RESEARCH CHALLENGES AND COPING MECHANISMS: PERSONAL EXPERIENCES OF IIUM PHD STUDENTS

BY

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A dissertation submitted in fulfillment of the requirement for the degree of Master of (Human Science in Sociology and Anthropology).

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ABSTRACT

The main objective of PhD studies is to groom students with research competence and skills to impact a huge change through knowledge production in academics and industries. This research, therefore, examines the challenges of PhD candidates at the International Islamic University Malaysia (IIUM). The significance of the study is that, while most previous studies focus on research competence challenges, this research on the other hand, highlights personal problems and strategies students employed as coping mechanisms. A qualitative research design is employed to understand the phenomenon under study. A purposive sampling technique is adopted to select 13 participants from various faculties within the University. An in-depth semi-structured interview is employed to generate relevant data from the participants' views of their research challenges. Thematic analysis is used to analyse the data. Experimental learning theory was the theoretical focus of the research. The major finding shows that poor academic writing skills, limited research methodology, and difficulties in sourcing relevant information are the main research competence challenges for the IIUM PhD candidates. Moreover, the research findings reveal that the major personal problem that IIUM doctoral candidates face is depression caused by stress, isolation, financial bankruptcy, and balance between academic and social life. This research finds that doctoral candidates in IIUM resort to e-learning and consulting supervisors to overcome research challenges. Likewise, engaging in leisure, physical exercise, patience, and prayer, and being in the company of family and friends; were the major coping strategies for overcoming stress and depression. It is recommended that a research network be established to enhance students' research competence and skill. Furthermore, collaborative learning should be encouraged to reduce stress and encourage flexible work. It is proposed that funding be made available for doctoral students to engage in more research publications.

ملخص البحث

إنّ الهدف الأساسي لدراسة درجة الدكتوراة هو اعداد الطلاب ذوي الكفاءة والمهارة في البحث لإحداث تغيير كبير من خلال إنتاج المعرفة. يهدف هذا البحث إلى دراسة التحديات التي تواجه طلاب الدكتوراة في الجامعة الإسلامية العالمية الماليزية (IIUM). وتكمن أهمية هذه الدراسة في أنها تسلط الضوء على التحديات الأكاديمية والمشكلات الشخصية التي تعيق الانتاج المعرفي للطلاب خلال دراستهم درجة الدكتوراة، كما و تعرض الدراسة آليات و طرق التغلب على تلك التحديات و المشاكل. تعتمد الدراسة أسلوب البحث النوعي لفهم الظاهرة قيد الدراسة. وقد تم الاعتماد على أسلوب أخذ العينات وذلك باختيار 13 طالباً ممن يدرسون في درجة الدكتوراة من مختلف الكليات في داخل الجامعة. وكذلك تم استخدام المقابلة شبه المنظمة والمتعمقة لجمع البيانات ذات الصلة بآراء المشاركين حول التحديات التي تواجههم. ويستخدم الباحث أسلوب التحليل الموضوعي لتحليل البيانات. كما و يعتمد نظرية التعلم التجريبية لتكون المحور النظري للبحث. وقد أظهرت النتائج الرئيسية للدراسة مهارات الكتابة الاكاديمية الضعيفة، ومنهجية البحث المحدودة، والصعوبات الإجرائية ذات الصلة بكتابة بحوثهم. علاوة على ذلك، فقد كشفت نتائج البحث عن العديد من المشاكل الشخصية التي يواجهها طلاب الدكتوراة مثل الاكتئاب الناجم عن الاجهاد والعزلة والتحديات المالية وعدم التوازن بين الحياة الأكاديمية والأسرية. وقد توّصل البحث إلى أن طلاب الدكتوراة في الجامعة يعتمدون على التعلم الذاتي عبر التعليم الإلكتروني واستشارة المشرفين للتغلب على هذه التحديات. وبالإضافة إلى الانخراط عند أوقات الفراغ في التمارين البدنية و التي تزودهم بالصبر والدعاء. كما ويعتبر البقاء بصحبة العائلة والأصدقاء من الاستراتيجيات الهامة للتكيف و للتغلب على التوتر والاكتئاب. يوصي هذا البحث بإنشاء شبكة بحثية لتعزيز كفاءة ومهارات البحث لدى الطلاب. علاوة على ذلك، يوصي البحث بتشجيع التعلم التعاوني بين الطلاب لتقليص التوتر وتشجيع العمل المرن. ويقترح البحث توفير التمويل المالي لطلاب الدكتوراة لانشغالهم في المزيد من البحوث العلمية.

