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Tracing Indigenous Students' Academic Performance in A Malaysian Higher Education Institution: The Foci of Scholarship to Orang Asli

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Abstract

This research is embarked to assess the overall performance of the indigenous students in a special pre-diploma programme at Universiti Teknologi MARA (UiTM) known as "Mengubah Destini Orang Asli (MDOA)" (or translated as "Changing the Destiny of the Indigenous People"). The programme is for those unable to further their studies in public universities for not meeting the minimum entry requirements. The performance of 246 Orang Asli students enrolled in the MDOA programme for the year 2010 to 2017 was analysed descriptively using Microsoft Excel. The enrolment data for this programme in seven of UiTM's state campuses i.e., Pahang, Perak, Melaka, Kelantan, Johor, Negeri Sembilan and Pulau Pinang were obtained from UiTM's Centre for Strategic Planning and Information. The results showed that a total of 167 or 68% of indigenous students were successful in their pre-diploma programme and managed to further their studies at the diploma level. However, only 97 students or 58% of them completed their diploma studies. Additionally, 14 students or 6% of those diploma graduates had continued their studies to a bachelor degree. The indigenous students enrolled for MDOA programme are fully sponsored by the Department of Orang Asli (Indigenous) Development of Malaysia. The number of students enrolled from 2010 until 2017 are 246 indigenous students. Based on this study, the overall performance showed that the programme has indeed succeeded in guiding the indigenous students to further their studies at a higher level, particularly at pre-diploma level. This study is the first to trace the overall performance of indigenous students enrolled in a special prediploma programme by UiTM which specifically designed for underqualified and underprivileged students. This is important to justify the investment made by the government and to validate the usefulness of such remedial courses.

Keyword: Academic Performance, Destiny, Indigenous, Pre-Diploma, Scholarship

Introduction

Malaysia is known as an international education hub for higher learning institutions. Former Education Minister, Dr Maszlee Malik in an announcement mentioned that the ministry has identified four groups to be enrolled in higher education institutions nationwide starting 2019 by providing a "special lane". The four groups are athletes, Orang Asli (indigenous), B40 group (the bottom 40% of households with monthly income below RM4,000) and the disabled ("Helping the underprivileged", 2019). Therefore, the ministry and university have undertaken various actions and programmes to encourage more enrolment of the groups. Hence, Universiti Teknologi MARA, Malaysia (UiTM) in manifesting its corporate social responsibility established an office known as Pejabat Programme Mengubah Destini Anak Bangsa (MDAB) (or translated as Office for Changing Destiny of Nations' Children Programme) in June 2010 and renamed to Pejabat Programme Pra Pendidikan Tinggi (PPT) (or translated as Office for Pre-Higher Education *Programme*) in May 2019. This unique programme is self-funded by salary deduction of UiTM's staff, and contributions by corporate organizations with the objective to allow Bumiputera students who fail to meet the minimum entry requirement to higher learning institutions of at least a pass for Mathematics, English and History with minimum three Credits including Malay Language of the Malaysian Certificate of Education (Sijil Pelajaran Malaysia - SPM) to further their study in programmes such as the Pre-Diploma Programme (i.e. either Pre-Commerce or Pre-Science). These students shall be fully sponsored in terms of tuition and hostel fees as well as bi-weekly living allowances provided for students from B40 family of less than RM4,000 monthly gross income.

The PPT Pre-Diploma Programme is a unique preparatory programme which can be considered as a remedial programme. This is because its two programmes i.e., the Pre-Commerce programme helps students to enhance Mathematics and English language, while the Pre-Science programme focuses on enhancing the understanding of science subjects such as Physics, Chemistry and Biology. Thus, it is rather interesting to find out whether going through such remedial programmes will help those students to excel in their studies and further continue later to the diploma programme of their choice. Similarly, the PPT Office is also responsible to handle enrolment of indigenous students who have similar SPM results to enrol in Pre-Diploma Programme and to further their studies to higher level of education. This special programme for indigenous people is fully sponsored by Jabatan Kemajuan Orang Asli (JAKOA – Department of *Indigenous People Development*). Thus, it is crucial in the objective of this study to identify the academic performance and background of this group of indigenous students that benefits from the allocation provided by UiTM as well as full scholarship by JAKOA. This study is significant to ascertain whether such remedial course and financial assistance as such have indeed met its objectives and helped the students to perform well in their studies despite their below par qualifications and socio-background. This paper aims to assess the overall performance of indigenous students of MDOA programme for the past 7 years from year 2010 until 2017 for all branches of UiTM, collectively.

