

Academic Performance Among Malaysian Graduates: Before and After

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Introduction

Opportunities for a better education in our many public universities are ever increasing. Students who are given the chance to receive higher education in any public university in Malaysia are subsidised by the government and, therefore, are determined by national policies. As of 2001, the number of students enrolling for first degrees in public universities stood at 157,889 and the number of graduates produced that year was 32,924. It is well accepted that the quality of the graduates is often measured by their class degrees or the final grades earned which is commensurate with the Cumulative Grade Point Average (CGPA) achieved.

However, have we ever wondered at the number of our graduates who actually acquired academic value-added experiences in our public universities? In other words, how many of our students actually entered with a low academic performance but improved while in university to the point of becoming an excellent student? Does the level of achievement of a student before entering university more or less determine the level of achievement of the student while in university?

In pursuance of the study by Universiti Sains Malaysia for IPPTN, entitled 'Graduate

Unemployment among Public Institutions of Higher Learning (PIHL)', the current paper aims to look at the relationship between the level of academic achievement of students before being accepted into a university (i.e. at the STPM, Diploma and Matriculation levels) and the CGPA achieved for their university degree.

The Method

The study employed the same data set gathered from a research survey carried out by IPPTN on graduates of PIHL who graduated in 2001 (for further details of the survey see Morshidi Sirat et al. 2004). A value-added approach using z-score analysis was used to study the academic achievement of students for a specified time period which was the pre to post-university period. Public university graduates with different entry qualification backgrounds were studied to measure the value-added among university graduates. Three different entrance qualifications were considered, namely the matriculation certificate, STPM and diplomas results.

For the purpose of the study, several assumptions need to be highlighted. Firstly, the determination of students' quality depends on their examination results used to enter the university. Pre-university academic achievements at STPM, matriculation and diploma levels

are the bases for measuring students' academic standing or academic quality. Secondly, it is accepted that the achievement of a university student not only depends on innate abilities of the student (e.g., better mental ability or high I.Q.s as well as learning potentials) but also several other factors. These other influences, such as family background, friends, university system and the lecturers, however, are exempted in this study. Therefore, the study fully focuses on and explores only academic qualifications. Furthermore, the objective of this study is not to consider all the factors affecting the quality of students and the quality of graduates as such study requires a larger amount of data and longer time, particularly with regard to the input variables. The study also assumes that the element of education cost, as a factor, does not influence the academic achievements of students. Finally, it must be made clear that for this study, students with CGPAs that are below average are considered low achievers in their academic performance or below-average students. University students with CGPAs above the average score are considered high achievers or excellent students in their academic performance.

The Findings

Table 1 reveals that of the 542 respondents who entered university using their matriculation certificate, 51.8 percent were in the lower category of academic achievement while 48.2 percent were in the higher category of academic achievement when they were studying at matriculation level. As university students, 67.3 percent of the respondents with low academic achievement during matriculation continued to be classified in the low achievement category while only 32.7 percent managed to improve academically and were placed in the high achievement category.

It was also found that 9.4 percent of the respondents experienced value-added in their academic achievement. These were those who had low academic performance at the matriculation level but improved at university. In contrast, 24.9 percent of the respondents experienced value-subtraction in their academic achievement, meaning that almost a quarter of the students with good matriculation results did not do well once they entered university.

From these results it could be inferred that a majority of those who entered a particular university with good matriculation results continued to maintain their good standing at university level, whereas those with low achievement at matriculation continued to show low performance at the university. Also, it must be highlighted that there were some students who did well in matriculation but failed to maintain their good academic performance once at university level.

As with the findings on respondents

with matriculation entrance qualification, the majority of respondents with STPM entrance qualification were also in the category of low academic achievement prior to entering university. Table 2 shows that 58 percent of the 795 respondents were in the low academic performance level and 42 percent were in the high academic achievement category.

However, it is interesting to note that the majority of the students with a STPM background are in the category of high academic achievement at university level. Data from Table 2 reveals that 56.1 percent of the respondents are high achievers and only 43.9 percent are low achievers. The findings also reveal that almost 30 percent of these respondents demonstrated good academic achievement at both STPM and university levels.

From this it could be said that a greater number of respondents with STPM qualification acquired value-added in their academic performance. The results reveal that 26.3 percent of respondents experienced value-added and only 12.2 percent experienced value-subtraction in their academic performance.

The question next is how the graduates with a diploma entrance qualification fared when it came to having a value-added academic performance. Firstly, it must be noted that 51.2 percent of 205 respondents with diploma qualifications were in the category of low academic achievement at a diploma level before entering university as compared to 48.8 percent who were in the higher academic achievement category. From Table 3, it is found that 31.7 percent of the respondents with a

diploma who achieved a good academic standing when at diploma level continued to maintain similar level of performance in the university. On the other hand, a total of 32.7 percent of the said respondents who had a low performance at the diploma level continued to perform below par at university level.

Data from Table 3 also shows that 18.5 percent of graduates who entered university on the basis of their diploma qualifications acquired value-added academic standing while 17.1 percent of the respondents acquired less value in their academic standing in the university.

Implications and Suggestions

This study has clearly shown that the majority of graduates in our local universities who achieved a weak performance in university, had already a low academic achievement at the pre-university level (be it matriculation or STPM). In other words, the majority of students who did not do well in pre-university examinations will continue to perform poorly when they enter university.

However, what is interesting from this study is the concept of value-added to academic standing obtained by the graduates produced. Regardless of entrance qualification, it is found that the number acquiring value-added is greater than those who experienced value-subtracted. The number acquiring value-added is most significant among those with STPM qualification.

This study suggests that there is still the possibility that a small percentage of students entering university with average results will

be able to improve their standing and graduate with good and excellent academic results. It would be interesting to conduct a specific study on students who obtained weak-to-excellent results to discover the factors that promoted this transformation. Universities and students committed to academic excellence would be able to work together to increase the percentage of students who have a value-added experience while in university.

Secondly, this study also suggests that appropriate measures need to be taken by universities to ensure that services provided to the students do not culminate merely in the issuance of a degree scroll, but also succeed in transforming the weak students at the pre-university level to excellent students in the university. Universities will need to re-evaluate their goals to produce graduates or who have undergone a radical change while in university

culminating in achieving their optimum academic standing and quality of being.

Lastly, for all involved in this business of educating the masses, this study has demonstrated that it is not enough just to produce graduates; it is better to produce men and women who have learnt to learn and transform their lives.

References

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Academic performance at matriculation level	Academic performance at university level		Total (%)
	High (%)	Low (%)	
High	126 (23.3)	135 (24.9)	261 (48.2)
Low	51 (9.4)	230 (42.4)	281 (51.8)
Total (%)	177 (32.7)	365 (67.3)	542 (100.0)

Table 1: Academic Performance of Graduates with Matriculation Entry Qualification

Academic performance at STPM level	Academic performance at university level		Total (%)
	High (%)	Low (%)	
High	237 (29.8)	97 (12.2)	334 (42.0)
Low	209 (26.3)	252 (31.7)	461 (58.0)
Total (%)	446 (56.1)	349 (43.9)	795 (100.0)

Table 2: Academic Performance of Graduates with STPM Entry Qualification

Academic performance at diploma level	Academic performance at university level		Total (%)
	High (%)	Low (%)	
High	65 (31.7)	35 (17.1)	100 (48.8)
Low	38 (18.5)	67 (32.7)	105 (51.2)
Total (%)	103 (50.2)	102 (49.8)	205 (100.0)

Table 3: Academic Performance of Graduates with Diploma Entry Qualification