

Postgraduate Research on International Tertiary Students: The Case of Malaysia

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This paper sought to enumerate theses produced by postgraduate researchers of Malaysian universities that focus on international students enrolled in Malaysian tertiary institutions. Using the Malaysian Theses Online (MyTO) and the university libraries' Online Public Access Catalogue (OPAC) databases to gather the initial data, this paper went on to present metadata about the researchers as well as the participants of these postgraduate studies. It concluded that though there has been quantitative progress since the first thesis on international students was produced in 1999, there is a need to address the unevenness of focus that was leaning more towards the experiences of postgraduate students in public institutions of higher learning and less on those enrolled in undergraduate programs, especially at private institutions of higher learning in Malaysia.

Keywords: international students, international tertiary students, postgraduate theses

INTRODUCTION

Malaysia's efforts in the recruitment of international students into its higher education institutions gained prominence at the turn of the millennium. Sirat (2008) claimed that a steady increase in international students started in 1996, which coincidentally was the year of the enactment of Act 555: Private Higher Education Institutions Act and Act 556: Lembaga Akreditasi Negara Act (replaced by Act 679: Malaysian Qualifications Agency Act). With this reassurance of quality for private institutions, coupled with respectable international rankings of Malaysian universities in general, international students have continued to make Malaysia a destination of choice for their tertiary studies.

Since the early 2000s, the Government of Malaysia has intensified its internationalization initiatives to be a center of educational excellence. From a figure of 18,242 international students in 2001, the number enrolled in Malaysian tertiary institutions increased to more than 130,000 in 2016 and had been in that range up to 2018 (Kementerian Pendidikan Malaysia, 2019; Kementerian Pendidikan Tinggi, 2017, 2018). A study of the figures on international students available from the UNESCO Institute of Statistics showed

Malaysia was one of the top 10 destinations of choice for the years 2014 to 2016 (UNESCO Institute of Statistics, 2019).

In a conceptual paper presented at the 6th International Conference on University Learning and Teaching (InCULT 2012), Saad et al. (2013) claimed that Malaysia was at the initial stage in terms of research on international students as compared to the traditional host countries of the United Kingdom (UK), the United States of America (USA) and Australia, which were all deemed to be in the third stage based on data they gathered from published materials and theses within ten years of their research. This study investigated Saad et al.'s claim from an approach that differed from theirs as it focussed only on theses produced by postgraduate candidates in Malaysian institutions of higher learning.

By looking into the statistics, this study aimed to reveal the breadth of research on international students conducted by postgraduate candidates enrolled in Malaysian institutions of higher learning.

LITERATURE REVIEW

Saad et al. (2013) opined that studies on international students from traditional host countries such as Australia, the United Kingdom, and the United States of America were “vast and in-depth, embracing both social and academic aspects; various fields like psychology, sociology, linguistics, counseling and more; and also macro (host institution management team) and micro (class - teaching and learning) levels” (p. 490) while those from Malaysia were “still very general if compared to the research and studies conducted in traditional host countries” (p.490). Their paper highlighted that most of the issues of the studies they found focus on academic and communication and to a certain extent, acculturation issues.

Since then, more research on international students enrolled in Malaysian institutions has been conducted, some of which involved adjustment challenges. Ahrari et al. (2019) provided an overall picture of the different types of adjustments that postgraduate international students had to make in the form of academic adjustment, psychological adjustment, and sociocultural adjustment. The impact of post-arrival strategies (open-mindedness and flexibility) and pre-departure factors (travel familiarity, religious and cultural similarities, knowledge and awareness of the host country) on the adjustment efforts of international students was studied by Mohamed (2020).

Related to adjustment and adaptation are stress and mental health issues, Khosravi et al. (2018) studied newly registered students at a public university and found that quite a significant number were in psychological distress with severe depression being the most prevalent symptom as compared to other indicators (somatic, anxiety, and social dysfunction). Focussing on the role of social support in dealing with acculturation stress and adjustment, Lashari et al. (2018) found that friends played a significant role in providing emotional and informational support that helped international students in their psychological adjustment.

Students' academic success and failure are also topics that generated much interest. J. K. N Singh (2020) conducted a qualitative study on the experiences of academic failure of postgraduate students. Students attributed the failures to issues with supervision and mismanagement, which ultimately affected their motivation to progress and their state of mental health. Studying factors that impact learning sustainability, Yassin et al. (2020) found that intercultural learning challenges had no significant influence on sustainable learning. Instead, the study found that issues related to language proficiency, research skills, and academic processes and systems negatively affected sustainable learning.