APPROVAL PAGE

I certify that I have supervised and read this study and that in my opinion, it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Master of Human Sciences in Sociology and Anthropology.

…….
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Supervisor

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This dissertation was submitted to the Abdulhamid Abusulayman Kulliyyah of Islamic Revealed Knowledge and Human Sciences and is accepted as a fulfilment of the requirement for the degree of Master of Human Sciences in Sociology and Anthropology.

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Shukran Abd. Rahman, Dean, Abdulhamid Abusulayman Kulliyyah of Islamic Revealed Knowledge and Human Sciences.

DECLARATION

I hereby declare that this dissertation is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted for any other degrees at IIUM or other institutions.

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This dissertation is dedicated to my father, Alhaji Fuseini Abdullah, who relentlessly brought me up with dedication and uncommon sacrifice. Words are not sufficient to express my gratitude. Thank you, Dad!

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LIST OF ABBREVIATION

AIKOL	Ahmad Ibrahim Kulliyyah of Law
AMOS	Analysis for a moment structure
BIPT	Imaging Profile Technology
BNM	Bank Negara Malaysia
DOAJ	Director of Open Access Journals
	Doctor of Philosophy
DOI	Digital Object Identifier Number
EBP	Evidence-Based Practice
EBSCO	Elton B. Stephens Company
ELT	Experimental Learning theory
Elton B	Stephens Company
HINARI	Health Inter-network Access to Research Initiative
IEEE	Institute of Electrical and Electronics Engineers
IIUM	International Islamic University Malaysia
IRKHS	Islamic Revealed Knowledge and Human Sciences
ISN	Initial Sequence Number
KENMS	Kulliyyah of Economics and Management Sciences
KICT	Kulliyyah of Information Communication and Technology
Libgend	Library Genesis Book Download
	Malaysian Research Assessment Score and KPI for Universities in Malaysia
MCO	Movement Control Order
MHE	Ministry of Higher Education
PDF	Portable Document Format
SDG 4	Sustainable Development Goal four
SDGs	Sustainable Development Goals
SPSS	Statistical Package for Social Sciences
	Teaching English to Speakers of other Languages
UKM	University Kebangsaan Malaysia
UM	University Malaya
UKM	University Kebangsaan Malaysia
UPM	University Putra Malaysia

CHAPTER ONE

INTRODUCTION

1.1 INTRODUCTION

In recent years, a new dawn of learning has emerged in the higher education system where power is vested in the students' hands to learn, investigate, and produce new knowledge with a special aid from the supervisor acting as a facilitator shaping the students on track. This new wave is known as the Doctor of Philosophy (Pinto et al., 2012a). Doctoral candidates are expected to produce a dissertation in their professional field before completion, and this has necessitated students to acquire research skills that have been the driving force of all universities, specifically in Malaysia (Isa & Ahmad, 2018; Meerah et al., 2012; Pinto et al., 2012a).

However, the world universities, including Malaysian universities' reputations, are at stake if issues such as the inability of doctoral students to conduct research independently, academic writing, insufficient learning facilities, Isolation, and low standard of supervision, as well as funding for publication, are not addressed (Aristovnik et al., 2020; Barbeiro et al., 2015; Rozana, 2020). The universities' core agenda in Malaysia focuses on building Ph.D. students' research skills, publishing journal articles, writing dissertations, enhancing students' communication skills, and not undermining innovation. Strategies including MyRA KPI (Malaysian Research Assessment Score and KPI for Universities in Malaysia) ensuring to maintain the integrity of Malaysian universities to remain at the top of university globally ranking and are meant to enroll more doctoral students to enhance and promote research work in the various universities (Isa & Ahmad, 2018). Doctoral students, the minority of the student population, are slapped with challenges that underpin their study and hence call for immediate attention by the university bodies to smoothen their research journey (Golde, 2005a; Isa & Ahmad, 2018; McAlpine & Norton, 2006).

