

**A STUDY ON PERSONAL CAREER GROWTH AND  
POSTGRADUATE ENROLLMENT WITH  
SCHOLARSHIP AWARD AS THE MODERATING  
EFFECT: EXPERIENCES IN UNIVERSITI SAINS  
MALAYSIA**

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**UNIVERSITI SAINS MALAYSIA**

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UNIVERSITI SAINS MALAYSIA

By  
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## DEDICATION

~~ To My Beloved Dad and Mum – Tuan Haji Baba Rahim & Puan Hajah Bibi  
*For their love, care and sacrifices*

~~ To My Beloved Brothers and Sister – Muhammad Nasree, Mohd Nizam &  
Nuraini  
*For their love, care and encouragement*

~~ To a Dedicated Lecturers – Dr Jayaraman & Dr Faiz Hilmi  
*For their affection and motivation to do my best*

To My Dear Friends – Ameneh Hikmat & Yulihassri Hassan  
*For their understanding and cooperation*

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## **ABSTRAK**

Kajian ini memberi tumpuan utama kepada perhubungan diantara kecermelangan akademik, kemampuan kewangan dan pengalaman kerja terhadap pendaftaran pelajar ijazah tinggi di Universiti Sains Malaysia bersama bantuan kewangan sebagai faktor pengeras. Ia sebenarnya adalah untuk untuk mengukur mana satu dimensi diantara faktor kelayakan peribadi yang mempunyai pengaruh yang tertinggi terhadap pendaftaran pelajar ijazah tinggi dan adakah bantuan kewangan memberikan kesan yang besar sebagai faktor pengeras. Kelaziman yang diamalkan untuk mendapatkan bantuan kewangan banyak bergantung kepada kecermelangan akademik serta mod pengajian secara penyelidikan. Kecermelangan akademik menjadi dimensi utama untuk pendaftaran pelajar ijazah tinggi di USM, diikuti dengan pengalaman perkerjaan, namun IPS langsung tidak melihat dari segi dimensi kemampuan kewangan.

Untuk tujuan kajian ini, adalah penting untuk IPS untuk merancang dan memberi pemberat yang sama rata antara kedua-dua dimensi kecermelangan akademik dan pengalaman kerja terhadap pendaftaran pelajar ijazah tinggi, serta pelajar yang tidak cukup dari segi kemampuan kewangan, bantuan kewangan patut dipertimbangkan. Buat masa sekarang, IPS hanya memberi keutamaan kepada dimensi kecermelangan akademik diikuti dengan pengalaman kerja sebagai faktor kedua untuk pendaftaran pelajar ijazah tinggi, padahal IPS langsung tidak melihat dari segi dimensi kemampuan kewangan. Oleh itu, arah tuju kajian adalah untuk meyasat sama ada kecermelangan akademik, kemampuan kewangan serta pengalaman kerja mempunyai kesan positif yang besar terhadap pendaftaran pelajar ijazah tinggi. Sebagai tambahan, bantuan kewangan digunakan sebagai faktor pengeras dalam hubungan ini.

## **ABSTRACT**

This research study was mainly focus on the relationship between academic achievement, financial capacity and working experience with postgraduate enrollment and scholarship awards provided by Institute of Graduate Studies, Universiti Sains Malaysia as the moderating effect. It is about to examine which dimension of the personal career growth has the highest weightage towards the postgraduate enrollment and does the scholarship award give any significant as the moderating effect. The current practice of eligibility to entitle for scholarships is much dependent upon on academic performance and mode of studies by research. Academic achievement has become the first dimension for the postgraduate enrollment in USM followed by working experience dimension as secondary factor, where else IPS does not look at financial capacity dimension.

For the purposes of this study it is important for IPS to plan and give an equal weightage requirement to both academic achievement and working experience dimensions for postgraduate enrollment, where students do not have sufficient financial capacity, a scholarship awards should be considered. Currently IPS-USM is only prioritizing on academic achievement dimension followed by working experience dimension as secondary factor for postgraduate enrollment, where else IPS does not look at financial capacity dimension. Therefore, the aim of this study is to investigate whether academic achievement, working experience and financial capacity has a positive significant influence on the postgraduate enrollment. In addition to that, scholarship award is used as a moderating effect in this relationship.

