

## Abroad Versus Local: Exploring Successful Postgrad Ventures Using Postgraduate Research Experience Questionnaire (PREQ)

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### Abstract

Not much is known about the different doctoral experiences done locally and abroad that may elevate the status and prestige of HEIs in Malaysia. These differences in experiences could enlighten the domains that allow doctorate students to either flourish or wither in their journey to complete their studies, influencing the prestige of the respective HEIs. In this study, data were elicited from 28 respondents using a PREQ questionnaire covering six broad domains: Supervision, Intellectual Climate, Skills Development, Infrastructure, Thesis Examination Process, and Clarity of Goals and Expectations. Results showed notable differences in students' satisfaction with Supervision, Intellectual Climate and Infrastructure among those who completed their studies locally and abroad. Based on the results, recommendations were given so that the postgraduate overall learning environments at HEIs in Malaysia could be improved significantly, thus contributing to the improvement in terms of HEIs' image and prestige in Malaysia.

**Keywords:** Doctoral Experiences, Doctoral Study, Higher Degree Experience, PhD, Research Experience Questionnaire (PREQ)

### Introduction

The growing number of doctoral students has become a common trend across higher education institutions (HEIs) in Malaysia (Zakaria, 2000). Positive and constructive changes in higher education policy (Yusoff & Chelliah, 2010), better scholarship and grants opportunities coupled with low tuition fees (Awang et al., 2012), and a good reputation and image (Arambewela & Hall, 2007; Awang et al., 2012) are some of the key factors that attract students to enrol at a university in Malaysia. To date, Malaysia is already an attractive destination for international students, particularly for students from Asia, the Middle East and Africa (Trahar, 2014), where there are now more than 90,000 international students currently studying in the numerous institutions of higher learning in Malaysia (Yusoff & Chelliah, 2010). As the country embarks further on its goal to become a regional education

hub (Padlee et al., 2010; Baharun et al., 2011), understanding the 'pull factors' has essential implications in attracting more international students that correspond with the current expansion of knowledge economy in the higher education sector globally (Singh et al., 2014). Of late, international students are becoming more critical when choosing their educational institutions (Arambewela & Hall, 2007), which has added to their ever-changing needs and wants (Isa et al., 2016). A way of addressing the issue is through students' satisfaction that can improve Malaysia HEIs' competitive rate to attract new students and maintain the existing ones (Sohail et al., 2003, Jalali et al., 2011; Memon et al., 2014). Realising this, one of the aspects that practitioners and academics are keen on is service quality, which is often extremely difficult to define and measure (Abdullah, 2006a). Moreover, Memon et al (2014) asserted in their paper that, to date, little effort had been made to explore student satisfaction in the Malaysian higher learning institution setting.

In this paper, we argue that comparing the doctoral experience between local and abroad can provide new insights and understanding that can elevate the status and prestige of HEIs in Malaysia. It is interesting to note that according to Arambewela and Hall (2007), prospective students' expectations result from information gathered about the university, its courses, teachers, and comparative ranking with other universities. Baharun et al (2011) indicated in their paper that in order to be able to meet their expectations, it is vital to recognise the needs of the students as failure to do so will affect students' experience, thus affecting its positive or negative outcome. Furthermore, as it is broadly accepted that foreign HEIs are better in many aspects, this paper makes a significant contribution by elucidating aspects of learning experiences that HEIs in Malaysia could improve. According to Kaur and Sidhu (2009), evaluating doctoral students' experiences may point out immediate actions needed by HEIs in Malaysia to further enhance support and facilities for their postgraduate students. As universities worldwide compete nationally and internationally, HEIs in Malaysia should aim to enhance student satisfaction and reduce student dissatisfaction by delivering services to a reasonable standard (Jalali et al., 2011). Hence, the main objectives of this article are twofold:

- Differentiate the quality of experiences of those who pursued their study abroad and those who did it locally, and
- To provide information on the specific areas that need more consideration towards providing a better higher degree experience in Malaysian HEIs.

This paper first gives a brief overview of doctoral students' satisfaction and the literature on past research that emphasise the matter. Then, we will describe the utilisation of the Postgraduate Research Experience Questionnaire (PREQ) in the study of collecting the needed data. The paper will then discuss the findings and provide some suggestions in the conclusion section.