The struggle with language is a frequent topic of choice amongst linguists and language specialists. The academic writing skills of postgraduate students were the focus of the studies by Kotamjani et al. (2018) and M. K. M. Singh (2015). Both these studies linked the difficulties to reliance on previous learning patterns and interference from their native languages. Another perspective on language difficulties was provided by Taly and Paramasivam (2020) who investigated the cause of speaking anxiety and the strategies used by international students enrolled in postgraduate programs at a public university to overcome this difficulty.

These studies represent a cross-section of issues faced by international students covered by researchers. However, a study of published papers is not the only method for determining the breadth of research

conducted. An alternative method is to use theses to determine the breadth of coverage in terms of issues faced by international students.

Bista (2016) shared data on theses of doctoral candidates from the United States of America and Canada who studied international students. His search of the ProQuest Dissertations & Theses Global database led to a finding of 17,903 theses produced by North American doctoral candidates, the earliest of which was written in 1922. Focussing on 2015 alone, the search on ProQuest produced 100 theses. A similar paper was produced for the year 2016, focussing on recurring themes of the theses. Acculturation emerged as the most common theme followed by writing and academic skills and retention (Bista & Gaule, 2017).

METHODOLOGY

The scope of the study is bounded by the Malaysian Qualification Agency's (2021) definition of a thesis and dissertation as "the documentation of the original research prepared and submitted by the candidate in a doctoral program by research or mixed-mode" (p.60) and "the documentation of the original research prepared and submitted by the candidate in a master's program by research or mixed-mode" (p.57) respectively. For the purpose of discussion in this paper, the nomenclature "thesis" has been used to include "dissertation".

The initial stage of data gathering was conducted from February to March 2019 and involved an online search using two platforms. The first is the Malaysian Theses Online (MyTO) database. MyTO is an "electronic theses dissertation (ETD) initiative to manage the collection of theses and dissertations of public universities in Malaysia" (Mohd Yusop, 2007). Established in 2005 by the Persidangan Perpustakaan Universiti dan Perpustakaan Negara Malaysia (Conference of Academic Libraries & National Library of Malaysia), it has now expanded its collection to include theses and dissertations from "public academic universities and university colleges as well as private academic universities" (MyTO, n.d.).

To obtain a more comprehensive set of data, a search was also conducted on all Online Public Access Catalogues (OPACs) of university libraries that were accessible to the public. All the 20 public universities had accessible OPACs while only 39 out of the 57 university-status private institutions had online catalogs available for public viewing. Data from university colleges and college-status institutions was not collected.

The search was conducted using the key phrases 'international student' and 'foreign student'. In addition, as Malay is also a medium of academic communication in public universities, the Malay version of the key phrases i.e., 'pelajar antarabangsa' and 'pelajar asing' was used to search.

Once this data had been collected, the filtering stage followed to remove duplicate records as well as irrelevant or non-applicable studies based on the following parameters.

- The study had been conducted to fulfil the requirements for a postgraduate program (master's and doctoral). Some of the results of the search on these platforms include undergraduate-level papers which were then removed from the list.
- The focus of the study was on international students enrolled in a Malaysian tertiary institution. Studies where the subjects were from a non-tertiary institution as well as those who were enrolled in a tertiary institution situated in a different country were removed.
- The researcher was enrolled in a Malaysian institution of higher learning. The online databases also include postgraduate theses of candidates who were enrolled in an institution situated in another country, which was also removed from the list.

The final stage involved the collection of metadata about the researcher (level of study, type of university, year of completion, name of university, field of study, focus of study, and approach of study) and the participants/subjects of the study (level of study and type of institution). To do this, information was mined from the abstract and content of the theses that were released online. However, some institutions only released the first few pages of the theses online, while some limited online accessibility to just the abstract. The researchers then endeavored to obtain the contact details (email addresses and workplace phone numbers) or social, academic, or professional networking accounts of the authors of these theses. The authors were then contacted, and those who replied were forthcoming with the information requested.

Finally, visits to various university libraries were made to obtain the rest of the data that was not obtainable through the abovementioned methods.

FINDINGS AND DISCUSSION

Quantity of Theses by Year

Table 1 depicts the year of completion of the theses. The earliest thesis recorded in the MyTO and/or OPAC database was for 1999, a master's level paper entitled 'Psychosocial adjustment during cross-cultural transitions: A case study of foreign students in IIUM' by Galy Mahamadou. Ten years later in 2009, Mohd. Shah bin Abdullah submitted a doctoral paper, entitled 'International students marketing and recruitment issues and challenges facing Kolej Universiti Islam Antarabangsa Selangor (KUIS)' for the Doctor of Business Administration program at Universiti Utara Malaysia. Candidates from private institutions started to produce theses on international students in 2010 and had, so far, achieved one doctoral thesis in 2015 by a candidate from the Malaysian branch campus of the University of Nottingham.