## **CHAPTER 1**

### **INTRODUCTION**

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Chapter 1 introduces the general background of the research topic as well as the overview of the scenario in University Sains Malaysia. Some problem statements pertaining to the research topic in questions are discussed to address the gap in present literature. Research objectives and research questions guide the direction of this study in order to provide some significance to the pool of existing literature. Finally, organization of remaining chapters listed an overview of the remaining topics found in this report.

#### **1.1 Introduction**

“Transforming Postgraduate Studies” is one of the agenda in Transformation Plan of University Sains Malaysia. Since the university’s most important asset and product are the students, from the perspective of sustainable education, this translates into students can adapt and contribute towards a society that is diverse and with shapeless, solid and wide requirements. As sustainable supply chain of highly skilled workforce lays in the delivery of an effective postgraduate education agenda that represent competitiveness and innovation while inculcating social and environment awareness. The knowledge-based students will become the strength in the mechanism

of social advancement that transverse from institution to the population. (Abdul Razak & Mohamed, 2008)

University Sains Malaysia targets to become a university that produces postgraduate students who are not only trained in their disciplinary knowledge but also possess deep analytical skills and capabilities that allow them to navigate a variety of careers and adapt to changes after graduation.

One of the strategies taken to implement this plan is Reformed Student Funding – Transformation of postgraduate students support to address gaps in students funding. A distinctive funding set up by the university which allows opportunities for postgraduates to develop their own projects and not be constrained by the limiting research scope of the supervisor’s grants. This new funding strategy will support long term, creative risk-taking or ground breaking research. Empowering postgraduate to explore is integral to the development of “new knowledge” independent of funding agencies. The transformation plan also includes the revamping of other activities and programs of the university including postgraduate studies, students’ and self-development services and alumni activities. (Abdul Razak & Mohamed, 2008)

## **1.2 Background of Study**

This research study was mainly focus on the relationship between academic achievement, financial capacity and working experience with postgraduate enrollment

and scholarship awards provided by Institute of Graduate Studies, Universiti Sains Malaysia as the moderating effect. It is about to examine which dimension of the personal career growth has the highest weightage towards the postgraduate enrollment and does the scholarship award give any significant as the moderating effect. The current practice of eligibility to entitle for scholarships is much dependent upon on academic performance and mode of studies by research.

A total number of 100 postgraduate populations were selected for this study. Due to the diversification of bases, these postgraduates are divided into 7 categories, namely local postgraduate versus foreign postgraduate, postgraduate by research mode versus postgraduate by coursework versus postgraduate by mix-mode and finally postgraduate full time versus postgraduate part time. This will allow us to have a comparative dimension towards the subject of interest. The current financial support scheme in IPS is prioritizing those postgraduates who are perusing their studies by research method where else for postgraduates with course work, no funding is provided.

Academic achievement has become the first dimension for the postgraduate enrollment in USM followed by working experience dimension as secondary factor, where else IPS does not look at financial capacity dimension.

The proposed scholarships scheme is structured to support the postgraduates that deemed most in need and for those with the most potential to benefits form higher education. The characterization of “in need” in this sense is any postgraduates from a low-income background who also meets one or more of the following criteria:

- Ø academic achievement
- Ø financial capacity
- Ø working experiences

By doing an accurate study of the university financial aids scheme, it could provide significant and constructive results in order to explore the attitude of postgraduate applicants towards the postgraduate enrolment at the higher education level.

For the purposes of this study it is important for IPS to plan and give an equal weightage requirement to both academic achievement and working experience dimensions for postgraduate enrollment, where students do not have sufficient financial capacity, a scholarship awards should be considered.

Postgraduate Scholarships Scheme at the University Sains Malaysia included in this research is: USM Fellowships and Graduate Assistant (Teaching Scheme). The scholarships specifically target academically to students who have been deemed as 'in need' therefore they require the additional support from the University. These awards are purely taking into consideration of outstanding academic achievements with full-time research mode. It does not even consider other criteria such as the background of family income, personal circumstances and extra-curricular achievements.