### **Literature Review**

Memon et al (2014) asserted that 'student satisfaction is defined by the student's overall educational experience that contributes to the build-up of HEIs reputation that impacts its image and prestige (Arambewela & Hall, 2007). To provide a world-class higher educational system (Shahijan et al., 2016), HEIs in Malaysia must maintain their good standing to compete in the new 'knowledge-based economy' (Sohail & Daud, 2009). Addressing this challenge,

many HEIs have looked at and adopted different strategies to ensure the 'service quality' (Abdullah, 2006a) they are providing. One usual approach by the HEIs is by obtaining a seal of approval for a quality management system (QMS) and meeting the ISO 9000 quality management systems standards (Sohail et al., 2003) and by getting their academic courses audited by different governing bodies like the Malaysian Qualification Agency (MQA), Board of Engineers Malaysia (BEM), and the Malaysian Medical Council (MMC). While the idea of attaining such certification may seem attractive, a false notion of what students' satisfaction entails may result in unproductive distribution of funds within the institution as the management tries to improve the 'quality' of management rather than convalescing doctoral students' experience at their institution (Abdullah, 2006b). It may be the case, therefore, that HEIs in the past had put more effort into improving the system they deemed necessary for a better service of quality rather than the quality of 'educational experience' the students are going through at the university. Service quality may not necessarily translate to students' satisfaction as both serve a different purpose and are assessed in a different context.

### Past studies on Doctoral Students' Experience & Satisfaction in Malaysia

If one asked a range of experts what factors to be considered to evaluate doctoral students' experience and satisfaction, one would be sure to receive a wide range of responses. Abdullah (2006a, 2006b) considers six scopes - non-academic aspects, academic aspects, reputation, access, programme issues and understanding - in constructing the Higher Education PERFORMANCE (HEdPERF) to measure service quality within a higher education setting. In another study, Ming (2010) illustrates an exciting and practical framework that influences students' choice in selecting a place to continue their tertiary education (Figure 1).

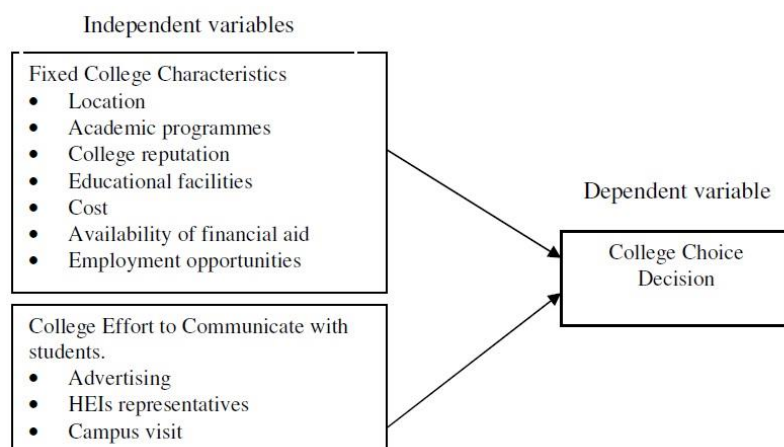


Figure 1: Conceptual Framework for Institutional Factors Influencing Students' College Choice Decision in Malaysia

Source: Ming (2010)

On the other hand, Jalali et al (2011) attempted to determine factors that affect students' satisfaction in a higher learning institution. In their research, Jalali et al (2011) establish that students perceive academic-related activities as more important than non-academic, influencing the students' satisfaction rate. In addition, Vakili (2012) emphasised analysing the Quality of Life (QOL) of postgraduate students at a Malaysian HEIs through four domains - physical health, psychological, social relationships and environmental. Furthermore, two researchers examine the criteria evaluated by international students while selecting a place

