# Postgraduates' Perceptions in Completion of Their Study

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## ABSTRACT

*This study was conducted to investigate the postgraduate students' perceptions towards their experiences of completion of their studies. The population of this study consisted of postgraduate students in a public university in Selangor. The sample comprised 104 randomly selected postgraduate students from the university. A 5-point Likert scale questionnaire was administered to the samples. The questionnaire consisted of four domains, namely student factor, supervisor factor, institutional factor and challenges faced by the students. This study discovered that (1) the postgraduate students perceived supervisors as a determinant factor that contributes toward conducting research. (2) they perceived their academic competencies in research writing as moderate and (3) the supervisor factor has a significant and inverse relationship on challenges faced by the postgraduate students, i.e. the efforts and competencies of supervisors reduced challenges of the postgraduate students to complete their research.  Based on the findings, it was suggested that higher learning institutions should highlight on the construction of knowledge through active interaction between lecturers and students. This type of assistance has become a platform for the students to cope up with the learning challenges they were facing in higher education.*

## 1.0 INTRODUCTION

Developing graduate education is essential as it can contribute to national economic development. Under the 11th Malaysian Plan, Malaysia is focusing on enhancing research skills to achieve the objectives featured in the plan (Outlook, 2016). All the efforts reflect the need to boost university research culture. Hence, universities need to focus on postgraduate students' development in research as a key indicator of innovation and development of human capital. According to Chapman and Chien (2014), global graduate enrolment has increased tremendously over the last decade. This reflects that the government has high priority in offering graduate education. In the Malaysia Higher Learning Institutions, students who pursue Master's Degree or Ph.D. programs in mixed mode program have to complete and pass all the prescribed core courses and the most vital focus is to proceed to the research phase of the program (Ishak & Alias, 2005). The academic thesis is the most symbolic example of a research project conducted by students (Nieminen, Takkinen, Renko & Risteli, 2007; Maxwell, 2011). The academic thesis can be considered as the first systematic empirical step of research, introduced to most of the postgraduate students (De Kleijn et al. 2012). The development of postgraduate (PG) programs has offered vast opportunity to young academicians to further their studies. Several studies have found that many of the graduate education programs worldwide have attracted mature professional-based and non-residential student studying on a part-time basis (Humphrey & McCarthey, 1999). Nevertheless, these students have to struggle to cope with challenges in their academic and professional workloads. Sometimes, they have experienced a lack of assistance and support from their supervisors; rigid program organization and structures; and a feeling of isolation (Mackinnon, 2004). Having said that, literature has found that postgraduate supervision has become a problematic context. To some extent, due to this problematic context, the attrition and completion rates of postgraduate students are becoming a vital concern to many universities (Lessing & Schulze, 2002). Hence, it is significantly important to observe students' experiences in conducting research and its' relation to challenges faced by them. The challenges have connection with students' individual factors, supervisors' factors as well as institutional factors. For example, Lessing and Schulze (2002) have reviewed a literature text and found that PG students were having difficulty in their research design; collecting and processing information; and writing a thesis report. Sidhu et al. (2013) have also stated that postgraduate students are also lacking academic literacy and research skills. In another study, Sidhu et al. (2014) have stated that postgraduate students and the relationship with their supervisors can also be a problem. Zuber-Skerritt and Roche (2004) have affirmed that in a supervision context, the roles of supervisors are to provide resources and information; feedback

and guideline of thesis writing, giving emotional support, and encouragement. Lessing and Schulze (2002) have also distinguished between the support needs of Master's Degree and PhD students, where the Master's Degree students need to methodologically master the research process and the doctoral candidates are expected to produce more original work and may, therefore, need more input in developing depth, synthesis, and critical ability. All the findings and suggestions have signified that PG students need more motivation as discovered by Teoh, Geethanjali, & Gurnam (2019). In the nature, supervisors play very important role directly and indirectly to guide and monitor students' progress, so that students are motivated to graduate on time. Besides, challenges remain exists since many other factors are in the concerns. Consequently, according to Philips and Pugh (2000), in order to complete PG research, students need determination and perseverance in facing their challenges. In this sense, Phillips and Pugh (2000) further remind that postgraduate students should take responsibility for their studies and to ascertain what is needed for their research. Conversely, Mackinnon (2004) cautions that the faculty or universities and the graduate school office need to address and acknowledge the intellectual and psychological conditions of their students. They need to provide conducive macro and micro-environment as well as individual resources to enhance graduate completion and performance (Lovitts, 2005). Therefore, postgraduate students' perceptions towards contributing factors from the three aspects (namely students, supervisors and institution) are important in conducting research and its relationship with challenges that they have faced is pertinent in this study. Hence, this study provides an insight to improve further the quality of PG students and to elevate good research while improving the completion rates of the students.