The year 2015 is significant as it saw 26 theses produced, the most within the 20 years of 1999-2018. There was also a significant increase in doctoral-level research with 10 theses published compared to the 1-2 theses published in the previous years. In 2016, the number of doctoral theses produced in Malaysia remained at 10, though the number of master's theses dropped significantly from 15 to seven.

TABLE 1
NUMBER OF THESES BY YEAR OF COMPLETION AND RESEARCHER'S LEVEL OF STUDY

Year	Public Universities			Private Universities			Grand Total		
	Doctoral	Master's	Total	Doctoral	Master's	Total	Doctoral	Master's	Total
1999	0	1	1	0	0	0	0	1	1
2002	0	2	2	0	0	0	0	2	2
2004	0	2	2	0	0	0	0	2	2
2006	0	1	1	0	0	0	0	1	1
2007	0	8	8	0	0	0	0	8	8
2008	0	4	4	0	0	0	0	4	4
2009	1	9	10	0	0	0	1	9	10
2010	0	14	14	0	2	2	0	16	16
2011	2	12	14	0	0	0	2	12	14
2012	1	6	7	0	2	2	1	8	9
2013	1	12	13	0	2	2	1	14	15
2014	2	8	10	0	4	4	2	12	14
2015	9	12	21	1	4	5	10	16	26
2016	10	6	16	0	1	1	10	7	17
2017	4	5	9	0	5	5	4	10	14
2018	3	0	3	0	1	1	3	1	4
Total	33	102	135	1	21	22	34	123	157

There has been much progress, at least in terms of theses produced by postgraduate candidates, since Saad et al. (2013) conducted their study. Based on numbers alone, a total of 75 theses were produced in the span of five years from 2014-2018, out of which 34 were for doctoral programs compared to five that were produced from 2009 (when the first doctoral thesis was produced) to 2013. The increasing numbers of doctoral theses with its rigorous standards, indicate that more in-depth research on international students had been conducted, showing progress from the time when it was declared that Malaysian studies were still "very general if compared to the research and studies conducted in traditional host countries".

The peak was achieved in 2015 with a total of 26 theses produced, 10 of which were at the doctoral level. The decreasing numbers since then are a matter of concern as it indicates a declining interest in international students as a topic of focus for postgraduate candidates.

Quantity of Theses by Researcher’s Level of Study and Type of University

As reflected in Table 2, there was more research on international tertiary students conducted by candidates at the master’s level (78%) compared to the doctoral level (22%). To a certain extent, this reflects the percentage of master’s level candidates who completed their programs in the years between 2015-2018 which hovered in the 81-85% range as compared to that of doctoral candidates of between 15-19% (Kementerian Pendidikan Malaysia, 2019; Kementerian Pendidikan Tinggi, 2016, 2017, 2018).

In addition, at 86%, more postgraduate research on international students was conducted by candidates from public universities compared to private universities. This mimics the distribution of successful postgraduate program candidates in these types of institutions. Looking at output figures as distributed by the Ministry of Education (and its predecessors), the ratios of public and private institutions’ graduates for master’s and doctoral level programs were between 71:29 and 82:18 for the years 2015-2018 (Kementerian Pendidikan Malaysia, 2019; Kementerian Pendidikan Tinggi, 2016, 2017, 2018).

One of the reasons for the lower number of theses produced by private university candidates is the relatively late start of private institutions in offering homegrown postgraduate programs. Many started as college-status institutions in the 1980s and their focus in the first few decades of their establishment was undergraduate programs (Sivalingam, 2007). It was only when these institutions were upgraded to become university colleges and subsequently, university-status institutions that in-house postgraduate programs started to be offered (Wan, 2007).

TABLE 2
NUMBER OF THESES BY RESEARCHER’S LEVEL OF STUDY AND TYPE OF UNIVERSITY

Level of Study	Public University	Private University	Total
Doctoral	33 (21.0%)	1 (0.6%)	34 (22%)
Master’s	102 (65.0%)	21 (13.4%)	122 (78%)
Total	135 (86.0%)	22 (14.0%)	157 (100%)

Researcher’s Institution

As of 2018, Malaysia had a total of 20 public and 57 private universities that were required to offer programs at the postgraduate level as part of the requirements for their establishment (Jabatan Pendidikan Tinggi, 2020). Out of these 77 universities, only 59 provided the public with access to information on theses produced by their postgraduate students, either through the MyTO or OPAC database. The search on these databases found that only 21 universities had theses focusing on international students.

Two public universities led in terms of the quantity of postgraduate research on international students: Universiti Teknologi Malaysia (31) and Universiti Utara Malaysia (30). The two oldest universities, Universiti Malaya and Universiti Sains Malaysia produced 12 and 11 theses respectively. Universiti Teknologi Malaysia and Universiti Sains Malaysia had the greatest number of doctoral theses at seven.

