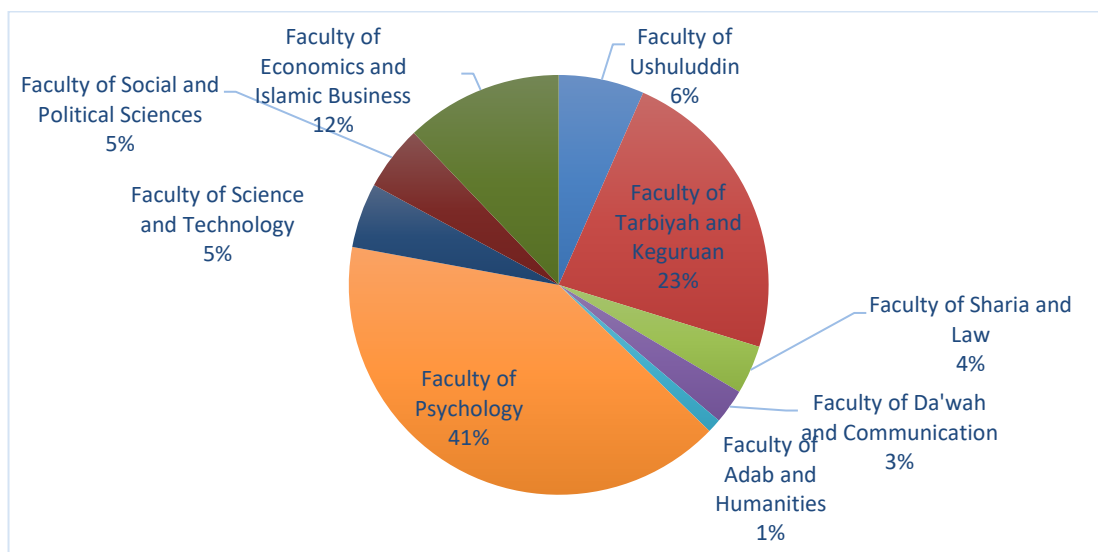


Figure 3 Characteristics of Respondents Based on Faculty

The characteristics of respondents based on study programme are presented in **Figure 4**. Respondents from the Islamic Education Management study programme numbered 68 students (12.1%), Islamic Religious Education as many as 12 students (2.1%), MI Teacher Education as many as 58 students (10.3%), Qur'anic Science and Tafsir as many as 8 students (1.4%), Legal Science as many as 60 students (10.7%), Islamic Criminal Law as many as 4 students (0.7%), Islamic Community Development as many as 16 students (2.9%), Agrotechnology as many as 1 student (0,1%), Biology as many as 10 students (1.8%), Chemistry as many as 8 students (1.4%), Electrical Engineering as many as 1 student (0.2%), Informatics Engineering as many as 10 students (1.8%), Sharia Accounting as many as 57 students (10.2%), Management as many as 2 students (0.4%), Sharia Financial Management as many as 9 students (1.6%), Psychology as many as 230 students (41%), and English Literature as many as 7 students (1.2%). This data shows that the Psychology study programme has the largest number of respondents, while Agrotechnology has the smallest number of respondents.

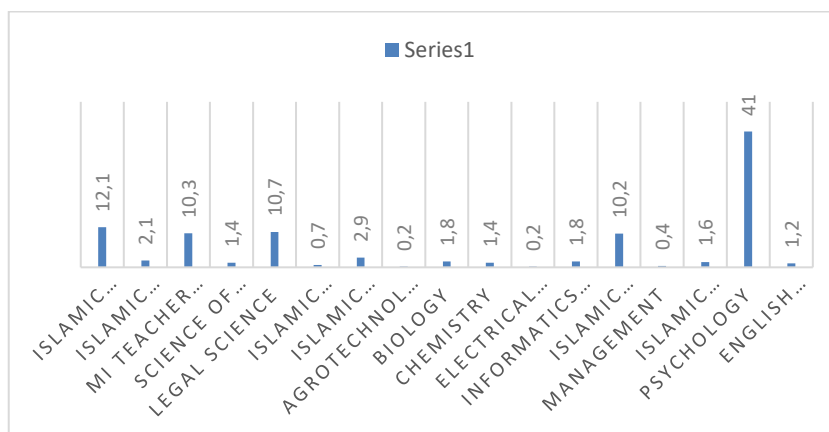


Figure 4 Characteristics of Respondents Based on Study Programme

Respondents from each pathway, namely SPAN PTKIN, UM PTKIN, Mandiri, and other pathways, were equal in number, namely 140 respondents with a percentage of 25% each. This data shows that the distribution of respondents based on admission pathways is evenly distributed.