### **1.3 Problem Statement**

Ever since it has been recognized as Accelerated Program for Excellent (APEX) University in 2008, USM is going towards becoming a university that produces postgraduate students who are not only trained in their disciplinary knowledge, but also, along the way, to possess deep analytical skills and capabilities that allow them to navigate a variety of careers and adapt to changes after graduation. (Abdul Razak & Mohamed, 2008)

Under the APEX Reformed Student Funding plan, it is a vision of USM that the transformation of postgraduate students would support and be able to address gaps in students funding resulting from unequal funding mechanism (Abdul Razak & Mohamed, 2008). To what extent the distinguishing funding set up allows the opportunities for postgraduates to develop their own projects and not be constrained by the limiting research scope of the supervisor's grants? This new funding strategy will support long term, creative risk-taking or ground breaking research. Empowering postgraduate to explore is integral to the development of "new knowledge" independent of funding agencies.

Revamping of other activities and programs of the university including postgraduate studies and students, and self-development services are also under the transformation plan Universiti Sains Malaysia (Abdul Razak & Mohamed, 2008). This is as a result of the current financial support system in IPS is more to support those postgraduates who are pursuing their studies by research method where else for

postgraduates with course work, no funding was provided. Besides, eligibility requirements apply to full time postgraduates' but not to part time postgraduates. Should IPS-USM generate its own scholarships scheme and provide prospective postgraduates with low income?

Currently IPS-USM is only prioritizing on academic achievement dimension followed by working experience dimension as secondary factor for postgraduate enrollment, where else IPS does not look at financial capacity dimension. Therefore, the aim of this study is to investigate whether academic achievement, working experience and financial capacity has a positive significant influence on the postgraduate enrollment. In addition to that, scholarship award is used as a moderating effect in this relationship.

#### **1.4 Research Objectives**

This study attempts to investigate the significant relationship between personal career growth and postgraduate enrollment with scholarship award as the moderating effect in USM. Thus, it will work based on the following research objectives:

- 1) To investigate the positive significant relationship between academic achievement and postgraduate enrollment.
- 2) To investigate the positive significant relationship between financial capacity and postgraduate enrollment.

- 3) To investigate the positive significant relationship between working experience and postgraduate enrollment.
- 4) To investigate the positive relationship between academic achievement and postgraduate enrollment moderated by scholarship award.
- 5) To investigate the positive relationship between financial capacity and postgraduate enrollment moderated by scholarship award.
- 6) To investigate the positive relationship between working experience and postgraduate enrollment moderated by scholarship award.

### **1.5 Research Questions**

Particularly, the research requires a deeper understanding concerning the following questions:

- 1) What is the significant relationship between academic achievement and postgraduate enrollment?
- 2) What is the significant relationship between financial capacity and postgraduate enrollment?
- 3) What is the significant relationship between working experience and postgraduate enrollment?
- 4) Does the scholarship award moderates the positive relationship between academic achievement and postgraduate enrollment?
- 5) Does the scholarship award moderates the positive relationship between financial capacity and postgraduate enrollment?

- 6) Does the scholarship award moderates the positive relationship between working experience and postgraduate enrollment?

A further aim was to examine which criteria of the personal career growth has the most highest weighted towards the postgraduate enrollment and to what extend does the university scholarship award give any impact as the moderating effect.

## **1.6 Significance of Study**

Since one of the strategies taken by USM is to implement the Reformed Student Funding; which is transformation of postgraduate students support to address gaps in students funding. A distinctive funding set up by the university which allows opportunities for postgraduates to develop their own projects and not be constrained by the limiting research scope of the supervisor's grants. This new funding strategy will support long term, creative risk-taking or ground breaking research. Empowering postgraduate to explore is integral to the development of "new knowledge" independent of funding agencies. The transformation plan also includes the revamping of other activities and programs of the university including postgraduate studies, student's activities, self-development services and alumni activities. Thus this study will help to support the proposed strategy.

Past literature shows academic achievement, financial capacity and working experience are important dimensions to be considered for postgraduate enrollment. Currently, IPS only prioritized on academic achievement as a primary dimension for

postgraduate enrollment. This study is to show whether academic achievement, financial capacity and working experience have an equal importance for postgraduate enrollment.