1.2 BACKGROUND OF THE STUDY

For the last 20 years, the population of advanced education has been rapidly increasing. It is worth revealing that Malaysia's higher education enrollment has sharply exploded since 2000, from 21,100 to 85,200 in 2010. Similarly, Thailand recorded higher education admissions from 19300 in 2007 to 19600 in 2012 (UNESCO, 2014). According to University Malaysia records, Ph.D. enrollment skyrocketed inconsistent trends. It indicated that 4000 increments of Ph.D. students enrolled in 2002 to approximately 40,000 in 2012, and a growing number of the students are affiliated with research universities (Sune, 2013). Looking forward to better life opportunities is one of the reasons which interprets this growth. Furthermore, governments consider universities as research centers, resulting in significant economic returns (UNESCO, 2014). Even though the doctoral program provides the labor industries with graduates, creative mindsets' availability remains questionable (Frick et al., 2016; Hope, 2016; Ross & Poronnik, 2013). To meet the job market's requirements, Ph.D. candidates need to master research methodology and techniques, communication skills, presentation abilities, report writing, data collection knowledge, computer-based technical skills, and prove the ability to work independently and cooperatively (Hasgall et al., 2019; OECD, 2019; Pritchard et al., 2009; Union, 2017).

Doctor of Philosophy PhD is an individual journey that requires time and effort for intellectual and professional transformation. Doctoral studies involve students in scientific research through which they develop research competence which has a positive impact on academic and non-academic industries globally (Hasgall et al., 2019; OECD, 2019). To boost the labor market with competent researchers and innovators, the Malaysian government, for example, aspires to have 60,000 local student Ph.D. holders by 2030 (Razona, 2021). In addition to the enormous privileges of having a growing number of Ph.D. graduates in Malaysia, the government is making efforts to be at the same pace as developed countries by sending its candidates to North America, Australia, Europe, China, Korea, and Singapore to enhance their Ph.D. programs (Razona, 2021).

Research indicates that 75% of universities emphasize research competence with the core interest of producing excellent Ph.D. graduates (Hasgall et al., 2019). Research competence refers to research knowledge and skills. It includes the students' capacity to identify a research problem, develop analytical research skills, describe a study's relevance, search online, use the library for research purposes, provide critical literature appraisal, suggest a substitute research design, and employ the appropriate empirical evidence to conduct and plan new research (Meerah et al., 2012; Mills & Paulson, 2014; Murtonen & Lehtinen, 2003).

PhD students receive diverse training courses to boost their research competence before graduating. It includes research methodology, problem-solving skills, language, analytical skills, communication, and critical thinking skills (OECD, 2017). The study by loginove and Kovalev (2017) concluded that research competence formation equipped the students with available knowledge and skills, developed their potential to make independent decisions and boosted their readiness to accept responsibility and critically evaluate research findings. Doctoral candidates are expected to develop analytical skills to interpret a study's objects from a multi-dimensional approach. They must possess the potential to relate research outcomes with practice and develop problem-solving skills (Gilmore & Feldon, 2010; Olehnovica et al., 2015; Vekkaila et al., 2012). According to Pinto et al. (2012), core elements, including synthesizing, analyzing, and evaluating, should be perfected by Ph.D. students.

Moreover, Ph.D. students must possess the skills to reference credible sources of information when they present new knowledge (Topalov & Radić-Bojanić, 2013). Because articles and publications that are free and downloadable are primarily skeletal, candidates must be aware enough to detect fake or vague sources of information online (Chatzilia & Sylaiou, 2013; Topalov & Radić-Bojanić, 2013). Studies emphasized that students should identify the validity of information sources and correctly write the bibliography of articles, books, and websites (Iannuzzi, 2000; Topalov & Radić-Bojanić, 2013). They must be conscious of the various information sources, such as the IIUM digital libraries, physical libraries, and other approved digital sources. For instance, databases such as IEEE, Nature, ScienceDirect, Scopus, and Science web retrieve vital information. These resources are highly valued because of the high

standard journal articles' validity and credibility cited on these web pages (Cheng et al., 2017).

On the other hand, numerous studies discussed that research competence among Ph.D. candidates is limited in some areas, such as the inability to employ the appropriate research design, methods, or methodology (Olehnovica et al., 2015; Wisecup, 2017; Spalter-Roth et al., 2010). Furthermore, the inability to employ the fundamental research methodology results in weak scientific writing skills (Strokova, 2020). In their study, Pyhältö et al. (2012) students showed difficulty forming a theoretical framework. Being comfortable with theoretical findings rather than empirical studies, Ph.D. students develop the habitual use of qualitative methods rather than a quantitative approach (Murtonen & Lehtinen, 2003).

Doctoral candidates should be trained to develop a holistic understanding of the research process rather than concentrating on a particular research task, such as data collection or data analysis, skipping the essential research elements that comprise research design, or forming research questions (Garcia-Perez & Ayres, 2012).