to pursue their studies. Padlee et al (2010) asserted that international students consider the quality of the learning environment, influencers, customer focus, cost, facilities, socialisation and location as factors influencing their educational destination. In comparison, Baharun et al (2011) indicated that the quality of education, cost, and facilities provided by the HEIs are the key aspects that determine the decision-making process for the international students and their satisfaction. On a different note, Alavi and Mansor (2011), who had carried out research to identify challenges and problems among international students, determined that social and recreational, and curriculum and method of teaching as essential aspects that influence students' satisfaction. In the same vein, Memon et al (2014) consider the internal learning environment, the quality of education, reputation of the institution, student facilities and post-study marketability of a degree, and external factor in terms of the community is a critical factor that influences the satisfaction of international students. Apart from that, previous studies have also explored the relationships between students' satisfaction with supervision (Abiddin, 2007; Krauss & Ismail, 2010; Md Yusof & Azman, 2013; Sidhu et al., 2013, 2014; Abdullah & Sulaiman, 2014), departmental support and learning environment (Singh, 2013; Sohail & Daud, 2009; Sam et al., 2013;), the importance of research skills and academic language ability (Meerah et al., 2012; Abdullah & Sulaiman, 2014; Sidhu et al., 2014; Salehuddin, 2016; Jeyaraj, 2018), managing time and stress (Yusof & Azman, 2013), and availability of facilities and services (Abdullah & Sulaiman, 2014).

Together these studies provide an essential insight into the various and different factors that could be used to determine students' satisfaction. Whilst the availability of this research, indicators measured and considered were relatively different. Furthermore, as much of the research was descriptive, pinpointing specific areas deemed for improvement is crucial. We are not anywhere to suggest that no recommendations were made to improve students' learning experiences, but the available data were very much a telling for problems identified. What is needed would be studies that elucidate how HEIs with better prestige and image are performing in some regions of interest that may inform HEIs in Malaysia on the parts they can improve on. This is perhaps important given the current situation where funding to HEIs by the federal government is subjected to budget cuts yearly. To keep abreast with the situation, HEIs in Malaysia now have to look for other avenues and resources to finance their knowledge trade. One of the strategies devised is to have a more significant number of students enrol on their postgraduate programme. This situation creates competition as students will look for a university that fits their prior expectations, the information they gained from promotional materials, and different ratings on the internet. In other words, HEIs in Malaysia compete in a global market where resources are becoming scarcer. Hence, to compete, HEIs in Malaysia must provide a learning experience that a student from China may get and experience if he or she opts to go to Australia or any other country that can provide a world-class learning environment.

## **Methodology**

### *Research Design*

To investigate the questions mentioned earlier, the study was conducted using an online, multiple-choice questionnaire administered through Google Docs. This study employed a quantitative method to understand and explore, for example, participants' level of agreement on the importance of supervisors' expertise alignment with doctoral students' research.

### **Research Sample/Participants**

Employing the convenience sampling method, we have distinguished that from 2008 until 2018, the university sent 157 people to pursue their studies at the doctoral level. Of the 157, 68 (43%) have completed their studies. Invitation to answer the PREQ was sent to all possible participants through email containing a link to the questionnaire. 28 people had answered the questionnaires with a return rate of around 41% from the faculty of engineering, science and technology, and the foundation studies. The demography of the 28 participants varied in terms of gender, age at the point they embark on their PhD quest, marital status, years taken to complete their study, and place of study. Table 2 provides the general demographic information of the participants for the survey.

### **Data Collection Method/Instrumentation**

The research adopts the Postgraduate Research Experience Questionnaire (PREQ) commissioned by the Graduate Careers Council of Australia to provide information on students' educational experiences in higher research degree courses in Australian institutions (Ainley, 2001). As the survey was developed by the Australian Council for Educational Research (ACER) and the GCCA, the survey was utilised to offer an overview of matters that could improve students' experiences and identify examples of good practice. The primary purpose of PREQ is to gather data concerning the experience of research degree (Masters by Research and PhD) graduates regarding broad aspects of their studies.

Consisting of 28 statements about research students' higher degree experiences, respondents were required to indicate their agreement with each statement by selecting a number ranging from one to five (one stands for 'Strongly Disagree' and five for 'Strongly Agree'). Ainley mentioned that the method allows the responses for groups of respondents to be summarised as percentage agreement that can be interpreted concerning the item and the nature of the responses. This aspect of the questionnaire is essential as it aims to distinguish the different experiences between those who continued their study abroad and those who had done it locally. Apart from that, our decision to use PREQ was made on the survey's focus on dimensions central to the postgraduate experience in most fields of study. According to Ainley, the items in PREQ are not just a collection of questions but interrelated items that signify the fundamental proportion of the postgraduate research experience.