Hence, this research is perceived be a significant contribution to the postgraduates of in order to support the “Transforming Postgraduate Studies” which is one of the agenda in Transformation Plan of University Sains Malaysia. It is a hope that the present study may provide the basis for future exploration so that IPS, USM could give a main concern not only to academic achievement as the main dimension in the postgraduate enrollment but also to working experience with the same weightage. In other word, academic achievement and working experience should come simultaneously as the dimension of the postgraduate enrollment.

## **1.7 Organization of Chapters**

There are five chapters pertaining to this study. An overview of each chapter is as follows:

### **Chapter One – Introduction**

This is an overview chapter of the study which consists of an introduction and a brief background student’s enrollment and scholarship awards. This is followed by problem statement, research objectives and research questions of this study which will determine the significance of the study.

## **Chapter Two – Literature Review**

Chapter 2 explores the relevant literature of the past related the impact of scholarship towards students enrollment and scholarship awards.

## **Chapter Three – Research Methodology**

This chapter seeks to explain the design employed in this research. It explains the variables, population and sampling, as well as data collection and procedure in order to obtain primary data fro this study. The details of the measurements used can be found in this chapter followed by data analysis and summary.

## **Chapter Four – Results**

Chapter 4 outlined the type of analysis conducted on the variables. It illustrated the response rate and the profile of respondents. The highlight of this chapter is the hypotheses testing where a list of hypotheses results are tabulated in the final section of this chapter.

## **Chapter Five – Discussion and Conclusion**

Study Findings, discussion and interpretation of analysis results are summarized in Chapter 5. It gives the readers an understanding of the implications and limitations of this research in addition to providing insight on how researcher can approach future research within the scope of scholarship impact and postgraduates enrollment.

## **CHAPTER 2**

### **LITERATURE REVIEW**

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This section discusses on the existing studies which are relevant to this research and provides the basis of this study.

#### **2.1 Postgraduate Student Enrollment**

Only a minor research has found of the factors that influence the recruitment of higher education students. The findings from the past researchers note that from a recruitment point of view, as well as the quality of teaching, and academic support and facilities were important. In addition to that, non-traditional applicants gave ‘more emphasis to reputation and quality, location and nearness to “home.”’ However, there is less work addressing on the impact of current student funding arrangements on student recruitment (**Sharp, 2008**). A perceived lack of support from institutions is evident when one examines the study funded by Joseph Rowntree Foundation (**Quinn et al, 2005**) which found that students faced difficulty in accessing support systems in higher education. Prior research found that the institutions most successful at recruiting non-traditional students worked to create a ‘friendly’ institutional atmosphere with ‘an emphasis on support leading up to, and during, the critically important first year of study’ (**Yorke, 2004**).

Some institutions seem to be making progress on the number and proportion of these enrollments. At the University Sains Malaysia, the percentage of postgraduate students increased from 56 percent of the total student population in 2007 to 58 percent in 2008. In terms of gender distribution University Sains Malaysia saw a reduction in the proportion of postgraduate males, between 2000 and 2005, from 54 percent to 50 percent. Analyses of the distribution of students, by program level, give cause for concern. In 2008, doctoral students at the University Sains Malaysia stood at only 6 percent of total postgraduate enrollment (**Abdul Razak & Mohamed, 2008**).

These enrollments raise an even more potential to turn out adequate numbers of future academics. The majority of postgraduate students are pursuing programs at levels and in fields that are considered to provide them with opportunities for career advancement outside of academe. An inordinate number, over the last decade, has been in professional management programs such as the master of business administration. The doctoral graduates, compared to their master's degree counterparts, represent quite a small proportion. Only 11 of postgraduate students at the University Sains Malaysia received doctoral degrees at the University Sains Malaysia in 2006, representing a mere 2 percent of the postgraduate cohort (**Abdul Razak & Mohamed, 2008**).