A host of research studies showed that insufficient awareness of online resources contributes to a deficiency in doctoral student research skills (Iannuzzi, 2000; Topalov & Radić-Bojanić, 2013). Supervisors postulate that the unfamiliarity with search engine use has restricted new doctoral students from selecting materials from limited online sources for their journals and assignments (Topalov & Radić-Bojanić, 2013). Ph.D. students could not differentiate between legitimate or fake information sources on a webpage (Khairunissa, 2020; Topalov & Radić-Bojanić, 2013; Wineburg et al., 2016). The first-year intake of doctoral students expresses ignorance of borrowing books from the physical library and searching for online university database libraries (Gordon, 2000; Lubbe, Worrall, Klopper, et al., 2005).

Lubbe et al. (2005) attest that the exhibition of poor managerial style often forced doctoral candidates to overwork. For example, poor organization of thesis document and structure, failing to keep references concisely while searching leads to inaccurate writing of bibliographies, and inability to save, update or back up the hard disk. Student lacks the skills to synthesize and explain the key themes in their literature.

Also, doctoral students are challenged to interpret their findings' outcomes (Lubbe, Worrall, Klopper, et al., 2005). Even though doctoral students meet the English proficiency requirement, they do not construct accurate English or introduce appropriate research terminologies (Bitchener & Basturkmen, 2006; Wang & Li, 2008).

The investigation of Boskovic et al. (2013) and Kaminskii (2012) reported that Ph.D. students were unaware of research misconduct and found themselves flouting principles governing research ethics. Plagiarism, falsification, fabrication of results, biased methodology, personal interest, disrespecting participants, and others were unfamiliar issues to most students.

Doctoral candidates' research limitation is not limited to academic research competence only, but other personal factors outweigh these challenges. Several lines of research postulate that Ph.D. students working alone feel a sense of isolation and limited cooperation. The feelings of isolation as a crucial problem indicating that they work in a vacuum, with no communication, with families, friends, or supervisors (Bireda, 2015; H. Daniel, 2020; Golde, 2005b; INOMICS Team, 2019). Bireda (2015) and Daniel (2020) confirmed that a lack of motivation had been a major problem among doctoral candidates. Scholars proposed that students join research societies and clubs to attend workshops and seminars (INOMICS Team, 2019). The financial crisis, personal time constraint, workload, and meeting deadline was inevitable as imprinted by the program prospects were the leading sources of stress (Bireda, 2015; INOMICS Team, 2019; Kurtz-Costes et al., 2006). Some female students demonstrated low commitment because of relationship sacrifices and family concerns (Kurtz-Costes et al., 2006). In general, Ph.D. candidates find it difficult to balance research work and social life due to heavy tasks that demand candidates to work every day. (Golde & Dore, 2001; INOMICS Team, 2019). Female students were conflicting with responsibilities, including taking care of children and parents, being responsible at work, and being part-time doctoral students (Bireda, 2015).

Lubbe et al. (2005) and Bireda (2015) found that busy supervisor schedules, not finding a suitable supervisor and supervisors selecting a topic for candidates, late response, poor guidance, unreadable comments, and communication barriers were concerns raised by most doctoral students.

1.3 STATEMENT OF THE PROBLEM

This research focuses on PhD students' research challenges at the International Islamic University Malaysia. Significant research has been done to examine Ph.D. students' research challenges, but most research was conducted in European countries, the USA, Canada, and Australia (Kyvik & Tvede, 1998; Mullane, 2002; Park, 2005). For example, Vekkaila et al. (2012) work stresses the experiences of Ph.D. students in the natural sciences among several publications. However, most of the studies failed to pay much attention to personal problems that could hinder the progress of students' research and coping strategies to overcome students' research challenges. Moreover, the few studies conducted in Malaysia followed the same trend conducted in developed countries.

Furthermore, most of the publications employed a quantitative approach, while the qualitative studies were limited in scope by focusing on a specific discipline and a small sample size (Copenheaver, 2020). Moreover, Eid and Rohaiza (2020) found that Ph.D. candidates at IIUM faced several research challenges ranging from limited knowledge of research methodology, insufficient computer-based skills, and unfamiliarity with research-related Software. However, the findings could not reveal personal problems that hamper doctoral students' research progress at IIUM.

Therefore, a clear literature gap needs to be filled to have a comprehensive understanding of PhD research challenges within the context of IIUM. Unlike previous studies, this study introduces personal problems and coping strategies and investigates research competence challenges to comprehensively understand the study.