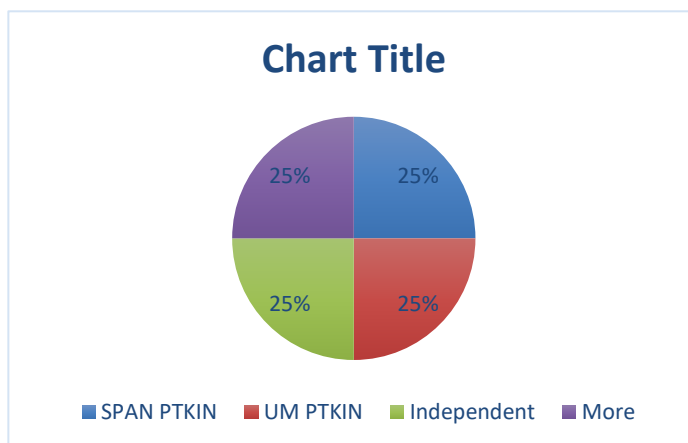


Figure 5 Characteristics of Respondents Based on the PMB Pathway

Games-Howell Post Hoc Test

In this study, the questionnaire data was classified into variables called "dummies", which is a numerical method to present several categories of respondents. Because of this dummy variable, each category of respondents can be compared based on different groups. In addition, ANOVA allows for a more thorough analysis in determining whether there are significant

differences between the categories defined by the dummy variables in question. However, the results of the homogeneity test for varieties showed that the test of homogeneity between groups was not very robust. For this reason, a *Games-Howell post-hoc* was used to ensure the accuracy of the results and to confirm this non-homogeneous variable condition. *The Games-Howell* test was chosen because it is effective in analysing data that does not contradict the assumption of homogeneity between variables and consistently produces reliable results even when there are differences in sample size across groups.

Table 1 Games-Howell Post Hoc Test Grade Point Average (GPA)

(I) Path_Entry	(J) Path_Entry	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
SPAN PTKIN	UM PTKIN	-.300	.127	.086	-.63	.03
	Independent	-.186	.129	.479	-.52	.15
	More	-.079	.132	.934	-.42	.26
UM PTKIN	SPAN PTKIN	.300	.127	.086	-.03	.63
	Independent	.114	.112	.740	-.18	.40
	More	.221	.115	.223	-.08	.52
Independent	SPAN PTKIN	.186	.129	.479	-.15	.52
	UM PTKIN	-.114	.112	.740	-.40	.18
	More	.107	.118	.802	-.20	.41
More	SPAN PTKIN	.079	.132	.934	-.26	.42
	UM PTKIN	-.221	.115	.223	-.52	.08
	Independent	-.107	.118	.802	-.41	.20

Source: Questionnaire data processed by researchers, 2024

Statistically significant mean differences are indicated by a significant value (Sig.) that is less than 0.05. Based on the results of the *Games-Howell post hoc* test in table 1, it is known that there is no significant difference in the cumulative grade point average of the 2022 and 2023 batch students based on the SPAN PTKIN, UM PTKIN, Independent and other pathways. Evidenced by the significant value of SPAN PTKIN with UM PTKIN of $0.086 > 0.05$. SPAN PTKIN with an independent pathway with a sig value of $0.479 > 0.05$. SPAN PTKIN with the pathway with a sig value of $0.934 > 0.05$. UM PTKIN with an independent pathway with a significant value of $0.740 > 0.05$. UM PTKIN with other pathways with a significant value of

0.223 > 0.05. Then the independent path with SPAN PTKIN with a significant value of 0.479 > 0.05. Independent with other pathways with a significant value of 0.802. Based on the analysis that students who enter from these four pathways have almost the same GPA so that no one dominates the GPA of students from one of the entry pathways.

Table 2 Games-Howell Post Hoc Test Semester Credit Units (SKS)

(I) Path_Entry	(J) Path_Entry	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
SPAN PTKIN	UM PTKIN	-.036	.087	.977	-.26	.19
	Independent	-.043	.086	.960	-.27	.18
	More	-.107	.080	.541	-.31	.10
UM PTKIN	SPAN PTKIN	.036	.087	.977	-.19	.26
	Independent	-.007	.084	1.000	-.22	.21
	More	-.071	.077	.793	-.27	.13
Independent	SPAN PTKIN	.043	.086	.960	-.18	.27
	UM PTKIN	.007	.084	1.000	-.21	.22
	More	-.064	.076	.832	-.26	.13
More	SPAN PTKIN	.107	.080	.541	-.10	.31
	UM PTKIN	.071	.077	.793	-.13	.27
	Independent	.064	.076	.832	-.13	.26