Literature Review

It is a generally accepted notion that education leads to accelerated human development, poverty reduction and sustained economic growth. As the cost-of-living increases, education costs also continue to rise. Therefore, affordability in furthering study towards tertiary level is one of the major challenges' students face today. Some studies have shown that students from better-endowed families perform better in examinations and the adverse effects of poverty on student

performance are well documented (Bernstein, 2007). Hassan and Rasiah (2011) found that higher schooling expenditure by parents has a positive correlation with student's academic performance which was also proved to be directly related to higher-income parents. Their study further confirmed that poverty in rural areas is invariably linked to lower student achievement and thus ultimately suggested that providing sufficient financial assistance such as subsidies and scholarships for poor students should continue to be very high on policy agenda. A study by Bakri, Razak, Rahman, and Khalid (2005) among management undergraduate students of a public university in Malaysia who had underperformed in their studies, found that these students were common among the lower end of socio-economic status, Malay ethnicity, introvert personality, lack in self-confidence, and require additional training with regards to career guidance, time management, effective communication, and study skills, hence suggesting a scholarship in order to provide the required financial support and to increase their morale and confidence toward completing higher education.

A scholarship is an award of financial aid for a student to further his or her education based upon various criteria, which usually reflects the values and purposes of the donor or sponsor of the award. While scholarships contribute to student's success, it is important to note that scholarships alone do not ensure successful completion. Although scholarships of all types are valuable to the students who receive them, research shows that scholarships that are awarded based on financial needs have the potential to create profound impact, both for students and their families, as well as entire communities (Goldrick-Rab, 2010). Scholarships that are primarily based on academic merit i.e., Merit-Based Aid, reward students who have excelled in high school (Lynch, 2018). These students tend to have a higher likelihood of going to college whether they receive a scholarship. They also are likely to receive aid from their chosen postsecondary institution, particularly if it is a well-endowed private college (Goldrick-Rab, 2010). In contrast, scholarships that focused on students with the financial need often play a pivotal role in a student's decision or ability to attend college (Goldrick-Rab, 2010). Therefore, Need-Based Aid is a scholarship or financial assistance afforded to student based on family income and assets (Goldrick-Rab, 2010). In a recent study by Lynch (2018) among the recipients of Boys & Girl Clubs Delaware scholarships in United States found that a need-based scholarship has a significant impact on the students' ability to complete post-secondary education successfully

Additionally, students from poor neighbourhoods exhibited poorer performance on a number of socioeconomic and health outcomes than the students from rich neighbourhoods (Kling, Liebman, & Katz, 2007; Abdullah, 2010). Carter (2013) also demonstrated that students from low-income families failed in schools and required remedial courses while at the university. A remedial course is defined as coursework below college-level and offered at a post-secondary institution (Calcagno & Long, 2008). Carter (2013) found that a remedial course was taken by as many as 1.7 million first-year students entering colleges in the United States of America (USA) and majority of those who need the remedial course are students from low-income families. Carter (2013) listed five factors that contribute to low-income students requiring remedial course, which include lack of exposure to books; language barriers where English is not their first language; lack of stability in terms of income and health; lack of positive academic role models; and they are the first generation in their families to attend college. On the other hand, Aziz, Yatim and Mesir's (2014) study among engineering undergraduate students at a local university in Malaysia who had undergone a special excellent student development programme, found that the students' background i.e. previous secondary school, personal motivation, and financial support were the primary factors of their excellent grade achievements.