As a conclusion, it is impossible to make a preparation to the next generation for academic without a practical strategy to support students as well as an energetic system of postgraduate training. Besides, the function of higher institution not just



only to improve the number of enrolment and the quality of the postgraduate students whose enter the university, but also to make sure these selected characteristic could provide an excellent postgraduate output.

There are several factors that could not support in developing a quality output of postgraduate such as low number of enrolment, late for graduation and also high number of student dropout. Therefore, an attractive funding model and up to date curriculums are important to determine in the growing of the future academics.

## **2.2 Scholarship Award**

The findings of Hatt, Hannan & Baxter (**April, 2005**) states that the financial aid can ease the financial pressures during student's transition to higher education (HE) and the scholarship scheme provided by the university can affect students' perceptions of an institution and their commitment to succeed. As a result, they managed to explore the impact of scholarships on the financial concerns of prospective students and their parents were limited by its timing. (**Wilcox, 2005**) suggests HE providers should consider the timing of the scholarships payments and the implicit message the scholarships sends to students if they want to ensure that their scholarships have a positive impact on the student experience. A long the way, (**Munro and Fisher, 2004**) reports that a wider study should be done in order to determine how far is the findings of their study earlier are replicated at other universities that are differently located within the sector.

Research on the impact of scholarship scheme from lower income background by **Hatt, Hannan, Baxter with Harrison (2005)** indicates the different ways of the two institutions administered their scholarship schemes and the effects on the students. To be more specific, they had explored whether there are any significant differences in the implementation of bursary schemes at the two institutions, comparing the extent to which students at these two institutions access the scholarship schemes, and finally examine whether scholarships affect the extent to which low-income students continue with their studies beyond the year of entry. **Matcalf (2006)** notes the prior research found that scholarship holders are well motivated to succeed, but it is unclear whether this is due to the additional financial support or to the process of conscious choice thru which they have entered higher education (**Paula 2006**). Since at early of stage in their study, they have noticed that it is unclear whether the low percentage of students accessing the awards is due to lack of awareness or reluctance to apply for a scholarships, they proposed that a further work at the two institutions is needed in order to explore these issues.

**Haupt (2005)** provides a statement that scholarship is considered to be a major factor of recruiting to a university such as Leeds as there is an evidence to indicate that the availability of these sources of funding are a factor in the decision to enter higher education for 'in need' students (those awarded a scholarship). It is clear is that a majority of students felt that the scholarship had a positive impact on their studies (**Paul Sharp, 2008**). Furthermore, students from lower-income background are more emphasis to reputation and quality, location and nearness to "home." However, there is less work addressing on the impact of current student financial support scheme arrangements on student recruitment. This research has been

supported by **May and Bousted (2004)** at Kingston University, to investigate the retention of non-traditional students (which were defined by social class, age and entry qualifications) and concluded that, in the first semester, student drop-out is influenced by what they term as 'unmet expectations'. Whilst a clear definition of what is meant by 'unmet expectations' is not provided, they indicate this relates to a student's expectations of the course content and teaching as well as access to personal tutors and other university staff. **Purcell (2005)** concentrating upon their research on indication that academic issues played an increasingly important contributing factor. As a result they suggest that such 'non-traditional' entrants may in fact benefit from a longer induction period to aid their transition from school/FE to HE. **Adnett (2007)** point out, this piece of research also contributes to the evidence that continuing to target support at scholarship holders prior to the first semester with the inclusion of the 'scholar pre-registration day' and during the first semester through the other non-financial support aspects of the scholarship schemes, is entirely appropriate and beneficial. The support is designed to introduce them to other scholarship holders as well as staff who they may well wish to approach in the future to discuss any difficulties and concerns that might arise.

### **2.3 Academic Achievement**

The admission requirement for postgraduate enrollment offers to those applicants who appear to have the highest potential for graduate study as well as with the benefit of a graduate education, are the most likely to contribute substantially to

their academic or professional fields through teaching, research, or professional practice (**Davis, 2003**).

This funding, together with those drawn by **Sharp (2008)** that states that the minimum graduate admission requirements are as follows: (1) a bachelor's degree or recognized equivalent from an accredited institution; (2) a satisfactory scholastic average, usually a minimum grade-point average (GPA) of 3.0; and (3) enough undergraduate training to do graduate work in your chosen field (B). In fact, satisfying minimal standards does not guarantee the admission, since the number of qualified applicants far exceeds the number of places available. As a result, many well-qualified applicants cannot be accommodated.