## 2.0 BACKGROUND OF THE STUDY

One of the requirements of the postgraduate studies is to conduct a research and write a thesis. PG students should be able to demonstrate their knowledge, attitude, initiative, confidence, and perseverance along with their own research spirit into their academic thesis (Radafshar et al, 2010). Nonetheless, Stuart et al. (2008) have asserted that one of the basic principles in the completion of any study is the researchers' beliefs about research. Their beliefs will strongly motivate them to undertake a study and later successfully complete their study. On the contrary, previous studies have shown that PG students take a longer time to complete their studies (Ismail, Abiddin, & Hassan, 2011). In addition, it was reported that attrition rate among Malaysia postgraduate students was high. In this case, there are some factors that need to be explored with regards to their beliefs since the focus of

beliefs had shown a strong factor in the completion of study. Many researchers such as Moskvicheva, Bordovskaia, Darinskaya (2015) emphasised that students' and supervisors' responsibilities within an institution play a major role to ensure the flow of the students' progress in writing. Hence the factors related to students, supervisors and institution pose as challenges for students to complete their studies. Malaysia in general aims to produce as many PG scholars as possible, particularly among Ph.D. graduates by 2023. Wang and Li (2008) have reported that the quality of research theses and dissertations were low. Given the role of research in a higher learning institution, it is critical to understand what are the determinant factors that contribute to the success or failure in pursuing PG studies.

To address this issue, one of the overriding questions is "What are the postgraduate students' reasons behind the inability to complete their studies?". Previous studies showed that there were contributing factors that postgraduate students encountered in the process of doing research and thesis activities (Duze, 2010). Such factors include, firstly, students themselves (such as students' knowledge, experience, commitment, socioeconomic condition, communication skill, stress and time management as described by Bocar, 2009), secondly, the institution (such as cooperation, guidance, fund and physical facilities as described by Safari et al., 2015), and thirdly, supervision (such as student supervisor relationship, supervisor knowledge and interest, regular contact between supervisor and student and timely feedback as described by Yousefi, Bazrafkan & Yamani, 2015). Some studies have also noted that factors in the catogories of attitude, knowledge, and barriers toward research (Soe et al., 2018; Khan, Khan & Iqbal, 2009). Hence, in relation to such factors, Lovitts (2005) found that graduate students are often not prepared to face the challenges that have been set on them by the school of graduate studies. Malfroy (2005) noted that some of the graduate students had anxiety due to the uncertain expectations. Given this point, most of the studies conducted worldwide on postgraduate training have focused on issues of supervision (Åkerlind & McAlpine, 2017; Mapolisa & Mafa, 2011). However, there were limited studies on challenges of writing theses or dissertations (Wang & Li, 2008; Bitchener & Basturkmen, 2006; Lessing & Schulze, 2002). Besides, studies pertaining to PG students' perception of determinant factors on conducting research and its' association to challenges are still scanty, particularly in a local context. Therefore, this study intends to investigate determinant factors and its relationship with challenges in conducting research studies among PG students in a higher learning institution.

The major objectives of this study are:

1) To examine the PG students' perceptions on their experiences (in terms of student factor, supervisor factor, institutional factor) of conducting research in a university in Selangor.
2) To identify challenges faced in conducting research among PG students in a university in Selangor.
3) To investigate the relationship between the students' experiences and challenges in conducting research among postgraduate students in a university in Selangor.

This study provides an important insight to the stakeholders such as universities, graduate school offices, deans and head of programs as a guide to reduce attrition rates among PG students. The finding may enable stakeholders, especially faculty and graduate school office, to understand students' perceptions of guidance, self-assessed strengths, and areas for improvement, which will help them meet their students' needs and provide the necessary support services. More importantly, the findings of this study can provide information in reducing some of the challenges faced by the graduate students in terms of the emotional state, self-management, as well as academic competency. Therefore, it is apparent for the universities to design and consolidate research culture, reduce research-related emotional state and create a conducive and comfortable environment for postgraduate students. Apart from that, creating a research culture is an important factor to educate and encourage a close relationship between supervisors and supervisees. In this sense, the graduate students are exposed to research scientifically and thus increase their academic competency and reduce their research anxiety.