PREQ focuses on the following six areas of research higher degree experience:

Table 1:

*Areas of Item and Description*

Item No.	Areas of Item and Description
<b>Supervision</b>	
1	Supervision was available when I needed it
7	My supervisor/s made a real effort to understand the difficulties I faced
13	My supervisor/s provided additional information relevant to my topic
17	I was given good guidance in topic selection and refinement
21	My supervisor/s provided helpful feedback on my progress
24	I received good guidance in my literature search
<b>Skill Development</b>	
6	My research further developed my problem-solving skills
10	I learned to develop my ideas and present them in my written work
14	My research sharpened my analytic skills
20	Doing my research helped me to develop my ability to plan my own work
26	As a result of my research, I feel confident about tackling unfamiliar problems
<b>Intellectual Climate</b>	
5	The department provided opportunities for social contact with other postgraduate students
9	I was integrated into the department's community
16	The department provided opportunities for me to become involved in the broader research culture
22	A good seminar programme for postgraduate students was provided
23	The research ambience in the department or faculty stimulated my work
<b>Infrastructure</b>	
3	I had access to a suitable working space
8	I had good access to the technical support I needed
12	I was able to organise good access to necessary equipment
18	I had good access to computing facilities and services
27	There was appropriate financial support for research activities
<b>Thesis Examination</b>	
2	The thesis examination process was fair
15	I was satisfied with the thesis examination process
25	The examination of my thesis was completed in a reasonable time
<b>Goals and Expectations</b>	
4	I developed an understanding of the standard of work expected
11	I understood the required standard for the thesis
19	I understood the requirements of thesis examination
<b>Overall Satisfaction</b>	
28	Overall, I was satisfied with the quality of my higher degree research experience

**Data Analysis Method**

The survey data were entered and analysed using SPSS Version 24. Descriptive and Crosstabulation analyses were performed to compare the experience of obtaining a doctoral

degree among those who did their study abroad and locally. One key difference between this study to its original is its mean ratings, where data was not recoded to 1 to –100, 2 to –50, 3 to zero, 4 to +50, and 5 to +100 (Ainley, 2001, p.12). In other words, scale ratings are not recorded as in the original study and are presented using the usual 1, 2, 3, 4, and 5 Likert scales. The scale was further divided into two groups; the scale of 1 to 3 as Disagree and 4 to 5 as Agree. We argue that a neutral state (scale of 3) indicates the candidates are not wholly satisfied, and the statement is given, thus reluctant to agree. Furthermore, a Crosstabulation on the percentage of agreement was used to determine the different aspect of the experience that expresses the differences between the two groups (abroad and local).

## Findings and Discussion

### Research Objective 1

Table 2

#### *Demographic Information of Respondents*

(n)	Gender	Age of Starting PhD	Marital Status (during the study)	Years of Study	Place of Study
1	Female	31-40	Married	5 years	Abroad
2	Male	41-50	Married	4 years	Local
3	Female	41-50	Married	3 years	Local
4	Female	41-50	Single	5 years	Local
5	Male	31-40	Married	5 years	Local
6	Female	20-30	Single	3 years	Abroad
7	Female	20-30	Single	4 years	Abroad
8	Female	31-40	Married	4 years	Abroad
9	Female	31-40	Married	4 years	Local
10	Female	41-50	Married	3 years	Abroad
11	Female	31-40	Married	5 years	Local
12	Female	31-40	Married	6 years	Local
13	Female	20-30	Married	3 years	Abroad
14	Male	20-30	Single	10 years	Local
15	Female	31-40	Married	4 years	Local
16	Female	20-30	Married	3 years	Abroad
17	Male	20-30	Married	4 years	Abroad
18	Female	20-30	Single	4 years	Local
19	Male	20-30	Married	3 years	Abroad
20	Male	41-50	Married	4 years	Abroad
21	Male	20-30	Married	4 years	Abroad
22	Male	31-40	Married	4 years	Abroad
23	Female	31-40	Married	4 years	Local
24	Female	31-40	Married	6 years	Local
25	Female	20-30	Single	3 years	Abroad
26	Female	31-40	Married	4 years	Abroad
27	Male	31-40	Married	4 years	Abroad
28	Male	31-40	Married	4 years	Abroad