As for private universities, INTI International University produced the most postgraduate-level research with seven theses, all as part of the requirements for its Master of Business Administration program. The sole doctoral thesis was produced by a candidate from the University of Nottingham Malaysia. The details are presented in Table 3.

TABLE 3
NUMBER OF THESES BY UNIVERSITIES

Name of University	Doctoral	Master's	Total
<u>Public Universities</u>			
Universiti Teknologi Malaysia	7	24	31
Universiti Utara Malaysia	2	28	30
International Islamic University Malaysia	5	11	16
Universiti Putra Malaysia	4	11	15
Universiti Kebangsaan Malaysia	7	5	12
Universiti Malaya	2	10	12
Universiti Sains Malaysia	5	6	11
Universiti Tun Hussein Onn Malaysia	0	3	3
Universiti Teknologi Mara	0	2	2
Universiti Pendidikan Sultan Idris	0	2	2
Universiti Malaysia Pahang	1	0	1
<u>Private Universities</u>			
INTI International University	0	7	7
Asia Pacific University of Technology and Innovation	0	4	4
Infrastructure University Kuala Lumpur	0	3	3
UNITAR International University	0	2	2
University of Nottingham Malaysia	1	0	1
Curtin University, Malaysia	0	1	1
Multimedia University	0	1	1
SEGI University	0	1	1
Universiti Tenaga Nasional	0	1	1
Wawasan Open University	0	1	1
Grand Total	34	123	157

Researchers' Field of Study

As can be seen in Table 4, 59 of the researchers who conducted postgraduate research on international students were from the field of Business & Economics. If Accounting and Finance were to be included in this figure, a total of 40% of the theses were produced by candidates in business-related fields. Out of these, 13 theses were produced as part of the Master of Business Administration (MBA) program requirements. The focus on international students by candidates from business postgraduate programs reflects their economic significance.

Other fields that have been significantly represented are Language, Linguistics & Communication (28), Arts, Humanities & Social Sciences (23), and Education (21). Another field worth of mention is Counselling with 10 theses. Although this number is not as considerable as the top four, its specialized focus on the psychosocial experience carries much weight in terms of depth.

TABLE 4
NUMBER OF THESES BY FIELD OF STUDY

Field of Study	Doctoral	Master's	Total
Business & Economics	9	50	59 (38%)
Language, Linguistics & Communication	9	19	28 (18%)
Arts, Humanities & Social Sciences	7	16	23 (15%)
Education	5	16	21 (13%)
Counseling	2	8	10 (6%)
Computer Science & Information Technology	0	5	5 (3%)
Engineering & Built Environment	1	2	3 (2%)
Accounting & Finance	0	3	3 (2%)
Health Sciences	1	1	2 (1%)
Hospitality	0	2	2 (1%)
Mathematics & Science	0	1	1(1%)
Total	34	123	157 (100%)

Focus of Study

Using the titles and the abstracts, the focus of each thesis was analyzed (See Table 5). Thirty-seven titles dealt with psychosocial experiences, mainly centering on coping, adjustment, assimilation, and acculturation. A total of 29 titles dealt with academic (teaching and learning) experiences. Out of these, nine centered on English language academic experiences while seven on the Malay language. These language learning experiences were very much connected to communication experiences or needs. However, the latter is placed in a separate category since the focus of those studies was on communication outside of the formal language learning realm. For the candidates in the business field, marketing and recruitment (20) were a popular focus followed by student satisfaction (17). Thirteen theses studied the consumer behavior of international students about items that were not directly related to their studies including the purchase of electronic and luxury goods.

TABLE 5
NUMBER OF THESES BY FOCUS OF STUDY

Focus	Doctoral	Master's	Total
Psychosocial Experiences	12	25	37
Academic Experiences	8	21	29
Marketing and Recruitment	4	16	20
Student Satisfaction	3	14	17
Communication Experiences or Needs	5	8	13
Consumer Behaviour (Non-university related issues)	1	12	13
Physical/Facility Experiences	0	12	12
General experiences	0	8	8
Economic or Financial Issues	0	3	3
Post-graduation Plans/Experiences	0	3	3
Management of International Students	1	1	2
Grand Total	34	123	157

The top two issues covered by Malaysian postgraduate candidates are similar to the themes uncovered by Bista and Gaule (2017) with acculturation, and writing and academic skills as the most frequent topics of choice for American doctoral candidates.