## 3.0 RESEARCH METHODOLOGY

### 3.1 Research Design

This study employed the descriptive survey research design to examine the postgraduate students' perceptions on their studies. The perceptions focus on the PG's experiences on their studies. Their sharing of experiences articulates some beliefs towards the challenges and direction to complete PG studies. The beliefs based on perceptions are usually captured via a survey research as prescribed by Babbie (1990).

## 3.2  Sampling

Population is the total number of units found in a study site whether the human or the object being studied. The population of this study consisted of PG students undertaking Master and Doctoral degree in a public university. A random sampling technique was conducted. A total of 183 PG students from the university were randomly selected, based on sample size recommended by Krejcie and Morgan (1970). However, out of 183 respondents, only 104 responded to the questionnaire.

## 3.3  Instrument

The questionnaire was adopted and adapted from Sidhu et. al., (2014).  In this study, self-rating questionnaire was used as the research instrument to assess PG students' perception towards those variables. This questionnaire consisted of four domains, namely student factor, supervisor factor, institutional factor, and challenges. The sections involve section A consists of respondents' demographic profile, meanwhile Section B, C and D consist of the 61 items measuring determinant factors (student factor, supervisor factor, institutional factor, and challenges) which comprised three dimensions.  On the other hand, Section E consists of challenges faced by postgraduate students in conducting research which consist of 24 items. Description of the items of this instrument were categorized into the four dimensions as shown in Table 1.

**Table 1: Experiences, challenges and its dimensions**

| Section | Dimension |
|---|---|
| B | Students' factors (32 items) |
|   | Critical Reading Skills |
|   | Writing skills |
|   | Research skills |
|   | Conceptual skills |
|   | Personal skills |
| C | Supervision's factor (18 items) |
|   | Supervisors Roles and Responsibilities |
|   | Supervisory Practices |
|   | Supervisors' Competency |
| D | Institutional factors (11 items) |
|   | Institutional facilities |
|   | Institutional support |
| E | Challenges (24 items) |
|   | Emotional state |
|   | Self-management |
|   | Academic competence |

Table 2 presents some sample items of the questionnaire. The items for the domain of challenges consist of items which carry negative values. Hence, the negative correlation between the domain of challenges to the domain of other factor indicates more challenges for less input of the factor, for example if the correlation between supervision's factor and challenges is negative, indicates that high challenges incur with less input from supervisor. Alternatively, it shows that less challenges incur with more input from supervisor.

### Table 2: Sample Items

| Dimension | Item |
| --- | --- |
| Challenges | Emotional State<br>I suffer from stress doing a postgraduate degree.<br>I lack interest in my postgraduate study.<br><br>Self-management<br>I have problems strategizing from my failures.<br>I have poor time management skills.<br><br>Academic Competence<br>I have limited access to research subjects and contacts.<br>I lack in-depth reading in the area of my investigation. |

*Validity and Reliability*

Validity is a test to measure what is supposed to be measured (Fraenkel, Wallen & Hyun, 2012). Conducting the validity of the instruments used is important so that the items to be measured are valid and the findings are based on facts that can provide justification. Apart from validity, it is important to conduct a reliability test of the instrument. As such, to determine the validity of the instrument, the instrument was given to a few experts to make certain of the face and content validity. The experts were selected from the field of educational management and leadership with vast experience in research work.

Reliability is the consistency of instrument in producing the same score each time it is used (Fraenkel, Wallen & Hyun, 2012). It is a measurement procedure that can be defined as the stability or consistency of a measure (Fraenkel, Wallen & Hyun, 2012). In order to ascertain the reliability of the instrument a pilot test was conducted to a group of 30 postgraduates who were not involved in this study. The result of the pilot test was reported as below in Table 3.

### Table 3: Cronbach's Alpha Value

|  | Cronbach Alpha value |
| --- | --- |
| Experiences/Determinant factors | 0.947 |
| Students | 0.964 |
| Supervisors | 0.964 |
| Institutional | 0.906 |
|  |  |
| Challenges faced | 0.950 |
| Emotional state | 0.875 |
| Self-management | 0.901 |
| Academic competency | 0.874 |
| Overall | 0.911 |

The Cronbach's Alpha value (Table 3) of section determinant factors was 0.947 while the challenges faced by postgraduate students was 0.950 where it exceeded the minimum acceptable value of 0.7 as suggested by Nunnally and Bernstein (1994). The reliability estimate for the whole set of questions was very high (0.911) and it demonstrates a very good scaling of the instrument.