Source: Questionnaire data processed by researchers, 2024

Statistically significant mean differences are indicated by a significant value (Sig.) that is less than 0.05. Based on the results of the *Games-Howell post hoc* test in table 2, it is known that there is no significant difference in semester credit units of students in batches 2022 and 2023 based on SPAN PTKIN, UM PTKIN, Independent and other pathways. Proven by the significant value of SPAN PTKIN with UM PTKIN of 0.977 > 0.05. SPAN PTKIN with an independent pathway with a sig value of 0.960 > 0.05. SPAN PTKIN with the pathway with a sig value of 0.541 > 0.05. UM PTKIN with an independent pathway with a significant value of 1 > 0.05. UM PTKIN with other pathways with a significant value of 0.793 > 0.05. Then the independent path with SPAN PTKIN with a significant value of 0.960 > 0.05. Independent with other pathways with a significant value of 0.832 > 0.05. Based on the analysis that students who enter from these four pathways have almost the same number of credits so that no one dominates the number of credits of students from one of the entry pathways.

Table 3 Games-Howell Post Hoc Test

Student Participation in Training/Seminar Activities							
(I) Path_Entry	(J) Path_Entry	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval		
					Lower Bound	Upper Bound	
SPAN PTKIN	UM PTKIN	-.021	.052	.977	-.16	.11	
	Independent	-.064	.053	.625	-.20	.07	
	More	-.036	.053	.905	-.17	.10	
UM PTKIN	SPAN PTKIN	.021	.052	.977	-.11	.16	
	Independent	-.043	.054	.858	-.18	.10	
	More	-.014	.053	.993	-.15	.12	
Independent	SPAN PTKIN	.064	.053	.625	-.07	.20	
	UM PTKIN	.043	.054	.858	-.10	.18	
	More	.029	.055	.953	-.11	.17	
More	SPAN PTKIN	.036	.053	.905	-.10	.17	
	UM PTKIN	.014	.053	.993	-.12	.15	
	Independent	-.029	.055	.953	-.17	.11	

Source: Questionnaire data processed by researchers, 2024

Statistically significant mean differences are indicated by a significant value (Sig.) that is less than 0.05. Based on the results of the *Games-Howell post hoc* test in Table 3, it is known that there are no significant differences in student participation in training activities and seminars in the 2022 and 2023 batch students based on the SPAN PTKIN, UM PTKIN, Independent and other pathways. Evidenced by the significant value of SPAN PTKIN with UM PTKIN of $0.977 > 0.05$. SPAN PTKIN with an independent pathway with a sig value of $0.625 > 0.05$. SPAN PTKIN with the pathway with a sig value of $0.905 > 0.05$. UM PTKIN with an independent pathway with a significant value of $0.858 > 0.05$. UM PTKIN with other pathways with a significant value of $0.993 > 0.05$. Then the independent path with SPAN PTKIN with a significant value of $0.625 > 0.05$. Independent with other pathways with a significant value of $0.953 > 0.05$. Based on the analysis that students who enter from these four pathways follow almost the same seminar / training activities so that no one dominates students from one of the entry pathways.

Table 4 Games-Howell Post Hoc Test - Student Intensity in Training/Seminar Activities

(I) Path_Entry	(J) Path_Entry	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
SPAN PTKIN	UM PTKIN	.057	.100	.941	-.20	.32
	Independent	.150	.101	.444	-.11	.41
	More	.078	.101	.865	-.18	.34
UM PTKIN	SPAN PTKIN	-.057	.100	.941	-.32	.20
	Independent	.093	.099	.786	-.16	.35
	More	.021	.100	.997	-.24	.28
Independent	SPAN PTKIN	-.150	.101	.444	-.41	.11
	UM PTKIN	-.093	.099	.786	-.35	.16
	More	-.072	.100	.890	-.33	.19
More	SPAN PTKIN	-.078	.101	.865	-.34	.18
	UM PTKIN	-.021	.100	.997	-.28	.24
	Independent	.072	.100	.890	-.19	.33

Source: Questionnaire data processed by researchers, 2024

Statistically significant mean differences are indicated by a significant value (Sig.) that is less than 0.05. Based on the results of the *Games-Howell post hoc* test in Table 4, it is known that there is no significant difference in the intensity of students in training activities and seminars in the 2022 and 2023 batch students based on the SPAN PTKIN, UM PTKIN, Independent and other pathways. Evidenced by the significant value of SPAN PTKIN with UM PTKIN of $0.941 > 0.05$. SPAN PTKIN with an independent pathway with a sig value of $0.444 > 0.05$. SPAN PTKIN with the pathway with a sig value of $0.865 > 0.05$. UM PTKIN with an independent pathway with a significant value of $0.786 > 0.05$. UM PTKIN with other pathways with a significant value of $0.997 > 0.05$. Then the independent path with SPAN PTKIN with a significant value of $0.444 > 0.05$. Independent with other pathways with a significant value of $0.890 > 0.05$. Based on the analysis that students who enter from these four pathways have almost the same seminar / training intensity so that no one dominates students from one of the entry pathways.