Approach of Study

As indicated in Table 6, out of 157 titles, data on the study approach was only available for 156. The researchers were unable to obtain the data for one title due to a lack of access to the thesis despite a personal visit to the university library. The majority of the studies, 64%, approached the study from a quantitative angle while 19% and 14% used the qualitative and mixed methods approaches respectively. At the doctoral level, there was almost an even use of each of the three main approaches with 12 utilising quantitative and 11 each for qualitative and mixed methods. The findings also revealed that there is a high tendency for master candidates to approach their studies from the quantitative angle.

TABLE 6
NUMBER OF THESES BY APPROACH OF STUDY

Study Approach	Doctoral	Master's	Total
Quantitative	12	88	100 (64%)
Qualitative	11	19	30 (19%)
Mixed Methods	11	10	21 (14%)
Research & Development	0	5	5 (3%)
Total	34	122	156 (100%)
Not Available	0	1	1
Grand Total	34	123	157

Participants' Type of Institution

Table 7 depicts the type of institution in which the participants of the study were enrolled. This information is different from that of Table 1 which depicts the type of institution in which the researchers were enrolled. There were cases where researchers from a public institution used students from private institutions as their subjects and vice versa.

Due to a lack of access, information on the participants' type of institution was not available for one thesis while this information was not indicated by the researcher in two theses. One thesis focused on governmental policy frameworks and thus this information was not relevant to the research. With a total of 119 out of the 153 theses (78%), the majority of the graduate research on international students focused only on those enrolled in public institutions. In actuality, a total of 127 studies involved participants from public institutions and an additional eight studies saw the participation of subjects from both public and private institutions. Research on students enrolled in private institutions amounts to 34, with only 25 (16%) focused solely on them.

TABLE 7
NUMBER OF THESES BY PARTICIPANTS' TYPE OF INSTITUTION

Type of Institution	Doctorate	Master's	Total
Public Only	24	95	119 (78%)
Private Only	4	21	25 (16%)
Public & Private	5	4	9 (6%)
Total	33	120	153 (100%)
Not Indicated	0	2	2
Not Relevant	1	0	1
Not Available	0	1	1
Grand Total	34	123	157

The numbers indicated above do not reflect the international student enrolment situation throughout the years which has seen more international students enrolled in private institutions. These percentages

represent a skewed inverse of the student population distribution where the majority are enrolled at private institutions (see Table 1.4). In 2018, this majority constitutes 70% (92,415) while only 30% (39,099) were enrolled at public institutions (Kementerian Pendidikan Malaysia, 2019).

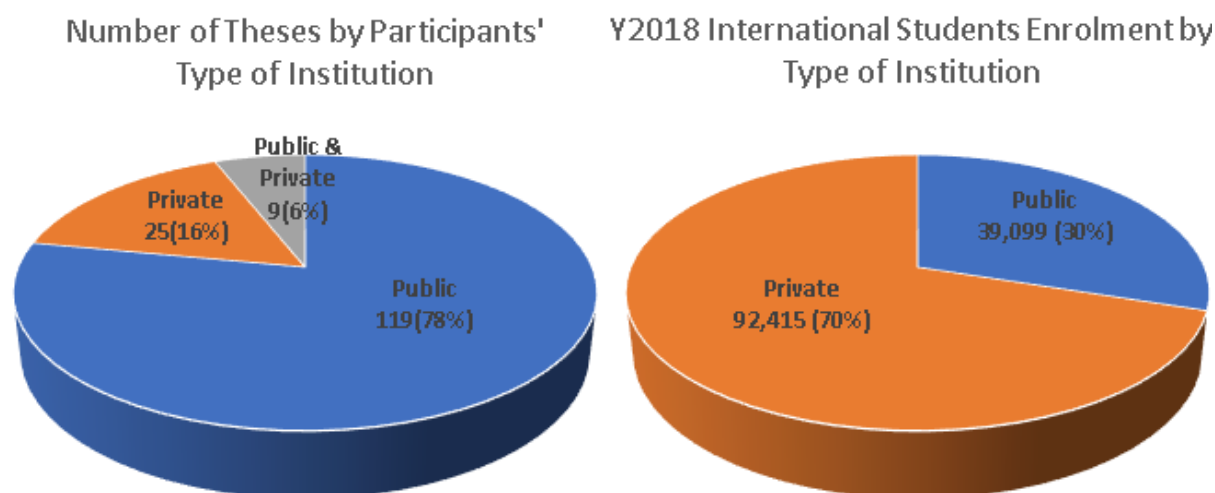
TABLE 8
NUMBER OF INTERNATIONAL STUDENTS ENROLLED IN MALAYSIA BY TYPE OF INSTITUTION AND YEAR

Type of Institution	Enrolment Number by Year				
	2014	2015	2016	2017	2018
Public	32,842 (30%)	33,396 (27%)	30,598 (23%)	33,095 (24%)	39,099 (30%)
Private	74,996 (70%)	88,665 (73%)	102,112 (77%)	103,198 (76%)	92,415 (70%)
Total	107,838	122,061	132,710	136,293	131,514

Note: Data from Kementerian Pendidikan Tinggi (2015, 2016, 2017, 2018) & Kementerian Pendidikan Malaysia (2019)

Fig. 1 provides a more visual image of the situation, indicating a dearth of postgraduate research conducted on the experiences of international students at private institutions with only 34 theses identified, out of which nine had a mix of public and private international students as their subjects. Looking at the remaining 25 with its exclusive focus on private students, only four were at the doctoral level.