**Miekle (2007)** reports that the admission decisions are based on departmental review, using a combination of factors, including academic degrees and records, the statement of purpose, letters of recommendation, test scores, and relevant work experience. Meikle also quoted that admission to graduate school requires a bachelor's degree. High grades in one's field of study are important—grades outside the field less so. The Graduate Record Examination standardized test is required by almost all graduate schools, while other additional standardized tests (such as the Graduate Management Admission Test (GMAT) and Graduate Record Examination (GRE) Subject Tests) scores may be required by some institutions or programs. These findings has supported by **Thomas (2007)** that a good letters of recommendation from undergraduate instructors are often essential, as strong recommendation letters from

mentors or supervisors of undergraduate research experience provide evidence that the applicant can perform research and can handle the rigors of a graduate school education.

**Haupt (2005)** provides an alternatives approach to explain that within the sciences and some social sciences, previous research experience may be important; within most humanities disciplines; an example of academic writing normally suffices. Many universities require a personal statement (sometimes called Statement of purpose or Letter of Intent), which may include indications of the intended area(s) of research; how detailed this statement is or whether it is possible to change one's focus of research depends strongly on the discipline and department to which the student is applying.

In some disciplines or universities, graduate applicants may find it best to have at least one recommendation from research work outside of the college where they earned their Bachelor's degree; however, as with previous research experience, this may not be very important in most humanities disciplines. As **Adnett and Slack (2004)** point out, some schools set minimum GPAs and test scores below which they will not accept any applicants; this reduces the time spent reviewing applications. On the other hand, many other institutions often explicitly state that they do not use any sort of cut-offs in terms of GPA or the GRE scores. Instead, they claim to consider many factors, including past research achievements, the compatibility between the applicant's research interest and that of the faculty, the statement of purpose and the

letters of reference, as stated above. Some programs also require professors to act as sponsor (**Walker, 2005**).

Admission to a master's program generally requires a bachelor's degree in a related field, with sufficiently high grades usually ranging from B+ and higher (note that different schools have different letter grade conventions, and this requirement may be significantly higher in some faculties), and recommendations from professors. However, some schools require samples of the student's writing as well as a research proposal. Admission to a doctoral program typically requires a master's degree in a related field, sufficiently high grades, recommendations, and samples of writing, a research proposal, and typically an interview with a prospective supervisor. Requirements are often set higher than those for a master's program.

Graduate students must usually declare their research goal or submit a research proposal upon entering grad school; in the case of master's degrees, there will be some flexibility (that is, one is not held to one's research proposal, although major changes, for example from pre-modern to modern history, are discouraged). In the case of Ph.D.s, the research direction is usually known as it will typically follow the direction of the master's research.

**Garard (2006)** in his review states the definition of a good GPA is calibrated by the quality of a school and also historic norms for “grade inflation” at a particular institution. Since we see many applications from a subset of schools every year, the admissions committee often has a logical database of norms to consult against. GRE

scores are a bit more difficult to evaluate, especially since it is possible to essentially memorize one's way to strong GRE scores.

## **2.4 Financial Capacity**

To get a clearer picture regarding the common of financial issues and its different solution, **Nick Adnett (2006)** has used a student of British Isles as a sample. Through the research, the current student financial support systems in the British Isles has been examined and a question whether or not a system based upon income-contingent student loans, means-tested grants and targeted bursaries could deliver both the desired expansion has been found out. In addition, **Barr (2004)** discovered that HE costs from the taxpayer to students has varied across the British Isles and he speculated about the likelihood of convergence of student finance systems over time.