Table 5 Games-Howell Post Hoc Test-Student Organisation Activities

(I) Path_Entry	(J) Path_Entry	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
SPAN PTKIN	UM PTKIN	.029	.059	.963	-.12	.18
	Independent	-.043	.058	.883	-.19	.11
	More	-.071	.058	.605	-.22	.08
UM PTKIN	SPAN PTKIN	-.029	.059	.963	-.18	.12

	Independent	-.071	.059	.615	-.22	.08
	More	-.100	.058	.314	-.25	.05
Independent	SPAN PTKIN	.043	.058	.883	-.11	.19
	UM PTKIN	.071	.059	.615	-.08	.22
More	SPAN PTKIN	-.029	.057	.959	-.18	.12
	UM PTKIN	.071	.058	.605	-.08	.22
Independent	SPAN PTKIN	.100	.058	.314	-.05	.25
	UM PTKIN	.029	.057	.959	-.12	.18

Source: Questionnaire data processed by researchers, 2024

Statistically significant mean differences are indicated by a significant value (Sig.) that is less than 0.05. Based on the results of the *Games-Howell post hoc* test in Table 5, it is known that there is no significant difference in the involvement of student organisational activities in the 2022 and 2023 batches based on the SPAN PTKIN, UM PTKIN, Independent and other pathways. Evidenced by the significant value of SPAN PTKIN with UM PTKIN of $0.963 > 0.05$. SPAN PTKIN with an independent pathway with a sig value of $0.883 > 0.05$. SPAN PTKIN with the pathway with a sig value of $0.605 > 0.05$. UM PTKIN with an independent pathway with a significant value of $0.615 > 0.05$. UM PTKIN with other pathways with a significant value of $0.314 > 0.05$. Then the independent path with SPAN PTKIN with a significant value of $0.883 > 0.05$. Independent with other pathways with a significant value of $0.959 > 0.05$. Based on the analysis that students who enter from these four pathways are active in organisations so that no one dominates from one of the entry pathways.

Table 6 Games-Howell Post Hoc Test - Type of Student Organisation

(I) Path_Entry	(J) Path_Entry	Mean Differenc e (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound Upper Bound	
SPAN PTKIN	UM PTKIN	.014	.092	.999	-.22	.25
	Independent	.086	.092	.788	-.15	.32
	More	.143	.090	.384	-.09	.37
UM PTKIN	SPAN PTKIN	-.014	.092	.999	-.25	.22
	Independent	.071	.089	.852	-.16	.30
	More	.129	.086	.444	-.09	.35
Independent	SPAN PTKIN	-.086	.092	.788	-.32	.15
	UM PTKIN	-.071	.089	.852	-.30	.16
	More	.057	.087	.912	-.17	.28
More	SPAN PTKIN	-.143	.090	.384	-.37	.09

UM PTKIN	-.129	.086	.444	-.35	.09
Independent	-.057	.087	.912	-.28	.17

Source: Questionnaire data processed by researchers, 2024

Statistically significant mean differences are indicated by a significant value (Sig.) that is less than 0.05. Based on the results of the *Games-Howell post hoc* test in table 6, it is known that there is no significant difference in the type of organisation followed by students in the batch of 2022 and 2023 based on the SPAN PTKIN, UM PTKIN, Independent and other pathways. Evidenced by the significant value of SPAN PTKIN with UM PTKIN of $0.963 > 0.05$. SPAN PTKIN with an independent pathway with a sig value of $0.999 > 0.05$. SPAN PTKIN with a pathway with a sig value of $0.788 > 0.05$. UM PTKIN with an independent pathway with a significant value of $0.853 > 0.05$. UM PTKIN with other pathways with a significant value of $0.444 > 0.05$. Then the independent path with SPAN PTKIN with a significant value of $0.788 > 0.05$. Independent with other pathways with a significant value of $0.912 > 0.05$. Based on the analysis that students from the four university entrance pathways have the same organisational activeness both intra-campus and extra-campus so that no one dominates from one of the entrance pathways.

