



**EFFECT OF STAKEHOLDERS' PERCEPTIONS ON THE RELATIONSHIP
BETWEEN QUALITY OF PUBLIC UNIVERSITIES AND GRADUATE
EMPLOYABILITY IN MALAYSIA**

By

AMAL ALMASRI

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia,
in Fulfilment of the Requirements for the Degree of Doctor of Philosophy**

July 2021

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DEDICATION

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

In the name of God, the Most Gracious, the Most Merciful

This endeavor is dedicated to Allah Subhanahu Wa Ta'ala

*The Prophet Mohammad Sala Allah Alih Wa Salam (the role model for all humankind)
My beloved late father Alhaj Ahmad Mohammad Almasri (may Allah rest his soul in
Heaven) who inoculated me in discipline, perseverance and strength that forever will
be part of my life.*

*My lovely mother Fatemeh Hussein Alkaleeh for her patience, encouragement and
support.*

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My fabulous sisters Assia, Kawthar and Asmaa who always believed in me and to
whom I am greatly indebted. Without your support and constant encouragement this
would not have been possible.*

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and support.*

*All my nephews, nieces, brothers in law and sisters in law
All my friends in Malaysia and in Syria for their role in my PhD journey*

Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Doctor of Philosophy

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July 2021

Chairman : Professor Noor Azman bin Ali, PhD
Faculty : School of Business and Economics

Employability is considered the key factor in the link between higher education institutions and the labor market in providing qualified and competent graduates for the employment markets. In Malaysia, most of the public universities have achieved the accredited levels of quality to run the academic programs based on the requisite standards. However, the rate of unemployment among graduates is considered high, which has affected the institutions' reputation. On the other hand, there are reports that some employers consider Malaysian graduate competencies do not meet the expectations of the workplace. Therefore, this study was conducted to determine whether the quality of public universities would influence graduate employability in the presence of graduate competencies as a mediating variable. The graduates and employers were considered as the key and most relevant stakeholders to provide the required information to achieve the research objectives. This study adopted human capital theory as the underpinning theory for its proposed conceptual framework. Based on a post-positivism paradigm, this study employed a mixed-method triangulation design which is both quantitative and qualitative methods to obtain data on the perceptions of graduates and employers as the stakeholders of higher education institutions. Data was collected from 483 graduates from three selected public universities (UPM, UM, and UKM) through a self-administered questionnaires survey. Structural Equation Modelling (SEM) was employed to investigate the study's structural model by using AMOS. This study is strengthened by ten personal interviews with employers as the qualitative data to support the quantitative results. The findings of this study prove that employers' perceptions have supported the graduates' responses, where the determinants of university quality, including reputation, academic program and curriculum, infrastructure and support facilities, academic staff, and training are the influential factors on graduate competencies and employability.

The main theoretical contribution is on the aspect of determinants of the quality in public universities, graduate competencies, and graduate employability are concomitant in one comprehensive framework. In addition to that, the relevant authorities and institutions in higher education sectors should pay particular attention to the skills and competencies required by employers to produce the ever-equipped and future-proof graduates.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

**KESAN PERSEPSI PIHAK BERKEPENTINGAN TERHADAP HUBUNGAN
ANTARA KUALITI UNIVERSITI AWAM DAN KEBOLEH PASARAN
GRADUAN DI MALAYSIA**