With regards to indigenous students' academic performance, there were scarce number of studies worldwide. In New Zealand, Pio and Graham's (2018) study among indigenous Maori teen mothers found that scholarship is very importance for them to continue their education to higher level. In Australia, Tjabal Indigenous Higher Education Centre was established by Australian National University (ANU) in attracting the indigenous students to further their education into higher level as well as helping them dealing with the difficulties of transition to university, to increase indigenous students' retention and graduate rates (Kruk-Buchowska & Wood, 2019). ANU has recommended that it is a necessity to employ more indigenous teaching staff and to increase the Indigenous Cultural Competency (ICC) of non-indigenous staff and students through offering more indigenous content in courses across different programmes (ANU, 2015). This would make the educational offering more meaningful to indigenous students, thereby encouraging more of them to stay in academia (Kruk-Buchowska & Wood, 2019). According to annual National Assessment Programme Literacy and Numeracy (NAPLAN) data, indigenous students are the largest group of repeat under-performers and are routinely underserved by the Australian education system (Department of the Prime Minister and Cabinet, 2016).

Indigenous community in Malaysia are the minority who consist of indigenous peoples in Peninsular Malaysia (legally referred to as Orang Asli) and Natives of Sabah and Sarawak (i.e., the Borneo States of Malaysia). According to Kadir (2019), the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) has broadened international focus on indigenous peoples' positions in the postcolonial context. The Orang Asli population is about 180,000 and have been introduced to various economic development and social development programmes (Ali, 2008). Nowadays there are some of indigenous who have acquired good jobs and positions in a government and private sectors (Er et al., 2010). However, most of the Orang Asli people receive formal education only at the primary level and only two percent have been successful in advancing their higher education in tertiary institutions (Abdullah, Mamat, Amir Zal, & Ibrahim, 2013). Ramle (2010) argued that a handful of Orang Asli communities have a negative attitude towards education because for them, education is not important because they emphasize more on having a simple way of life, that is, just to survive without thinking about future. This negativity is influenced by the socio-economic factors of the family and low parental educational achievement (Gordon & White, 2014). There is also an impression that the Orang Asli students are slow learners with learning difficulties and dyslexia (Edo, 2012; Safari, 2012).

From a geographical perspective, the location of the Orang Asli settlement are scattered and mostly far inland causing difficulties of accessibility and relatively low educational facilities (Mazdi et al., 2014). Doris et al. (2012) and Mazdi et al. (2014) concurred that indigenous peoples who mostly live in the hinterland more tends to have a high dropout rate at every level of education, starting from preschool to higher education institutions. Wan Afizi, et al. (2014) explained that this dropout phenomenon causes them to remain and living in the inferior due to economic, political backwardness nor social. Additionally, adaptability of Orang Asli towards mainstream education system was found as problematic (Abdullah & Mat, 2012). Difficulty in transition from school to university might be due to increase in workload and academic standards, loneliness and homesickness that lead to academic underperformance and withdrawal from university (McMillan, 2013). Besides, Nordin, Hassan@Yahya, Fern, Cherley, and Subramaniam's (2020) review shows that the indigenous students in Malavsia face many challenges such as lack of access to trained teachers, inadequate funding, and lack of knowledge among teachers, in terms of indigenous culture and tradition. A study Abdullah et al. (2013) among indigenous students of Temiar tribe in schools in Kelantan, Malaysia claimed that the standard of education among the Orang Asli people is still low and the common problem is due to the attitude and commitment of teachers which are significantly associated with degrading interest among students and issues of students' attendance and academic performance. Hence, a good and close relationship between educators and students is important among indigenous students (Haron & Boon, 1985). Repeatedly, strong links are drawn between student underperformance and the need for teacher improvement (Harrington, 2013; Hattie, 2003). Students are demotivated by the old stereotype of teaching techniques and are eager to learn when there is a new enrichment pedagogical approach such as 'edutainment' (Ahmad et al., 2011; Aminuddin et al., 2012). Previous studies indicated that a number of teachers have negative attitudes in the context of relationship with indigenous students such as not willing to live in the Orang Asli villages and some are still struggling to understand how to cater for indigenous students' success (Abdullah et al., 2013; Ure et al., 2017). Woodroffe (2020) established that educators' knowledge about indigenous' culture and way of life is vital in improving educational outcomes of indigenous students. Therefore, indigenous educators to elaborate on cultural links, using indigenous knowledge to mentor, guide and co-create appropriate, respectful and expert classroom practices (Buckskin, 2016).