Table 7 Post Hoc Games-Howell Test of Student Award

(I) Path_Entry	(J) Path_Entry	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
SPAN PTKIN	UM PTKIN	-.014	.026	.947	-.08	.05
	Independent	.000	.028	1.000	-.07	.07
	More	.029	.031	.791	-.05	.11
UM PTKIN	SPAN PTKIN	.014	.026	.947	-.05	.08
	Independent	.014	.026	.947	-.05	.08
	More	.043	.029	.462	-.03	.12
Independent	SPAN PTKIN	.000	.028	1.000	-.07	.07
	UM PTKIN	-.014	.026	.947	-.08	.05
	More	.029	.031	.791	-.05	.11
More	SPAN PTKIN	-.029	.031	.791	-.11	.05
	UM PTKIN	-.043	.029	.462	-.12	.03
	Independent	-.029	.031	.791	-.11	.05

Source: Questionnaire data processed by researchers, 2024

Statistically significant mean differences are indicated by a significant value (Sig.) that is less than 0.05. Based on the results of the *Games-Howell*

post hoc test in table 7, it is known that there is no significant difference in the awards achieved by students in the class of 2022 and 2023 based on the SPAN PTKIN, UM PTKIN, Independent and other pathways. Proven by the significant value of SPAN PTKIN with UM PTKIN of $0.947 > 0.05$. SPAN PTKIN with an independent pathway with a sig value of $0.791 > 0.05$. SPAN PTKIN with other pathways with a sig value of $0.788 > 0.05$. UM PTKIN with an independent pathway with a significant value of $0.947 > 0.05$. UM PTKIN with other pathways with a significant value of $0.462 > 0.05$. Then the independent path with SPAN PTKIN with a significant value of $1 > 0.05$. Independent with other pathways with a significant value of $0.791 > 0.05$. Based on the analysis that students from the four college entrance pathways have the same award so that no one dominates from one of the entrance pathways.

Table 8 Post Hoc Games-Howell Test of Student Scholarship

(I) Path_Entry	(J) Path_Entry	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
SPAN PTKIN	UM PTKIN	.036	.048	.877	-.09	.16
	Independent	-.014	.045	.989	-.13	.10
	More	.000	.046	1.000	-.12	.12
UM PTKIN	SPAN PTKIN	-.036	.048	.877	-.16	.09
	Independent	-.050	.047	.710	-.17	.07
	More	-.036	.048	.877	-.16	.09
Independent	SPAN PTKIN	.014	.045	.989	-.10	.13
	UM PTKIN	.050	.047	.710	-.07	.17
	More	.014	.045	.989	-.10	.13
More	SPAN PTKIN	.000	.046	1.000	-.12	.12
	UM PTKIN	.036	.048	.877	-.09	.16
	Independent	-.014	.045	.989	-.13	.10

Source: Questionnaire data processed by researchers, 2024

Statistically significant mean differences are indicated by a significant value (Sig.) that is less than 0.05. Based on the results of the *Games-Howell post hoc* test in table 8, it is known that there is no significant difference in student scholarships in the class of 2022 and 2023 based on the SPAN PTKIN, UM PTKIN, Independent and other pathways. Evidenced by the significant value of SPAN PTKIN with UM PTKIN of $0.877 > 0.05$. SPAN PTKIN with an independent pathway with a sig value of $0.989 > 0.05$. SPAN PTKIN with other pathways with a sig value of $1 > 0.05$. UM PTKIN with an independent pathway with a significant value of $0.710 > 0.05$. UM PTKIN with other pathways with a significant value of $0.877 > 0.05$. Then the independent path with SPAN PTKIN with a significant value of $0.989 > 0.05$. Independent with other pathways with a significant value of $0.989 > 0.05$. Based on the analysis that students from the four entrance

pathways to higher education get the same scholarship so that no one dominates from one of the entrance pathways.

Table 9 Games-Howell Post Hoc Test Study Time

(I) Path_Entry	(J) Path_Entry	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
SPAN PTKIN	UM PTKIN	-.150	.103	.469	-.42	.12
	Independent	.207	.111	.247	-.08	.49
	More	-.036	.109	.988	-.32	.25
UM PTKIN	SPAN PTKIN	.150	.103	.469	-.12	.42
	Independent	.357*	.103	.003	.09	.62
	More	.114	.101	.667	-.15	.37
Independent	SPAN PTKIN	-.207	.111	.247	-.49	.08
	UM PTKIN	-.357*	.103	.003	-.62	-.09
	More	-.243	.109	.116	-.52	.04
More	SPAN PTKIN	.036	.109	.988	-.25	.32
	UM PTKIN	-.114	.101	.667	-.37	.15
	Independent	.243	.109	.116	-.04	.52

Statistically significant mean differences are indicated by a significant value (Sig.) that is less than 0.05. Based on the results of the *Games-Howell post hoc* test in table 9, it is known that there are significant differences in student scholarships in the batches of 2022 and 2023 based on the SPAN PTKIN, UM PTKIN, Independent and other pathways . Evidenced by the significant value of SPAN PTKIN with UM PTKIN of $0.469 > 0.05$. SPAN PTKIN with an independent pathway with a sig value of $0.247 > 0.05$. SPAN PTKIN with other pathways with a sig value of $0.988 > 0.05$. UM PTKIN with an independent pathway with a significant value of $0.003 < 0.05$, so there is a significant difference. UM PTKIN with other pathways with a significant value of $0.667 > 0.05$. Then the independent path with SPAN PTKIN with a significant value of $0.247 > 0.05$. Independent with other pathways with a significant value of $0.116 > 0.05$. Based on the analysis that students from the four university entrance pathways have the same study time, but specifically for students with UM PTKIN and independent entrance pathways have significant differences.