The data in Table 2 show that out of the 28, 16 (57.1%) studied abroad, and 12 (42.9%) did their PhD locally. As seen in Table 1, both cohorts score a minimum of three years for the number of years taken to complete the doctoral study. What stands out in the table is that the average years spent to obtain a doctoral degree abroad is around 3.8 years, and 5 years for doing it locally. This number is hugely influenced by the maximum number of years spent by Respondent 1 (5 years, abroad) and Respondent 14 (10 years, local). A close examination of the Respondent 1 feedback did not elucidate any possible explanation for her delay in completion. However, Respondent 14's feedback may suggest a strong relationship between his delays and the supervision aspect. Out of six items for Supervision, he responded negatively to five items, suggesting a correlation between poor supervision and the delay. This finding parallels with van de Schoot et al (2013) that ineffective supervision, i.e., poor guidance and planning and not arranging for regular meetings, may result in doctoral students' tendency to prolong their doctoral studies, thus affecting their doctoral quest experience in the whole.

Table 3 compares the Crosstabulation of items between those studying abroad and local. It is an interesting observation that Overall Satisfaction, Goals and Expectation, and Infrastructure recorded 0% dissatisfaction feedback from respondents that pursued their doctoral study abroad. Based on this, it is interesting to speculate that foreign institutions provide better doctoral experiences through sufficient provision for technical and equipment support, skills needed to assist students in achieving their study goals, and the availability of services. Regarding Infrastructure, the data indicated that local graduates were less satisfied with the provision of a suitable workplace (41.7%). Although small, 33.3% of the local respondents are also dissatisfied with the technological support they had received. Following these present results, these finding broadly reflects those of Arambewela and Hall (2007), who indicated that graduate students expect certain facilities to be made available to them that comply with their standards at a reasonable cost and are available when required.

Furthermore, students might feel deceived as their high expectations built on the promises given by universities through their promotional material regarding the availability of core facilities such as computer equipment were not met. One implication of this finding is the need for HEIs in Malaysia to step up their game by providing and improving their amenities to their graduate students. Inability to meet with what was promised may have a disastrous effect not only on the image and the institution's prestige but also on the students' learning experience, which may affect enrolment in the future.

In response to PREQ (Table 1), another significant aspect of the graduate experience is the Supervision aspect concerning Item 1 - 'Supervision was available when I needed it, and item 24 - 'I received good guidance in my literature search. Consistent with the literature, this research found that more than half of the respondents who had done their study locally disagreed with both items. A closer interpretation of these two items highlights the accessibility aspect of supervision that could affect the overall doctoral experience. As the difference between the two cohorts was significant, it is possible to reflect that the differences are due to the respondent's reflection on how much supervision and assistance they have had before embarking on their doctoral quest. This accords with earlier findings by Abiddin (2007); Sidhu et al (2013, 2014); Abdullah and Sulaiman (2014) that put supervision as an integral factor that influences the outcome of going through a doctoral study. In



Abdullah and Sulaiman's (2014) study, students who had continued their studies at a local university in Malaysia experienced difficulties with independent supervisors and a less structured supervision style. Furthermore, as established by Abiddin (2007), students may have an impression of what adequate supervision comprises - receiving good guidance and advice, having access to lecturers, and openness for discussion - influencing the findings for these items.

## Research Objective 2

Table 3

*Crosstabulation on Percentage of Agreement between Studying Abroad and Local*

Domain	Items	Percent (%)						
		Studied Abroad			Studied Local			
		Disagree	Agree	Total	Disagree	Agree	Total	
1	Supervision	Good Guidance for literature research.	2 (12.5)	14 (87.5)	16 (100)	6 (50.0)	6 (50.0)	12 (100)
		Effort to understand difficulty.	4 (25.0)	12 (75.0)	16 (100)	3 (25.0)	9 (75.0)	12 (100)
		Supervisor availability.	1 (6.2)	15 (93.8)	16 (100)	6 (50.0)	6 (50.0)	12 (100)
		Provide additional info and relevant topic.	2 (12.5)	14 (87.5)	16 (100)	5 (41.7)	7 (58.3)	12 (100)
		Given good guidance in topic selection and refinement.	3 (18.8)	13 (81.3)	16 (100)	3 (25.0)	9 (75.0)	12 (100)
		Helpful feedback progress.	1 (6.3)	15 (93.8)	16 (100)	3 (25.0)	9 (75.0)	12 (100)
		Thesis exam complete	1 (6.3)	15 (93.8)	16 (100)	4 (33.3)	8 (66.7)	12 (100)