FIGURE 1
ENROLMENT FIGURES OF INTERNATIONAL STUDENTS VERSUS PARTICIPANTS OF RESEARCH BY TYPE OF INSTITUTION



Data on enrolment figures from Kementerian Pendidikan Malaysia (2019)

Participants' Level of Program

Information on the participants' level of program is presented in Table 8. A significant focus has been on postgraduate students with a total of 127 studies, out of which 64 (43%) focused solely on them. In contrast, the experiences of undergraduate students were only studied in 83 papers, and only 21 (14%) of these papers had them as the sole participants.

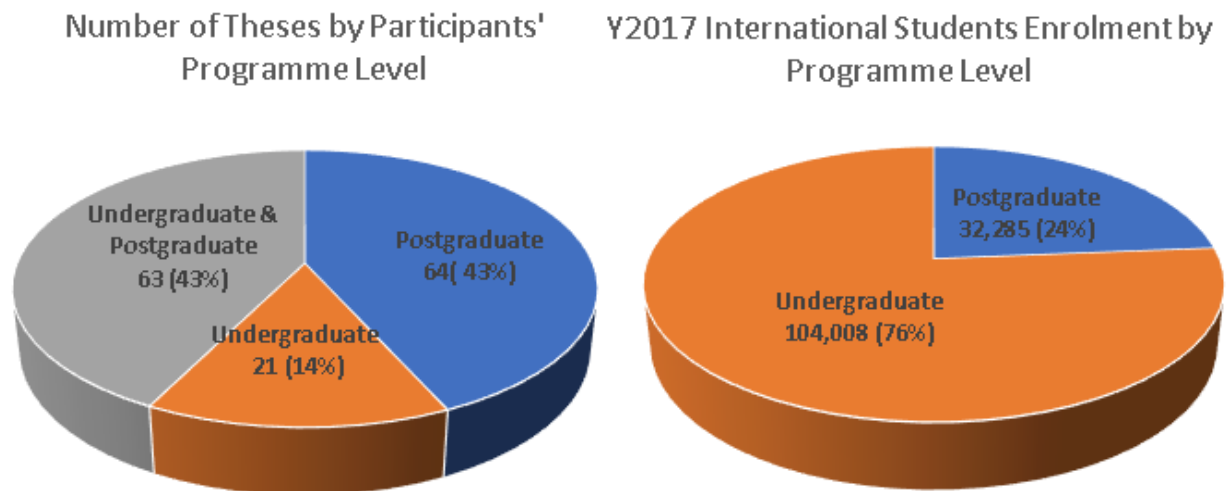
TABLE 8
NUMBER OF THESES BY PARTICIPANTS' LEVEL OF PROGRAMME

Level of Programme	Doctorate	Master's	Total
Postgraduate Only	18	46	64 (43%)
Undergraduate & Postgraduate	9	54	63 (43%)
Undergraduate Only	6	15	21 (14%)
Total	33	115	148 (100%)
Non-Student	1	5	6
Not Indicated	0	2	2
Not Available	0	1	1
Grand Total	34	123	157

In 2017, out of 33,095 enrolled at public universities, 21,170 (64%) were students who were pursuing either masters or Ph.D. programmes. Only 11,925 (36%) were undergraduates (Kementerian Pendidikan Tinggi, 2018). With a high number of postgraduate international students enrolled at public universities, it was no wonder that a majority of the studies on international students conducted by postgraduate researchers who were themselves enrolled in public universities focussed on the postgraduate students, leading to a smaller number of studies on the experiences of undergraduate international students.

The imbalance of focus on postgraduate as compared to undergraduate international students could be seen in Fig. 2 with its representation of enrolment figures of international students in the different levels of the academic programme compared to the program level of the participants of the studies.

FIGURE 2
ENROLMENT FIGURES OF INTERNATIONAL STUDENTS VERSUS PARTICIPANTS OF RESEARCH BY PROGRAMME LEVEL



Data on enrolment figures from Kementerian Pendidikan Tinggi (2018)

POINTS OF INTEREST

Saad et. al (2013) claimed that Malaysia was still at the initial stage in terms of research on international students which was “still very general if compared to the research and studies conducted in traditional host countries” (p.490). This claim was based on data they collected in the form of published papers as well theses. Though this paper considered only one of the elements i.e., postgraduate theses, the findings were useful in verifying this claim.