Nevertheless, Nor, Sukimi, and Nor (2018) who interviewed 12 Orang Asli indigenous students of Jakun tribe and their parents in Pahang, Malaysia found that they have improved in terms of their perspective towards education and career choice due to factors of family, school distance, transportation facility, role of teachers, peers and learning aids at schools. Salleh et al. (2009) discovered that indigenous became more aware on the importance of education upon realising other ethnics in Malaysia have grown so much with education. Norwaliza et al. (2016) claimed that various efforts have been done, especially by the Malaysian government so that the Orang Asli community can be included in the mainstream of education. Till to date, UiTM is the only public university in Malaysia that offer Orang Asli a remedial course so that they can further their study in higher level with the scholarship by JAKOA. However, its success story towards this community was never been publicly studied before. Only one study by Julaihi, Mohamadin, Mohamed, and Karim (2017) was conducted to investigate the overall performance of all UiTM's MDAB students (not MDOA) for nine semesters (December 2011 to December 2015) and the results showed that till to date about RM20 million has been spent just for the students' allowance and 83.43% of the overall MDAB students managed to complete the courses and continued their studies at diploma level.

Methodology

This study employed a quantitative procedure for the case of tracing the educational performance of remedial courses of pre-diploma programme enrolled by indigenous or Orang Asli students especially in a Malaysian higher education institution, i.e., in UiTM. This tracing is important to justify the scholarship offered by JAKOA through UiTM's special dedicated academic administration unit called MDA/PPT Office. Hence, this study empirically assessed the population data for overall performance of indigenous students who had studied in all prediploma programme (i.e., Pre-Commerce, Pre-Accountancy, and Pre-Science) offered by MDABT/PPT Office of UiTM, i.e., for the intakes of year 2010 till 2017 at all UiTM's branches throughout Malavsia (in states of Pahang, Perak, Malacca, Kelantan, Johor, Negeri Sembilan, and Pulau Pinang). The total population of all 246 indigenous students from the total pre-diploma students of 38,801 people (i.e., 0.6%) was analysed in this study. The data was obtained from The Centre for Strategic Planning and Information (CSPI), UiTM Shah Alam (i.e., for 15 semesters of intakes, i.e. 2 semesters a year or Jun and Dec intake for 2010 till 2016, and once a year or only, i.e. September intake for 2017 due to UiTM decided to change academic calendar for Pre-Diploma to be similar with Bachelor Degree intake. The census sampling technique was utilised in this study to fully considered all students in the population of indigenous students of the chosen intakes whose ethnicity is either Orang Asli, Jakun, Semai or Temiar. This secondary data was then analysed descriptively using Microsoft Excel 2016. The descriptive analysis was performed to specifically understand the demographic background of the indigenous students, in terms of state of their hometown, religion, and their parents' monthly gross income).

Based on the studied population of 246 pre-diploma students who are indigenous, their educational performance was traced based on 4 criteria; 1) the trends of the intake throughout the 15 semesters to identify any increment or reduction of the enrolment, 2) the indigenous students demographic backgrounds i.e. in terms of their state of hometown, religion, and family monthly income in order to further understand the possible influencing factor for these students' academic performance, 3) whether the indigenous pre-diploma students continue or not their studies to the next level, i.e. diploma programme of UiTM and if they continue, how they perform, 4) the same indigenous students were traced whether they continue or not (dropout) in the next higher educational programme, of bachelor degree in UiTM and if they continue, how they perform. The descriptive statistics were scrutinized as foundation of all data insights where it shall answer the question of "what happened?" and to come up with the information needed to help in making decisions through the application of statistical methods. Overall, the descriptive analysis applied in this study focuses on showing sets of data in its simplest form that will easily be absorbed by people. Summarized data were presented with the usage of pivot table and bar graphs.