Student Perceptions of the New Student Admission Process

In this section, students' perceptions of the new student admission process are presented with the hope that it can be an input for the next new

student admission process.

Table 10 Student satisfaction with the selected admission pathway

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	STS	8	1.4	1.4	1.4
	TS	14	2.5	2.5	3.9
	R	136	24.2	24.2	28.2
	P	219	39.0	39.0	67.2
	SP	184	32.8	32.8	100.0
	Total	561	100.0	100.0	

Based on table 15, respondents who answered strongly disagree were 8 students with a percentage of 1.4%. Then the respondents who answered disagree were 10 students with a percentage of 2.5%. Respondents who answered doubt as many as 136 with a percentage of 24.2%. Then the respondents who answered satisfied were 219 with a percentage of 39%. Respondents who answered very fast were 184 with a percentage of 32.8%. So it can be concluded that the students of Class 2022 and 2023 are satisfied with the process and system of new student admissions chosen.

Table 11 Admission pathways affecting academic performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	STS	41	7.3	7.3	7.3
	TS	94	16.8	16.8	24.1
	R	217	38.7	38.7	62.7
	P	128	22.8	22.8	85.6
	SP	81	14.4	14.4	100.0
	Total	561	100.0	100.0	

Based on table 11, 41 respondents who answered strongly disagree with a percentage of 7.3%. Then the respondents who answered unsatisfied were 94 with a percentage of 16.8%. Respondents who answered doubt as many as 217 with a percentage of 38.7%. Respondents who answered satisfied were 128 with a percentage of 22.8%. For respondents who answered very fast as many as 81 with a percentage of 14.4%. So it can be concluded that students are satisfied with the chosen admission path that can affect their

academic performance.

Table 12 Factors affecting academic achievement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Teaching Quality	65	11.6	11.6	11.6
	Self Motivation	268	47.8	47.8	59.4
	Learning environment	157	28.0	28.0	87.3
	Parent/family support	62	11.1	11.1	98.4
	More	9	1.6	1.6	100.0
	Total	561	100.0	100.0	

Based on table 12, 65 respondents chose teaching quality with a percentage of 11.6%. Respondents who chose self-motivation were 268 with a percentage of 47.8%. Respondents who chose the learning environment were 157 with a percentage of 28%. Respondents who chose parental and family support were 62 with a percentage of 11.1% and respondents who became others were 9 with a percentage of 1.6%. So it can be concluded that self-motivation is the main factor affecting academic achievement.

Discussion

Based on the test results, it is known that there are significant differences in the academic achievement of students in the 2022 and 2023 batches based on the SPAN PTKIN, UM PTKIN, Independent and other pathways. Based on the cumulative achievement index (GPA) indicator of all PMB pathways has a GPA of 3.01 - 4.00. This happens one of them is influenced by the same academic standards, after students are accepted, they are faced with the same curriculum and academic demands. According to Heywood (2000), they follow the same lectures, assignments, and exams so that over time, the initial differences from the entry pathways will shrink due to the uniform learning and assessment process. In addition, students from various pathways are generally able to adjust to the academic climate in each study programme either through the help of lecturers, friends or academic guidance. This adaptation makes the difference from the initial entry pathway less influential on student GPA achievement. Admission pathways such as SPAN PTKIN, UM PTKIN, Mandiri and other pathways have sufficient minimum standards to ensure that students have good basic academic abilities. Although the selection method is different, those admitted still have similar basic abilities, so the difference in GPA between

them can be small. In the indicator of the number of credits taken by students who enter through these four pathways, there is no significant difference because the availability of courses and class schedules is the same. Each study programme has a set schedule every semester. All students from any pathway access the same classes, so the number of credits taken also depends on the availability of classes and time, not on the entry pathway. Based on the results of the distribution of questionnaires, students of batches 2022 and 2023 who are now in semesters 3 and 5 take an average package of 16-20 credits and 21-24 credits.