The total of 157 theses, with 75 produced within the 5 years of 2014-2018, proved much progress has been made in terms of quantity alone. Out of these 157 theses, 34 were for doctoral programs. The rigorous standards imposed on doctoral programs in Malaysian institutions with their strict requirements for new knowledge and discoveries to be produced before the doctorate can be conferred to any candidate indicate that in-depth studies have been conducted on the topic focussing on international students.

In terms of breadth, not only did the Malaysian theses cover elements attributed to theses produced by traditional host countries which covered “both social and academic aspects; various fields like psychology, sociology, linguistics, counseling and more; and also macro (host institution management team) and micro (class - teaching and learning) levels” (Saad et al., 2013, p. 490), there were also relatively new topics that had been studied including marketing and recruitment and consumer behavior. Candidates from business-related fields produced the most in terms of quantity, with 40% (62) of the 157 theses produced.

However, an issue to be addressed is the imbalance of involvement in terms of public-private institutions, both where the researchers and the participants (or subjects) of the study are concerned. The majority of the theses were authored by public university candidates with only 14% authored by researchers from private universities.

Correspondingly, public university researchers tended to investigate public university students with 78% of the total number having solely public university students as their subjects. The experiences of students enrolled in private institutions had not been as extensively researched even though these institutions enrolled a larger portion of the total international tertiary student population. In 2018, a total of 92,415 (70%) international students were registered as tertiary students at private institutions compared to 39,099 (30%) at public institutions (Kementerian Pendidikan Malaysia, 2019).

This public-private unevenness also contributed to an imbalance in terms of focus on postgraduate-undergraduate experiences. Since the majority of the studies were conducted by public university postgraduate candidates whose subjects were mainly public university international students of which the majority were enrolled in postgraduate programs, studies that had undergraduates as their subjects were not as extensive. With the situation being that the majority of international students are enrolled in undergraduate courses at private institutions, this imbalance is a matter of concern.

CONCLUSION

Like the number of international students in Malaysia, the quantity of postgraduate research on international students has seen an upward movement. Twenty years after the earliest thesis on international students was published, the count in 2018 stood at 157 postgraduate theses. There has been significant progress since the first postgraduate thesis on international students was produced but more must be done to address the imbalance in terms of attention given to the undergraduate experience, especially of those enrolled in private institutions of higher learning.

REFERENCES

- Ahrari, S., Krauss, S.E., Suandi, T., Abdullah, H., Sahimi, N.A.H.A., Olutokunbo, A.S., & Dahalan, D. (2019). A stranger in a strange land: Experiences of adjustment among international postgraduate students in Malaysia. *Issues in Educational Research*, 29(3), 611–632.
- Bista, K. (2016). Doctoral dissertations on international students published in 2015. *Journal of International Students*, 6(2), 647–659. Retrieved from <https://www.ojed.org/index.php/jis/article/download/376/295/>
- Bista, K., & Gaule, U. (2017). Recurring themes across fractal issues facing international students: A thematic analysis of 2016 dissertations and theses. *Journal of International Students*, 7(4), 1135–1151. <https://doi.org/10.5281/zenodo.1035989>
- Jabatan Pendidikan Tinggi. (2020). *Kriteria penubuhan naik taraf Institusi Pendidikan Tinggi Swasta*. Retrieved from https://drive.google.com/drive/folders/18aV6uweknfTdZ3E78wrie9I_Z4Ep3Sx_