Results and Discussion

Based on pre-determined criteria in tracing the overall performance of MDOA students, i.e., the enrolment of Orang Asli students in pre-diploma programme, their demographics, their continuation of study and to the diploma level and its performance, and their continuation and to the bachelor degree level and its performance, the following tables were descriptively presented. Table 1 shows the statistics of intake for all 246 indigenous students who have registered for all Pre-Diploma Programmes managed by PPT Office i.e., Pre-Commerce, Pre-Science and Pre-Accountancy (which only introduced in 2010). Based on Table 1, it was found that indigenous students enrolled for Pre-Diploma at seven UiTM State Branches, and it was found that the highest number of enrolments was on year 2013 (58 students), followed by 2014 (51 students), 2015 (46), and 2016 (43 students). The rest were very little i.e., 17 students for year 2010, 13 students for 2017 (this is due to only 1-semester intake), 13 students also for 2012, and only 5 students on 2011). With the total enrolment of 246 students for the last 15 semesters, the average or mean for the enrolment of indigenous students is only 16 per semester. Regarding the state of hometown for all 246 indigenous students who have registered for all Pre-Diploma Programmes managed by PPT Office. Based on Table 2, it was found that indigenous students were mostly originated from Pahang i.e., 100 students, followed by Perak (55 students), Negeri Sembilan (26 students), Kelantan (25 students), Johor (18 students), Selangor (16 students), Melaka (3 students) and Federal Territory Kuala Lumpur (3 students). On the other hand, it was found that indigenous students mostly do not adhere to any religion i.e., 126 out of 246 total enrolled students (51%), followed by Islam (32.5%), Others (9%), and Christian (7%). In terms of monthly gross income of these indigenous students' parents, majority of them (i.e., 35%) were earning grossly between RM500 to RM999.99 monthly, followed by parents with monthly gross income between RM3,000 to RM3,999.99 (21.5%), between RM1,000 to RM1,999.99 (16%), between RM1 to RM499.99 (15%), and between RM4,000 to RM4,999.99 (7%). The median of the parents' gross income for the indigenous students in this study was between RM500 to RM999.99 monthly.

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Pre-Diploma Programme	2010	2011	2012	2013	2014	2015	2016	2017	Grand Total
Pre-Commerce	9	5	11	56	51	45	40	12	229
UiTM Pahang	9	4	9	32	23	15	4	6	102
UiTM Perak		1		14	14	10	12	1	52
UiTM Melaka			1	4	7	9	10	2	33
UiTM Kelantan					6	11	6	2	25
UiTM Johor			1	6	1		8	1	17
Pre-Accountancy	4								4
UiTM Perak	3								3
UiTM Pahang	1								1
Pre-Science	4		2	2		1	3	1	13
UiTM Pahang	4		2	1					7
UiTM Negeri	-								-
Sembilan				1		1	2		4
UiTM Pulau Pinang							1	1	2
Grand Total	17	5	13	58	51	46	43	13	246

Table 1: Indigenous Students Enrolment for Pre-Diploma Programme

Table 2 shows the progress of all indigenous students who had completed their UiTM Pre-Diploma Programmes offered by PPT Office. There were 167 students, i.e., only 68% who continued their study in Diploma Programmes. The rest of 79 students (32%) did not continue their study due to failure or no interest. The full Cumulative Grade Point Average (CGPA) results of these 79 students were not available to validate these reasons. Among those who furthered their study in diploma level, most of them, i.e. 21% had opted for Public Administration Diploma, followed by next four most popular diploma programme of Office Management and Technology (18%), Business Study (13%), Tourism Management (10%), and Banking Study (7%).