The indicator of student involvement in seminar activities has no significant difference between students who enter through the four PMB channels. This is due to the equal opportunity for every student, universities provide equal access to seminars, training, and self-development activities for all students, regardless of their admission pathway (Kubiak et al., 2018). Information and opportunities to participate are usually disseminated equally to all students. Participation in seminars or trainings is more often influenced by personal motivation, interest in a particular field or a desire to develop skills (Bell et al., 2017; De Barba et al., 2016). These factors are usually not dependent on the student's entry pathway, but rather on their individual goals. According to Kivunja (2015) all students have the same need to develop themselves to improve career prospects and skills. Seminars and training are often considered important tools in this regard, so all students tend to have the same interest in participating (Masika & Jones, 2016; Szymkowiak et al., 2021).

The indicator of being active in student organisations has no significant difference between students who enter through the four PMB channels. Campus organisations, both intra such as the Executive Student Council (DEMA Eksekutif), Executive Student Senate (SEMA Eksekutif) and student associations as well as extra-campus organisations and regional organisations, are open to all students regardless of entry pathway. All students have the same rights and opportunities to join and be active in

these organisations. Many students join organisations to develop soft skills, social networks, and leadership experience (Cimatti, 2016; Khasanzyanova, 2017; Ritter et al., 2018). These needs are the same among all students, regardless of their admissions pathway. They see all-campus organisations as a platform for personal and career development and therefore have equal levels of participation (Fallon & Stockstill, 2018). Involvement in organisations is often driven by a sense of leadership or an individual's interest in social, cultural or religious issues (Gotsis & Grimani, 2017; Hunsaker, 2016; Kaya, 2015). These motivations are personal and unrelated to admission pathways, so students from different pathways have equal opportunities to be active in organisations.

The indicator of getting a scholarship has no significant difference between students who enter through the four PMB channels. Scholarship criteria are basically based on merit and economic conditions (Schimanski & Alperin, 2018; Schudde & Scott-Clayton, 2016). Most scholarships offered by universities and government or private institutions focus on academic criteria (merit and GPA) or economic conditions (scholarship assistance). These criteria apply equally to all students, regardless of entry point, so students from different entry points have the same opportunity to fulfil the scholarship requirements (Dalla & Kewuel, 2023). Students of UIN Sunan Gunung Djati Bandung have the same opportunity to get scholarships such as LPDP scholarships, Generasi Bank Indonesia, KIP Kuliah, Jabar Future Leader Scholarship, city / regional government scholarships, BAZNAS, Djarum Foundation and other scholarships from public and private institutions. The scholarship selection process often prioritises transparency and openness so that equal opportunities are given to all students (Pitman, 2016). Clear selection criteria make students from various admission channels have equal rights and opportunities to get scholarships. Scholarship motivation also relies heavily on individual student motivation and ability to fulfil scholarship requirements (Boatman & Long, 2016; Kay & Kibble, 2016). Focuses such as discipline in studying

and perseverance in applying for scholarships are more decisive than admission pathways.

Awards are given based on specific achievements and criteria, such as GPA, scholarly work, leadership, or achievements in arts or sports (Barbee, 2016; Freeman, 2017). These criteria apply equally to all students regardless of entry pathway. This allows students from any pathway to have an equal chance of getting the award. UIN Sunan Gunung Djati Bandung provides various self-development programs, such as student organisations, competitions, and seminars, which all students can participate in. These activities allow students from all pathways to develop their potential and excel. Equal opportunities to get involved in the campus environment make the chances of achieving awards relatively balanced. UIN Sunan Gunung Djati Bandung encourages equitable participation and achievement by rewarding students who excel in academic and non-academic fields regardless of their admission path. The focus is more on the results and contributions of students rather than their admissions pathway.

There are differences in the intensity of study outside of class hours, and there are also no differences. Students who enter through the SPAN PTKIN, UM PTKIN, and other pathways have no difference. However, students who enter through the UM PTKIN and Independent pathways have significant differences. The UM PTKIN route generally has a stricter academic selection than the Independent route. Students who enter through UM PTKIN often have higher academic scores or a more solid academic background. This selection can create a group of students who are more accustomed to high study intensity, which continues to carry over during college. This may encourage them to maintain high study intensity outside of university (Bicen & Kocakoyun, 2018; Wechsler, 2017). As the UM PTKIN selection is more competitive, these students may already have a stronger academic foundation and more disciplined study habits. Independent pathway students, who are accepted by a different selection, do not yet have structured study habits, so their study intensity outside of lectures tends to

be lower.