The current study examines the extent to which IIUM PhD candidates face research challenges in terms of research competence. The research focuses on competencies that encapsulate academic writing skills, English proficiency, research methodology, computer skills, teamwork, and supervisor supervisee challenges.

Secondly, the study investigates the extent to which IIUM PhD students face research challenges in terms of personal problems. Personal problems such as balancing research work and personal life, homesickness, time management, stress, financial challenges, and several other personal problems that could hinder the student's research progress

Lastly, the current study intends to explore the coping strategies of IIUM PhD students in carrying out research activities. This mechanism intends to cover the academic and personal strategies that the students adapt to overcome their PhD challenges.

1.4 SIGNIFICANCE OF THE STUDY

Studying research challenges among the Ph.D. candidates at IIUM has numerous benefits for the university and the candidates. At the university level, research findings support evidence of the strengths and weaknesses of Ph.D. candidates in terms of research skills and knowledge. Thus, concerned parties in the university administration would understand the problems and improve offered programs to boost students' research productivity and overcome external pitfalls. This study would allow the students to articulate their research experiences and consider the aspects they need to develop individually. This study would awaken stakeholders and policymakers to incorporate suggestions that could create a conducive atmosphere for doctoral students to balance their social lives and productive and reproductive activities in pursuing a PhD.

1.5 RESEARCH OBJECTIVES

The study aimed to achieve the following objectives:

1. To examine to what extent IIUM Ph.D. candidates face research challenges in terms of research competence.
2. To investigate to what extent IIUM Ph.D. candidates have research challenges in terms of personal problems

3. To explore how IIUM Ph.D. candidates overcome research challenges in carrying out their research activity.

1.6 RESEARCH QUESTIONS

1. To what extent do IIUM Ph.D. candidates face research challenges in terms of competence?
2. To what extent do IIUM Ph.D. candidates have research challenges in terms of personal problems?
3. How do IIUM Ph.D. candidates overcome research challenges in carrying out their research activity?

1.7 ORGANIZATION OF THE STUDY

The present study covers the research's introductory chapter, including the study's background, the problem statement, the research questions, and the objectives. It further discusses the study's significance and presents the study boundaries, demarcations, and limitations. Chapter two presents the literature review and theoretical framework. It reviews the relevant theoretical and empirical literature. Chapter three discussed the research methodology. It outlines the research design, the target population, the sample size, the sampling technique, the instrument for data collection, and the data analysis tools. Research findings and discussion are presented in chapter four. Chapter five's last chapter outlines the conclusion and recommendations of the literature reviewed. This chapter ends with proposed suggestions for future studies.

1.8 LIMITATION OF THE STUDY

Although the researcher employed a qualitative case study, the sample size requires an expansion for future studies. The current study focused on students' research challenges, excluding the views and experiences of the supervisor's challenges in the supervision process to present an objective and comprehensive case. The COVID -19 pandemic

triggered the halting of conventional activities on campus, making it difficult for the researcher to access some students' face-to-face data collection. The new normal obliged the researcher to employ social media platforms to complement the data collection process, particularly for female doctoral candidates.

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CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

The literature review surveys the status of existing knowledge. Researchers read contexts of various investigations by selecting specialised authors, relevant theories, books, and articles to establish gaps in the problem under study (Bhattacherjee, 2012). According to Rhoades (2018), integrating existing findings and critically criticising previous publications builds bridges between similar topics and identifies key research issues. This section reviews the available literature on research competence and personal problems that obstruct PhD candidates' journey and affect their research work. It highlights the characteristics challenges and proposes suggestions focusing on information search, familiarity with research-related Software, data management, application of research methodologies, communication, English proficiency, writing skills, and teamwork involvement. Besides the academic arena, the personal problems that hinder the success of PhD candidates' research include social, financial, stress, isolation, and other challenges.

2.2 RESEARCH COMPETENCE

Doctoral students are attributed to the heart of empirical studies, and they play an influential role in ensuring sustainable development in the academic and industrial world through the production of new knowledge. Currently, doctoral students are motivated to achieve a high standard of results and materialise this outcome, and research competence is paramount. This competency seeks to train doctoral students to gain rich experiences, skills, and knowledge (Ismail & Meerah, 2012). The findings of Barnard-Brak et al. (2011) opine that the pressure on 21st Century doctoral students to develop skills in research competencies has been an indicator of the academic environment to elevate the status quo of the university ranking and the prospectus of the job market is tied to research competence (Barnard-Brak et al., 2011).