Table 2: Indigenous Students Enrolment for Diploma Programme (Ex-MDOA)

Diploma Programme	2010	2011	2012	2013	2014	2015	2016	2017	Grand Total
Not Continuing Study	11	3	3	11	16	17	13	5	79
Diploma in Public		0	Ū			,	0	Ū	
Admin		1	3	11	8	4	7	1	35
Diploma in Office									
Technology and									
Management			2	11	4	7	6		30
Diploma in Business									
Studies	3	1	1	9	3	4	1		22
Diploma in Tourism									
Management			1	3	7	3	3		17
Diploma in Banking									
Studies	2			5	3	1	2	1	14
Diploma in Information									
Management				1	3	4		1	9
Diploma in Hotel									
Management				1	2	3	2		8
Diploma in Science			1	2		1	2		6
Diploma in Culinary									
Arts							2	3	5
Diploma in Digital									
Media and Graphics									
Design			1	1				1	3
Others	1			2	4	1	4		12
Grand Total	17	5	13	58	51	46	43	13	246

0 0			1	5		,	
Diploma Programme		Dean's List	Passed/ Graduated	Failed	Dropped	Withdrawn	Grand Total
Not Continuing Study	79						79
Diploma in Public Admin			15	14	3	3	35
Diploma in Office							
Technology and							
Management			22	8			30
Diploma in Business							-
Studies		2	6	9	4	1	22
Diploma in Tourism				-			
Management		2	10	3	1	1	17
Diploma in Banking							
Studies		2	10	2			14
Diploma in Information							
Management			7		1	1	9
Diploma in Hotel							-
Management			3	2	3		8
Diploma in Science		1	3		1	1	6
Diploma in Fine Arts		1	4	1	1		7
Diploma in Digital Media			·				,
and Graphics Design			2			1	3
Others			9	3	1	3	16
Grand Total	79	8	56	41	16	11	246

Table 3: Indigenous Students Achievements in Diploma Programme (Ex-MDOA)	Table 3: Indigenous	Students Achiever	nents in Diploma	Programme	(Ex-MDOA)
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Table 3 shows the diploma results of all indigenous students who had graduated from UiTM prediploma programmed offered by PPT Office under the MDOA Programme. There were 8 out of 167 indigenous students who had graduated in diploma programme where 5% of them had completed it with a Dean's List Award, on top of 56 students (34%) who had completed their diploma study. Unfortunately, there were 41 students (25%) who failed their diploma, 16 students (10%) had been dropped from their diploma studies, and 11 students (7%) who had withdrawn themselves from the diploma programmes. The low passing rate, i.e. below 40% at diploma level presents an alarming sign for various active actions by JAKOA who are still sponsoring these indigenous students at diploma level. Special attention may need to be given so that these students will not shy away in striving the best efforts for their diploma studies.

Bachelor Degree Programme	2010	2011	2012	2013	2014	2015	2016	2017	Grand Total
Not Continuing Study	13	5	9	53	50	46	43	13	232
Bachelor in Business									
Administration (Hons)									
Finance	1			1					2
Bachelor in Science (Hons)									
Applied Chemistry			1	1					2
Bachelor in Science (Hons)									
Hotel Management			1	1					2
Bachelor in Office System									
Management (Hons)			1						1
Bachelor in Business									
Administration (Hons)									
Marketing	1								1
Others	2		1	2	1				6
Grand Total	17	5	13	58	51	46	43	13	246

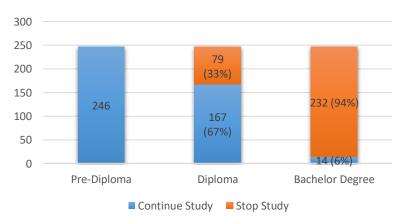
Table 4: Indigenous Students Enrolment for Bachelor Degree Programme (Ex-MDOA)

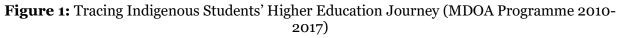
Table 4 shows the progress of all Ex-MDOA indigenous students who had and had not completed their diploma studies and their enrolment in bachelor degree programme. There were only 14 students (i.e., only 22%) out of 64 students who graduated with diploma (as in Table 6) who continued their study in bachelor degree programmes. In summary, only 6% of all 246 prediploma students of MDOA Programme who had furthered their education in 11 bachelor degree programmes, i.e. in various courses of finance, applied chemical, hotel management, office system management, marketing, investment management, Islamic banking, plantation management and technology, administrative science, fine arts, and creative technology (screen).