The desire to maintain international competitiveness encourages governments has become the factor in expanding participation in HE at time when budgetary pressures has limit their ability and/or willingness to fund such an expansion and this would lead to high potential for governments to manage a greater share of the costs of HE on to students and their families. Furthermore, **Kerr (2007)** clarify that a decentralized approach to providing a financial support to students from low-income families lays on complicated decision making, and it is burdening to those who typically are the least-informed and the least likely to possess the necessary skills. Kerr also added the results from the desire to maintain international competitiveness encourages governments to expand participation in HE when the time of budgetary

pressures limit their ability and/or willingness to fund such an expansion. His future suggestion is to analyze the impact of bursary schemes in different types of higher educational institutions and among different categories of applicants.

The issue with regards to the impact of scholarships towards students success has draw an attention of **Lavinia Mitton (2007)** as she elaborated that eligibility of getting scholarships may depend on family income, exam performance or subjects studied may results in failure of eligible individuals to claim income-related benefits they are entitled to has been a long-standing concern within social security policy. For further understanding, **Corden (2006)** concluded that although the student grants, loans and bursaries are not means-tested benefits in the same sense as social security, the social policy literature on take-up of such benefits can provide some insights into the probable effectiveness of the new system of deferred fees with grants and bursaries for poorer students in place from 2006/7.

This is supported by **Sharp (2008)** who has suggested implication for managers within individual HE institutions in England is that they should act now to rationalize their own bursary schemes and provide prospective students with definite information about what they will receive very early in the application process (e.g. by giving an assured bursary to all students from certain disadvantaged schools), even if this results in some students from better-off backgrounds also getting awards.

In reality, there is no evidence that students are being delay going to the university because of the lack of finance, but the percentage of the students from lower socioeconomic group is growing. Instead of approaching the issue from the



perspective of how and why students apply for income-related support and develop a research on how students make choice of going to higher education, we should ask whether the specific way the current arrangements have been set up will attract the disadvantaged students or not.

## **2.5 Working Experience**

More and more graduate schools are encouraging students to obtain some work experience in their field of study before attending graduate school. And more and more students are realizing that, if they have had experience outside of school, they need to bring their real world into the classroom, **Hatt, S. et al. (2005)**. Furthermore, Hatt elaborates that working or interning before graduate school allows the postgraduate student to assess their career goals and could also help in further establishes student. Postgraduate will have more opportunity to define our career path and perhaps finding true calling within their field. It also affords them the chance to identify their strengths and weaknesses.

Giving the work world a try before graduate school whether during undergrad classes, would help before attending the program, as well as when it comes time to begin the career after earning graduate degree **Sharp (2008)**. Working after finishing an undergraduate coursework, for instance, can get recharged to study and perform research again. However, many students choose to work before graduate school in order to save some money to pay for the program they wish to join. Work experience related to the field of study can, in addition to better preparation for classes, actually enhancing chances of gaining admission to the graduate program of choice. The work

experience before graduate school can be in the form of an internship, volunteer work, traineeship, apprenticeship or full-time employment. Entering graduate school with work experience can enhance the confidence in abilities, as well as the confidence that graduate admissions officers have.

Just about all students who apply to graduate school have high test scores and impressive GPAs. Having work experience before applying to graduate school can make the difference between admission and rejection. In addition, if the grades or test scores were not meet their requirement, the work experience in the related field of study could be what pushes over the edge and helps to get admitted.

Graduate programs appreciate the fact that working before graduate school gives students the ability to bring up-to-date ideas and knowledge to their academic department. Working in the field equips with hands-on experience, professionalism and knowledge of new technologies, **Reay, D., Ball, S. & David, M. (2002).** Students who have this experience can share it with their classmates, as well as with professors who have been in academia for some time. Again, this makes the entire graduate school process that much easier; because you are bringing knowledge with you to help you acquire new knowledge.

Work experience, a few years of industrial experience can be a huge plus for an applicant. Practical experience in leading industrial positions can expose students to important problems and often leads to students who have stronger implementation skills coming into the program. In addition, an applicant who spends time in industry and makes the conscious decision to come back to graduate school (giving up regular

hours, a higher salary, etc.), typically shows a high level of dedication to graduate study. They know it is what they want, rather than “it seemed like the next thing to do.”

Working before graduate school can also help to determine just what we need to learn when entering a program. Meaning, during the spare time away from work, we can engage in some research in our field. Once they begin graduate school, they can seek to answer the questions we have formed while working in the field. This can be of great help in identifying routes for the research and dissertation. Some employers who make investments in their employees will even provide with financial support to help pay for the graduate program.