	<b>Thesis Examination</b>	reasonable time.						
<b>8</b>		Satisfied thesis exam process.	1 (6.3)	15 (93.8)	16 (100)	5 (41.7)	7 (58.3)	12 (100)
<b>9</b>		Thesis exam was fair.	1 (6.3)	15 (93.8)	16 (100)	4 (41.7)	8 (58.3)	12 (100)
<b>10</b>	<b>Intellectual Climate</b>	Provide opportunity to involve in broad research culture.	1 (6.3)	15 (93.8)	16 (100)	8 (66.7)	4 (33.3)	12 (100)
<b>11</b>		Appropriate financial support research activity.	3 (18.8)	13 (81.3)	16 (100)	2 (16.7)	10 (83.3)	12 (100)
<b>12</b>		Integrate department community.	2 (12.5)	14 (87.5)	16 (100)	6 (50.0)	6 (50.0)	12 (100)
<b>13</b>		Postgrad seminar program provided.	0 (0)	16 (100)	16 (100)	4 (33.3)	8 (66.7)	12 (100)
<b>14</b>		Opportunity for social contact with other postgrad students.	0 (0)	16 (100)	16 (100)	3 (25.0)	9 (75.0)	12 (100)
<b>15</b>		Research ambience in faculty stimulate work.	1 (6.3)	15 (93.8)	16 (100)	4 (33.3)	8 (67.7)	12 (100)
<b>16</b>			Learn and develop	0 (0)	16 (100)	16 (100)	2 (16.7)	10 (83.3)

		ideas present written work.						
<b>17</b>	<b>Skill Development</b>	Research sharpened analytical skill.	0 (0)	16 (100)	16 (100)	3 (25.0)	9 (75.0)	12 (100)
<b>18</b>		Further develop problem solving skill.	1 (6.3)	15 (93.8)	16 (100)	3 (25.0)	9 (75.0)	12 (100)
<b>19</b>		Doing research help plan work.	1 (6.3)	15 (93.8)	16 (100)	3 (25.0)	9 (75.0)	12 (100)
<b>20</b>		Research confident tackle unfamiliar problem.	1 (6.3)	15 (93.8)	16 (100)	2 (16.7)	10 (83.3)	12 (100)
<b>21</b>	<b>Infrastructure</b>	Good access computer facilities service.	0 (0)	16 (100)	16 (100)	2 (16.7)	10 (83.3)	12 (100)
<b>22</b>		Access suit work space.	0 (0)	16 (100)	16 (100)	5 (41.7)	7 (58.3)	12 (100)
<b>23</b>		Good access tech support.	2 (12.5)	14 (87.5)	16 (100)	4 (33.3)	8 (66.7)	12 (100)
<b>24</b>		Good access to necessary equipment.	0 (0)	16 (100)	16 (100)	2 (16.7)	10 (83.3)	12 (100)
<b>25</b>	<b>Goals and Expectations</b>	Understood required standard thesis.	0 (0)	16 (100)	16 (100)	2 (16.7)	10 (83.3)	12 (100)

26		Understand standard of work expected.	0 (0)	16 (100)	16 (100)	3 (25.0)	9 (75.0)	12 (100)
27		Understood requirement thesis exam.	0 (0)	16 (0)	16 (100)	1 (8.3)	11 (91.7)	12 (100)
28		Overall Satisfaction research experience.	0 (0)	16 (100)	16 (100)	3 (25.0)	9 (75.0)	12 (100)