Table 5 shows the bachelor degree results of all indigenous students who had graduated from UiTM pre-diploma programme offered by PPT Office under the MDOA Programme. There were 2 out of 14 indigenous students who had furthered their study in bachelor degree level, (i.e. 14%) graduated with a Dean's List Award, and only 8 students (57%) who had successfully completed their bachelor degree study. Unfortunately, there were 4 students (29%) who had not completed their bachelor degree due to special leave or being dropped by UiTM. The high passing rate, i.e., above 70% at bachelor degree level, indicates the determination and high spirit of the Ex-MDOA indigenous students in completing their studies once they have embarked on that journey. The two Dean's List indigenous students should be approached by JAKOA and PPT Office to capture their experience and insights for motivating other indigenous students to pursue such similar directions and achievements in their tertiary studies.

Bachelor Degree Programme		Dean's List	Passed/ Graduated	Special Leave	Dropped	Grand Total
Not Continuing Study	232					232
Bachelor in Business Administration (Hons)	-					-
Finance			2			2
Bachelor in Science (Hons) Applied						
Chemistry			2			2
Bachelor in Science (Hons) Hotel						
Management		2				2
Bachelor in Office System Management						
(Hons)				1		1
Bachelor in Business Administration (Hons)						
Marketing			1			1
Others			3		3	6
Grand Total	232	2	8	1	3	246

Table 5: Indigenous Students Achievement for Bachelor Degree Programme (Ex-MDOA)





As per Figure 1, instead of underqualified to continue study at a tertiary level, 246 indigenous students were able to at least experience a pre-diploma study in UiTM. Progressively 67% of them managed to register a diploma programme. On top of that, the number of indigenous students who furthered their study to a bachelor degree was very low, i.e. 6% of pre-diploma students, or only 8% of diploma students.

Based on the results of this study, it was found that almost two third of indigenous students who were sponsored to enrol in a remedial course of UiTM's MDOA pre-diploma programme who had successfully furthered their studies to a higher level of education i.e. UiTM's diploma programme, although originally they could not be doing that because they were under-qualified of the entry requirement for a diploma programme in a Malaysian public university. However, for the next level of bachelor degree, the continuation percentage is too low, i.e. only six percent, thus showing the low motivation of these students to get an executive level of qualification. This situation might be due to the reasons that the indigenous students in this study were already satisfied with a diploma certificate that could help them in finding a decent job, which might be better than the traditional jobs of their parents. Another reason possibly the degree of difficulty in bachelor degree could be too high for them to venture into and at the same time needing them to wait for another two to three years before they can start working. It was also known from the findings of this study that the number of indigenous students who had enrolled for pre-diploma programme in UiTM were increasing tremendously, i.e., almost 1.5 times higher in the year of 2016 than in the year of 2010. This shows that the interest of this minority people in Malaysia towards education has improved, hence promising a better future ahead of them. This increasing number of enrolments in a remedial course and the good conversion rate from pre-diploma to diploma programme are the vital evidence for the sponsor of the MDOA scholarship in terms of its success and achievement. These results would be in line with previous studies who also found the same significant positive impact of this Need-Based Aid kind of scholarship towards the students' educational performance (Lynch, 2018; Goldrick-Rab, 2010).