## **2.6 Theoretical Framework**

This study aims to investigate the relationship between the personal determine factor towards postgraduate enrollment moderates by scholarship awards. Thus the dependent variable in this study was the enrollment of postgraduates USM. Personal determine factor such as academic achievement, financial capacity and working experience are the independent variable that will positively relate to postgraduates enrollment in University Sains Malaysia. In addition, this study attempts to examine if the relationship mentioned above is moderates by the scholarship awards.

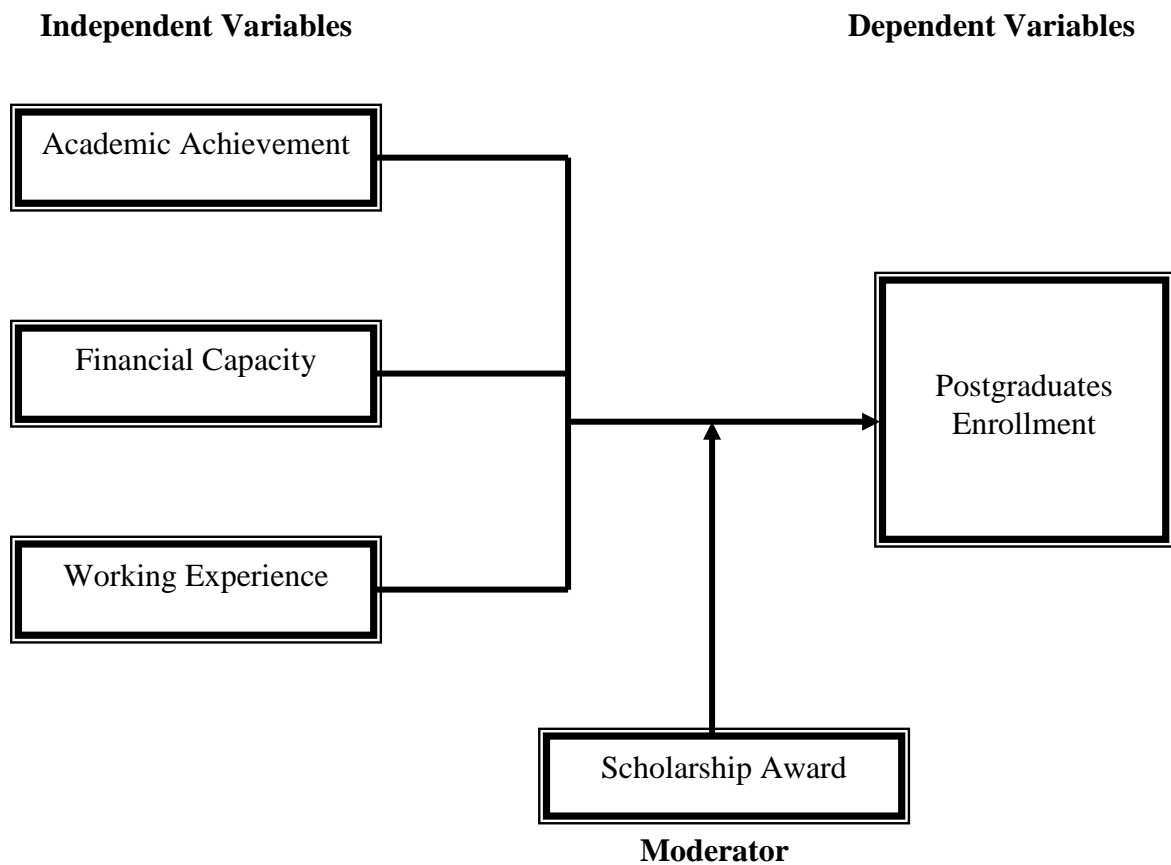


Figure 3.1: Framework of the study and the proposed hypotheses.

## 2.7 Hypotheses Development

Based on the theoretical framework provided, six general hypotheses are developed for empirical verification in the present study.

H1: Academic achievement has a positive significant relationship with postgraduate enrollment.