Oleh

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Kebolehpasaran adalah dianggap sebagai faktor utama yang mengaitkan antara institusi pengajian tinggi and pasaran buruh dalam menyediakan graduan yang berkelayakan dan berdaya saing untuk pasaran pekerjaan. Di Malaysia, kebanyakan universiti awam telah mencapai tahap kualiti yang diiktiraf untuk menjalankan program akademik berdasarkan piawaian yang ditetapkan. Walau bagaimanapun, kadar pengangguran dalam kalangan graduan boleh dianggap tinggi hingga boleh menjejaskan reputasi institusi. Pada masa yang sama, terdapat banyak laporan yang menyatakan majikan menganggap bahawa kompetensi graduan di Malaysia tidak mencapai tahap jangkaan mereka di tempat kerja. Dengan itu, kajian ini dijalankan untuk menentukan sama ada tahap kualiti universiti awam mempengaruhi kebolehpasaran graduan dengan mengambil kira kompetensi graduan sebagai pemboleh ubah perantara. Graduan dan majikan telah dilibatkan sebagai pihak yang berkepentingan yang paling penting dan bersesuaian untuk memberi maklumat yang diperlukan bagi mencapai objektif kajian. Kajian ini menggunakan teori modal insan sebagai teori asas bagi membentuk cadangan kerangka konseptual. Berdasarkan pendekatan pasca-positivisme, kajian ini mengambil pendekatan penyegitigaan (*triangulation*) iaitu menggunakan kaedah kuantitatif dan kualitatif bagi mendapatkan data persepsi dari graduan dan majikan sebagai pihak berkepentingan institusi pengajian tinggi. Data telah dikutip daripada seramai 483 graduan dari tiga universiti awam terpilih (UPM, UM dan UKM) melalui kajian soal selidik urus-sendiri. Pemodelan Persamaan Penstrukturan (SEM) telah digunakan untuk menyiasat model struktur bagi kajian ini menggunakan AMOS. Kajian ini diperkukuhkan dengan dengan sepuluh temuduga bersemuka bersama majikan untuk mengesahkan keputusan yang diperolehi daripada kaedah kuantitatif. Penemuan dari kajian ini membuktikan yang persepsi majikan telah menyokong maklum balas graduan, dimana penentu kualiti universiti, termasuk reputasi, program akademik dan kurikulum, infrastruktur dan kemudahan sokongan, staf akademik dan latihan merupakan faktor yang berpengaruh terhadap kebolehpasaran dan daya saing graduan. Sumbangan teoritikal utama adalah pada aspek penentu kualiti bagi universiti awam, daya saing graduan, dan

kebolehpasaran graduan merupakan suatu faktor yang saling menyokong dalam satu kerangka yang menyeluruh. Tambahan pula, pihak yang berkenaan dan sektor institusi pengajian tinggi perlu memberi perhatian terhadap kemahiran intelektual dan insaniah yang diperlukan oleh majikan dengan melahirkan graduan yang lengkap dan kalis cabaran masa depan.



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LIST OF ABBREVIATIONS

AUQA	Australian University Quality Agency
CA	Cronbach's Alpha
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CR	Construct Reliability
CUAP	Committee on University Academic Programs
DV	Dependent Variable
DSM	Department of Statistics Malaysia
EFA	Exploratory Factor Analysis
EPU	Economic Planning Unit
GOF	Goodness-of-Fit
HEQC	Higher Education Quality Council
IIUM	International Islamic University Malaysia
IV	Independent Variable
MBNQA	Malcolm Baldrige National Quality Awards
MI	Modification Indices
MM	Measurement Model
MOHE	Ministry of Higher Education
MQA	Malaysian Qualifications Agency
NIST	National Institute of Standards and Technology
NFI	Normed Fit Index
NHESP	National Higher Education Strategic Plan
OECD	Organization for Economic Co-operation and Development

QAA	Quality Assurance Agency
QS	Quacquarelli Symonds
RMSEA	Root Mean Square Error of Approximation
SAS	Self-Accreditation Status
SEM	Structured Equation Modelling
SETARA	Rating System for Malaysian Higher Education Institutions
SEAP	Southeast Asia and the Pacific
SM	Structural Model
SPSS	Statistical Package for Social Sciences
TLI	Tucker Lewis Index
TQM	Total Quality Management
TVET	Technical and Vocational Training
UKM	Universiti Kebangsaan Malaysia
UM	Universiti Malaya
UPM	Universiti Putra Malaysia
USM	Universiti Sains Malaysia
UTM	Universiti Teknologi Malaysia
UUM	Universiti Utara Malaysia

CHAPTER 1

INTRODUCTION

The aim of this study was to investigate the relationship between the quality of public universities and graduate employability. Specifically, it would be examining the mediating role of graduate competencies in relation to the quality of public universities and graduate employability. This chapter presents the background information of the present study. It covers topics related to the current research gap in literature, research objectives, research questions, significance of the study, scope of the study and operational definitions of the variables in this study.