Nevertheless, among those indigenous students who had pursued the diploma programme, its success rate is only 50% (with 12.5% dean's list recipients) and the rest were either failed, dropped or withdrawn. This could be another reason why the continuation rate to the bachelor degree was very poor, i.e. at 6%. One of the major causes of why indigenous students were reluctant to further studies into higher education is the cultural effacement and alienation that they face at college or university (Schofield et al., 2013; Wilson et al., 2011), which could be compounded by economic disadvantage. This high number of dropouts was in line with the report by JAKOA (2011), where from 2005 to 2010, the number of dropout cases in secondary schools was triple compared to the actual enrolment in primary schools. Similarly, only 880 of the Orang Asli students have completed their tertiary education between 1971 and 2010 (JAKOA, 2011). It is hopeful in the future that the rate of study continuation from pre-diploma to diploma programme could be further improved to at least 80% as that would be the minimum target rate by UiTM's PPT Office for non-indigenous students (Julaihi et al., 2007). Likewise, the rate of study continuation from diploma to bachelor degree should also be further increased to 30% in the next 5 years. As seen in this study, there were some small number of strongminded indigenous students (i.e., only 14) who had furthered their study in bachelor degree, and their educational achievements were magnificent (i.e. 71% success rate with 14% were dean's list recipients). This clearly indicated that although originally these students were underqualified for a higher education programme, but through the remedial course like MDOA, they could forever change their destiny towards achieving higher education like a bachelor degree with flying colours. What need more is their passion, willingness, and dedication. Only assertion and resilience throughout their education journey in a higher education institution such as UiTM that shall bring them the shining future. which is just waiting for them to grab this ever-open awesome opportunity.

All in all, mastery of education and educational opportunities among children of indigenous people are an important factor in improving self-efficacy and standard of living towards a better one. Education is vital to help the Orang Asli community to be more viable and enabling them to acquire jobs that provide more income so that they can save for old age and to face the unexpected disasters (Abdul Talib et al., 2003; Huaman, 2019). As a recommendation to all higher education institutions and the policy makers, more effective and efficient remedial courses could be provided to allow all indigenous to still further their studies. Also, more motivational incentives and boost elements should be introduced especially that is suited to the current younger generation. The curricula and varsity activities should be more tailored made to the needs and values of this minority so that they will be at ease in adapting to the new environment and culture. Indigenous educators' ability to observe and understand the education system from the perspective of minorities strengthens their knowledge and skills as educators. For example, Kakkar's (2017) study among indigenous in Indian schools found out that colonial authorities were no use in determining English as medium of instruction for indigenous education. Moreover, Morris and Handon (2019) highlight the importance of developing new curricula in better engaging indigenous people that is custom-made through their perspectives. Frawley et al.'s (2009) study among indigenous students in various universities in Australia found out that they prefer culturally supportive universities' learning environment to feel part of the community and to enhance their value. In enhancing the current university curricula, Kruk-Buchowska and Wood (2019)'s study suggested that promoting indigenous values and heritage to non-indigenous students as well as inviting non-indigenous students to share their perspectives and relations creates a hybrid 'third space' that allows for a better understanding of indigenous issues and helps increase the feeling of inclusion among the indigenous students.

Conclusion

In conclusion, the MDOA programme has indeed been proven to benefit all indigenous students. Hence, this study is suggesting a more concentrated effort by education arm of JAKOA in collaboration with PPT and UiTM in attracting and motivating the indigenous students in continuing their study not only by providing scholarship but also with various engagement and self-realization strategies so that this minority group of students. The MDOA Programme or now known as PPT-Orang Asli shall be further enhanced with close monitoring of the students' performance and at the same time providing them guidance and support throughout their educational journey. Without MDOA Programme by UiTM, the indigenous students may not be able to pursue their studies and achieve the success like the ten students who had successfully graduated with bachelor degree although initially they were underqualified to even enter a university. The statistical evidence of this initiative's achievements should be referred for researchers and policymakers to ascertain the academic performance framework of the concerning groups of students, and therefore be replicated by other higher educational institutions. Hence, efforts must be intensified by involving all stakeholders, including parents, the government, through the JAKOA and the Ministry of Higher Education. Success factors as well as lessons learned and must be practiced to all students to improve their educational attainment. Therefore, efforts to develop Orang Asli in the aspect of education can be further enhanced. A perfect early education can certainly guarantee better job opportunities in the future.

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