## 4.0 FINDINGS

The following are the findings according to the research questions:

### 4.1 Research Question 1: What are the students' experiences in conducting research?

The postgraduate students' experiences in conducting research were identified in terms of three main factors, students, supervisors, and institutional factors (Table 4).

### Table 4: Experiences in Conducting Research

| Determinant factor toward conducting research | Mean | Std dev |
| --- | --- | --- |
| Students' Factors |  |  |
| Student Critical Reading | 3.56 | 0.59 |
| Student Writing Skill | 3.43 | 0.72 |
| Student Research Skill | 3.39 | 0.67 |
| Student Conceptual Skills | 3.40 | 0.69 |
| Student Personal Skills | 3.64 | 0.65 |
| Total | 3.48 | 0.66 |
|  |  |  |
| Supervisors' Factors |  |  |
| Supervisors' Roles | 3.93 | 0.79 |
| Supervisors' Practice | 4.08 | 0.78 |
| Supervisors' Competency | 4.10 | 0.79 |
| Total | 4.03 | 0.78 |
|  |  |  |
| Institutional Factors |  |  |
| Institutional Facilities | 3.50 | 0.66 |
| Institutional Support | 3.39 | 0.78 |
| Total | 3.44 | 0.72 |

Mean indicator Low<1.66; Moderate= 1.67- 3.33; High= > 3.34

Table 4 indicates the mean and standard deviation scores of respondents' perception towards the determinant factors in conducting research. The mean of the students' factor is 3.48 (SD=0.56). Specifically, the breakdown are critical reading skills, mean= 3.56, standard deviation SD=0.56, followed by writing skills, mean=3.43, standard deviation SD=0.72, then conceptual skills, mean= 3.40, standard deviation SD=0.65 and lastly research skills, mean=3.39, standard deviation SD=0.67. The finding shows that the postgraduate students rated their skills descriptively above average high. This is reflected in the result where the highest mean score was students' personal skill with mean=3.64, standard deviation SD=0.65.

Comparatively, students rated supervisors' factors higher compared to the other two factors (students and institution factors). In terms of supervisor's factors, the total mean scores of supervisor's factors is = 4.03 with standard deviation SD=0.78. It was the highest determinant factor for the postgraduate students to conduct the research. Specifically, the respondents rated with mean 4.10 standard deviation (SD=0.79) for item supervisors' competency, followed by supervisors' practices with mean 4.08 with standard deviation (SD=0.78) and lastly, respondents rated the item of supervisors' roles with mean 3.93 with standard deviation (SD=0.79).

In terms of institutional factors, the total mean is 3.44 (SD=0.72). Specifically, the respondents rated with mean 3.50 (SD=0.66) for institutional facilities and mean 3.39, (SD= 0.7) for institutional support. The result depicts that institutional facilities is accounted as the highest mean score.

The finding indicates that overall, the students perceived that all the determinant factors namely, students, supervisors and institutional factors were high. Hence, this study suggests that all the determinant factors play important roles in the life of the postgraduate student in the process of their learning and conducting research. Nevertheless, the result of the study depicts that supervisor's factor is the most important determinant factors that the postgraduate students are involved in conducting research.

This finding supports the research done by Alam, Alam and Rasul. (2013). Supervisor's role, practices and competency are important factors in making sure these students could complete their theses. In this sense, Lessing and Schulze (2002) concurred that a varied pattern of supervisory involvement in the research process can produce the excellent results. Hence, this pattern involves a significant initial investment in time and effort in formulating the research question, followed by less interaction and more monitoring during the implementation phase, and finally increased input during the eventual writing of the research report. Besides,

Alam et al (2013) reviewed past studies and found that the successful completion of a thesis was mainly due to the abilities of the students and supervisor relationships. On the same note, failing to complete student's thesis is due to problems related to inadequate supervision, research support and research environment.

## 4.2 Research Question 2: What are the challenges faced toward conducting research among postgraduate students?

The postgraduate students' challenges were investigated in terms of emotional state, self-management and academic competence as illustrated in Table 5.

**Table 5: Challenges faced toward conducting research**

| Challenges toward conducting research | Mean | Std Dev |
|---|---|---|
| Emotional state | 2.54 | 0.81 |
| Self-Management | 2.36 | 0.81 |
| Academic Competence | 2.58 | 0.93 |
| Total mean score | 2.49 | 0.85 |

Mean indicator Low= <1.66; Moderate= 1.67- 3.33; High= > 3.34

Table 5 reports the mean and standard deviation scores of respondents' perceptions towards challenges in conducting research. On the whole, the finding showed that perceived a moderate challenges in conducting research where the mean of challenges faced toward conducting research is 2.49, (SD= 0.85).