- Kementerian Pendidikan Malaysia. (2019). *Statistik pendidikan tinggi 2018*. Retrieved from <https://www.moe.gov.my/index.php/muat-turun/laporan-dan-statistik/pendidikan-tinggi/buku-perangkaan/2018-10/2401-statistik-pendidikan-tinggi-2018-bab-1-pdf/file>
- Kementerian Pendidikan Tinggi. (2015). *Perangkaan pendidikan negara Kementerian Pendidikan Tinggi 2014*. Retrieved from <https://www.moe.gov.my/index.php/muat-turun/laporan-dan-statistik/pendidikan-tinggi/buku-perangkaan/2014-1/2365-bab-1-makro-institusi-pendidikan-tinggi-pdf/file>
- Kementerian Pendidikan Tinggi. (2016). *Statistik pendidikan tinggi 2015*. Retrieved from <https://www.moe.gov.my/index.php/muat-turun/laporan-dan-statistik/pendidikan-tinggi/buku-perangkaan/2015-1/2373-2015-bab-1-makro-institusi-pendidikan-tinggi-pdf/file>
- Kementerian Pendidikan Tinggi. (2017). *Statistik pendidikan tinggi 2016*. Retrieved from <https://www.moe.gov.my/index.php/muat-turun/laporan-dan-statistik/pendidikan-tinggi/buku-perangkaan/2016-4/2382-2016-bab-1-makro-institusi-pendidikan-tinggi-pdf/file>
- Kementerian Pendidikan Tinggi. (2018). *Statistik pendidikan tinggi 2017*. Retrieved from <https://www.moe.gov.my/index.php/muat-turun/laporan-dan-statistik/pendidikan-tinggi/buku-perangkaan/2017-5/2392-statistik-pendidikan-tinggi-2017-bab-1-pdf/file>
- Khosravi, R., Azman, A., Khosravi, S., & Khosravi, N. (2018). Addressing mental health issues of international students at University Sains Malaysia: An inquiry for social work policy and practice. *The International Journal of Humanities*, 25(2), 31–43.
- Kotamjani, S.S., Samad, A.A., & Fahimirad, M. (2018). International postgraduate students' perception of challenges in academic writing in Malaysian public universities. *International Journal of Applied Linguistics and English Literature*. <https://doi.org/10.7575/aiac.ijalel.v.7n.7p.191>
- Lashari, S.A., Kaur, A., & Awang-Hashim, R. (2018). Home away from home - The role of social support for international students' adjustment. *Malaysian Journal of Learning and Instruction*, 15(2), 33–54.
- Malaysian Qualifications Agency. (2021). *Standards: Master's and doctoral degree*. Retrieved from <https://www2.mqa.gov.my/qad/v2/2021/new/Final%20MDD%202021%20-%20upload%20v2.pdf>
- Ministry of Education. (2015). *Malaysian education blueprint 2015-2025 (Higher Education)*.
- Mohamed, M.A. (2020). Challenges and adjustment of international students in Malaysia: Pre-departure factors and post-arrival strategies. *Asian Journal of Multidisciplinary Studies*, 8(10), 43–52.
- Mohd Yusop, Z.B. (2007). Malaysia Theses Online (MyTO): An approach for managing universities electronic theses and dissertations. *International Conference on Libraries (ICOL)*, pp. 1–7. Retrieved from http://perpun.upm.edu.my/myuninet_v2/wp-content/uploads/2018/01/Malaysia-Theses-Online-MYTO.pdf
- MyTO. (n.d.). *MyTO Portal*. Retrieved July 8, 2019, from <http://myto.upm.edu.my/myTO/myto.html>
- Saad, N.S.M., Yunus, M.M., & Embi, M.A. (2013). Research on international students in traditional host countries and Malaysia: Some potential areas in Malaysia. *Procedia - Social and Behavioral Sciences*, 90(InCULT 2012), 488–496. <https://doi.org/10.1016/j.sbspro.2013.07.118>
- Singh, J.K.N. (2020). Academic failure: Unspoken experiences by international postgraduate students in a Malaysian university. *IAFOR Journal of Education: Studies in Education*, 8(4), 79–94.
- Singh, M.K.M. (2015). International graduate students' academic writing practices in Malaysia: Challenges and solutions. *Journal of International Students*.
- Sirat, M. (2008). The impact of September 11 on international student flow into Malaysia: Lessons learned. *International Journal of Asia-Pacific Studies*, 4(1), 79–95.
- Sivalingam, G. (2007). Privatization of higher education in Malaysia. *Forum on Public Policy Online*. Retrieved from <http://files.eric.ed.gov/fulltext/EJ1098483.pdf>
- Taly, B.C., & Paramasivam, S. (2020). Speaking anxiety among postgraduate international students in the academic context of a university in Malaysia. *International Journal of Linguistics*. <https://doi.org/10.5296/ijl.v12i1.16053>

- UNESCO Institute of Statistics. (2019). *Education: Inbound internationally mobile students by continent of origin*. Retrieved from http://data.uis.unesco.org/Index.aspx?DataSetCode=EDULIT_DS
- Wan, C.D. (2007). Public and private higher education institutions in Malaysia: Competing, complementary or crossbreeds as education providers. *Kajian Malaysia*, 25(1–14). Retrieved from [http://web.usm.my/km/25\(1\)2007/KM ART 25\(1\)1.pdf](http://web.usm.my/km/25(1)2007/KM_ART_25(1)1.pdf)
- Yassin, A.A., Abdul Razak, N., Qasem, Y.A.M., & Mohammed, M.A.S. (2020). Intercultural learning challenges affecting international students' sustainable learning in Malaysian higher education institutions. *Sustainability*, 12(18), 7490. <https://doi.org/10.3390/su12187490>