In addition to examining differences in academic achievement, this study also presents the results of students' perceptions of the admission system. The classes of 2022 and 2023 were satisfied with the process and system of new student admissions chosen with 184 respondents who answered very satisfied with a percentage of 32.8%. UIN Sunan Gunung Djati Bandung implements a transparent and structured admission system, so that students can easily understand the selection stages, requirements, and a clear timeline. This creates trust in the system and reduces confusion during the admission process. By using an online system, prospective students can register more easily without having to come directly to campus. This technology makes it easier to access information, submit documents, and check selection results, which is considered efficient especially for prospective students from out of town. UIN Sunan Gunung Djati Bandung's admission system is based on academic achievement and objective selection criteria. Students feel that this merit-based selection provides fair opportunities for all participants, so they feel that the selection results are the result of their own efforts and qualifications.

Then all respondents chose self-motivation to be the main factor influencing academic achievement. Students who have high self-motivation tend to be more proactive in learning (Geller, 2016; Ruijuan et al., 2023). They take the initiative to look for additional materials, deepen their understanding through independent research, or discuss with lecturers and friends. This is very different from passive learning patterns, where students only depend on material from lecturers. The world of lectures often presents great challenges, such as difficult material, complex assignments, and schedule pressure (Islam et al., 2015; Simamora, 2004). Students who have strong self-motivation do not give up easily when facing these challenges (Wijaya, 2024). They are able to stay focused and motivated to find solutions, overcome difficulties, and continue to strive to achieve their academic goals. Self-motivation is often driven by long-term visions, such

as career ambitions or self-development (Almistarihi, 2020). With strong motivation, students are more motivated to master skills and knowledge that will be useful in the future, both for work and for personal life (Cook & Artino Jr, 2016; Seli, 2019). They are more purposeful in learning and more serious in achieving academic performance because they realise the long-term impact.

The results of this study are in line with research conducted by Sardjito et al. (2013) and Riezky (2016) that there are no differences in student academic achievement based on entry pathways. Entry pathways have different selection criteria, the learning process at UIN Sunan Gunung Djati is equitable and provides equal access to all students to develop academic potential. The curriculum, teaching quality, educational facilities, and learning environment provided are designed to support the success of all students regardless of admission pathway. Students' ability to adapt to the learning system can reduce the impact of differences in initial background, including selection pathways. Factors such as individual motivation, social support and access to learning resources determine academic success more than the pathway to university. Finally, it is likely that small differences in the initial quality of students from each selection pathway may become insignificant once they undergo a uniform and consistent learning process. This suggests that the education system at UIN Sunan Gunung Djati Bandung is successful in creating an inclusive and equitable environment for all students, regardless of their admission pathway.

The finding that there is no significant difference in academic achievement between admission pathways may encourage UIN Sunan Gunung Djati Bandung to continue strengthening inclusive learning systems, such as equal access to academic facilities, qualified lecturers, and guidance that supports student development. UIN Sunan Gunung Djati Bandung can utilise these results to de-stigmatise students from certain pathways, for example, the independent pathway which is often considered less competitive. This finding enriches theoretical studies on the

effectiveness of student selection systems in higher education, especially in PTKIN. It shows that the initial quality of students is not the only predictor of academic success in higher education. The findings emphasise the importance of educational environment factors, such as teaching quality and facilities, in creating academic equality among students with different backgrounds. This research can serve as a foundation for further studies on other factors that influence academic achievement, such as learning motivation, student engagement or socio-economic conditions.

The results can be used by the government and PTKIN managers to evaluate the effectiveness of the current selection system. This includes adjusting the admission criteria to keep it relevant to the needs of the education world. University policies can be directed to ensure that all selection channels, including independent channels, remain transparent and fair so that the public believes in the credibility of the admission system. Universities can develop mechanisms to monitor students' academic performance to identify needs and provide timely intervention to students who need support. The results of this study can be used to direct data-driven educational development policies, such as the efficient allocation of educational resources to support student success.

CONCLUSION

This study concludes that admission pathways at UIN Sunan Gunung Djati Bandung (SPAN PTKIN, UM PTKIN, Independent, and others) do not significantly affect students' academic performance, including GPA, credits taken, seminar participation, or organisational involvement. A notable exception was found in study intensity, where students admitted through UM PTKIN exhibited higher engagement than those through Independent pathways. The standardised curriculum and academic environment at UIN Sunan Gunung Djati Bandung help bridge initial differences among students from various admission pathways.

This research contributes to the understanding of how inclusive educational systems, especially at PTKIN, minimise disparities in student

performance based on entry pathways. It reinforces the importance of institutional factors, such as teaching quality and equal access to facilities, in achieving academic equity. The study also highlights the role of internal motivation as a critical determinant of student success, transcending admission pathways.

This study is limited to analysing academic performance based on specific indicators, such as GPA and study intensity. Future research should explore additional variables, such as socio-economic background and long-term career outcomes, to provide a more comprehensive understanding. Expanding the study to other PTKIN institutions could also validate the findings and contribute to policy recommendations for broader implementation.

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