The mean scores for each component in challenges factors was arranged in descending order to rank the levels of challenges faced by the postgraduate. The results show that the respondents perceived a moderate challenges related to academic competence with mean= 2.58 with SD=0.93. The second challenges is related to emotional state where mean= 2.54 with standard deviation SD= 0.81 and the least challenges was self-management, mean= 2.36 with standard deviation SD= 0.81.

The finding showed that the challenges related emotional state, self-management, and academic competence toward conducting research among the post graduate students were moderate. In this study, the challenges in emotional state is referred to students' feeling of pleasure or displeasure which occur with achievement goals. Therefore, in this context, the respondents' feeling of pleasure or displeasure toward conducting research is moderate. According to Morrison-Saunders, Moore, Hughes and Newsome (2010) emotions experienced in the doctoral process may relate to student success with respect to completion rates. In details, students who

are having emotional state of feeling displeasure in any environment may lead to behaviours such as boredom, disenchantment, laziness (Eastwood, Frischen, Fenske & Smilek,, 2012).

## 4.3 Research Question 3: Is there a relationship between determinant factors and challenges toward conducting research among postgraduate students?

$H_0$ : There is no relationship between determinant factors and challenges toward conducting research among postgraduate students
$H_1$ : There is a relationship between determinant factors and challenges toward conducting research among postgraduate students

Table 6 shows the correlation matrix analysis of perceived experiences in conducting research and challenges in conducting research among postgraduate students.

**Table 6: Correlation of experiences and challenges in conducting research**

| | | Determinant Factors R value | | |
|---|---|---|---|---|
| | | Students | Supervisors | Institutional |
| Challenges research | inducting | -0.299 p=0.00 | -0.413 p=0.05 | -0.09 p= 0.40 |

In this study, the relationship between experiences and challenges faced in conducting research were examined using the Pearson's Product Moment correlation. Based on Table 6 above, supervisors' factors and challenges faced in conducting research showed a negative and moderate (r=-0.413, p=0.05) linear relationship. On the other hand, students' factors and challenges faced in conducting research showed a weak and negative (r=-0.299, p=0.00) linear relationship. However, the result depicts that there was no significant relationship between institutional factors and challenges faced in conducting research where r= -0.09, p=0.40.

The study reveals that the students' and supervisors' factors do influence challenges in conducting research but in inversely manner. In other words, the challenges faced by the students and supervisors could be reduced if student determinant factor is increased. In this study, students' factor in conducting research is referred to the students' ability in acquiring critical reading, writing, research and conceptual skills. Phakiti and Li, (2011) also discovered that was a positive relationship between general academic problems with challenges of academic writing. Besides,

it was also found that English language achievement, experiences and academic adjustment had an impact on their academic writing difficulties. Therefore, this study suggests that the challenges in conducting research could be reduced if the student's academic skills particularly in academic writing and perhaps, language are enhanced through proper guidance from the university faculties and supervisors.

The finding also reveals there is a moderate and inverse relationship between supervisors' factors and challenges faced by the students in conducting research. This study is in line with the research done by Ezebillo (2012) and Sidhu et al (2013). The relationship between supervisor and student plays a crucial role in completion of research studies. Deductively, if these students have a poor relationship with their supervisors, there is a tendency in a delay in completing their theses.

## 4.0 CONCLUSION

All in all, this study aims to find the relationship with challenges in conducting research studies among postgraduate students, this quantitative study managed to highlight a few factors namely students, supervisors, and institutional factors. Based on the findings, students rated supervisors' factors more compared to the other two factors (student and institutional factors) which spell the importance of maintaining a good relationship with supervisors. The results revealed that postgraduate students perceived conducting research as a challenge. Academic competence was rated most challenging compared to the emotional state and the least challenging was self-management. The correlation results in this study shows that supervisors' factors and challenges faced in conducting research showed a negative and moderate linear relationship. On the other hand, students' factors and challenges faced in conducting research showed a weak and negative linear relationship. However, the result depicts that there was no significant relationship between institutional factors and challenges faced in conducting research. Consequently, knowing the relationship among student, supervisor and institutional factors can be helpful to minimize the challenges faced by postgraduate students to complete their studies successfully on time.

## ACKNOWLEDGMENTS

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