On a different note, interestingly, there were no apparent statistical differences for Item 7 - 'My supervisor/s made a real effort to understand difficulties I faced', where both cohorts recorded the same percentage; 25% disagree and 75% agreement. Although the number is relatively small, this finding raised an intriguing question regarding the psychological support provided by the supervisor to their doctoral students. One issue that emerges from this finding is that supervision quality and the supervisor's role in both academic and non-academic issues influence students' satisfaction (Arambewela & Hall, 2007). As doctoral students from Malaysia consider having a 'people-oriented' supervisor as an integral factor in their doctoral degree pursuit (Sidhu et al., 2014), this inevitably becomes an integral stressor regardless of the location of their study as these doctoral students' experience 'acculturative stress' (Desa et al., 2012). Abdullah and Sulaiman (2014) indicated in their study that international postgraduate students in Australia faced challenges in understanding the academic system, language difficulties, writing academically and unstructured supervision. Furthermore, these doctoral students will also be subjected to considerable changes within the spheres of intellectual endeavour to obtain an ontological shift and gain their academic identity (Emmioğlu et al., 2017; Murphy & Wibberley, 2017; Sverdlik et al., 2018). Subject to the doctoral journey, which is frequently extended, challenging, arduous, and lonely, these new academics may go through a period of liminality; a suspended state in which understanding approximates to a kind of mimicry or lack thereof of authenticity (Meyer & Land, 2003:10). Manoeuvring through this period, Arambewela and Hall (2007) mentioned in their paper that student counselling services could play a significant role as a form of assistance and support. Through their paper, Yusof and Azman (2013) further emphasise the supervisor's role in managing students' stress by preparing meticulous and proper planning and time management at the beginning of their study.

Comparing the two cohorts also reveals an interesting observation on Intellectual Climate. Item 10 - 'The department provided opportunities for me to become involved in the broader research culture', recorded 66.7% disagreement, while Item 12 - 'I was integrated into the department's community', recorded a 50% disagreement rate. According to Sam et al (2013), faculty members, academic staff, and other PhD students are integral to assisting graduate students to academic success. Presenting papers in seminars, attending research-related courses, having a positive and supportive intellectual climate, and having the opportunity to collaborate with other students may influence the doctoral student's habits

and attitudes that enhance their learning experience. Sohail and Daud (2009) mentioned that sharing knowledge requires a positive role by the university administrators by encouraging their teaching staff to share knowledge through open discussions, forums, seminars or colloquiums. As an immediate effect of venturing into a PhD quest, a doctoral student would be subjected (but not limited) to self-imposed academic seclusion and isolation (Mantai & Dowling, 2015; McDonald et al., 2015; Elliot et al., 2016; Maksimovic & Kobayashi, 2017) that could restrict their social engagement. However, caution is needed when interpreting this with small sample size, as the findings might be subjected to bias. Nevertheless, a study provided by Sam et al (2013) described how international postgraduate students had been actively involved in social events and organisations, including schools' postgraduate student associations and others in one local university in Malaysia. Such finding shows that local universities have already provided numerous programmes and avenues for their students. Maybe, what is absent is the presence of knowledge-sharing culture in the local universities that motivate and create opportunities among doctoral students to have a part in enhancing knowledge. Thus, improving the Intellectual Climate aspect of doctoral programmes at local universities in Malaysia could result in more extraordinary student learning experiences that will potentially boost its image and prestige.

### **Conclusion**

The data for this paper was derived from the Postgraduate Research Experience Questionnaire (PREQ) to observe the different experiences of doctoral graduates at a local university in Malaysia. Information in this research supports the aspect of experiences that are significantly different on the educational experiences between those who pursued their study abroad and those who did it locally. Thus, this paper has managed to distinguish the need for Malaysian higher education institutions to improve on issues of supervision, intellectual climate and infrastructure, which are central components in improving the quality of postgraduate learning environments. Findings included in this study may inform HEIs management to improve the service they can offer students and develop dynamic strategies to attract international students by meeting their needs and wants. As the country moves towards becoming the 'education hub' in South-East Asia, HEIs in Malaysia should seek to offer comprehensive, attractive and supportive student packages to attract more international students (Shahijan et al., 2016). Like other developing countries, Malaysia strives to take its higher education system to a higher level of performance.

There is vast room for further research in determining factors to improve postdoctoral learning experiences. One factor that was not included in this study is the socio-cultural factor. Several works of the literature suggest that socio-cultural is an important aspect that influences international students in enrolling at HEIs in Malaysia (see Awang et al., 2012; Mustaffa & Ilias, 2013; Sam et al., 2013; Singh et al., 2014). Furthermore, future studies could seek to have a larger number of participants that could illustrate better and more dependable results. Data presented in this paper is restricted to only one HEI in Malaysia, thus limiting its generalisation. Ensuring an appropriate level of systems, services and support for doctoral students' experience should be a priority for improving the postgraduate learning process and elevating the status of HEIs in Malaysia.

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