1.1 Background of the Study

Higher education plays an important role in enhancing human's potential and the country's socio-economic development (Barro & Lee, 1994, 2013). Traditionally, after high school, the students are tempted to further their studies due to the premise that higher education is accompanied by higher chances of employment and higher salaries (Becker, 1962; Mincer, 1958; Schultz, 1961). In essence, it is an investment in the human capital, whereby knowledge is necessary to develop human resource potentials to meet various employment demands in the labor market (Rosli, Ishak, & Saat, 2015; Siti Mistima et al., 2018; Yusof & Jamaluddin, 2017).

Recently, the higher education degree no longer comes with advantages of high salaries and employment as before; this is reflected in the growing trend of unemployment among higher education graduates worldwide (Gomis, Kapsos, & Kuhn, 2020). Malaysia is not an exception in this matter according to the Department of Statistics Malaysia (DSM) (2020) in the last ten years, whereby the graph of the Malaysian youth unemployment rate showed a slight increase from 2011 (9.83%) to 2019 (11.7%) (Figure 1.1).

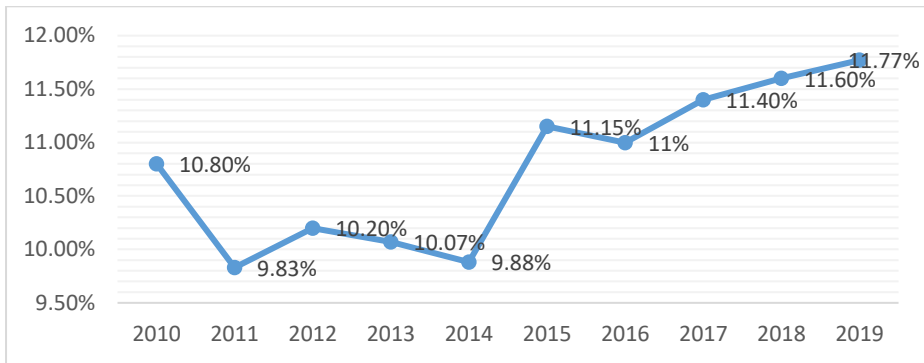


Figure 1.1 : Youth Unemployment rate Malaysia 2010-2019
 (Source: Department of Statistics Malaysia 2020)

This means that the youth unemployment issue in Malaysia exacerbated, in particular, for those who hold the higher education degree. Figure 1.2 shows that the youth labor force tends to be more sloping towards youth with low educational levels and the unemployment rate of degree holders is higher than non-degree holders (DSM, 2020). This issue seems counter-intuitive to the economic wisdom of raising the job opportunity and return to the level of education (Ibrahim & Mahyuddin, 2017).

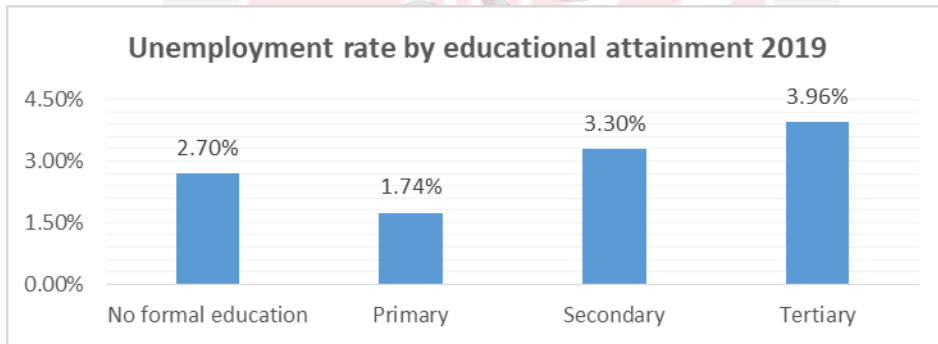


Figure 1.2 : Comparison of Youth Unemployment Rates by Educational Attainment
 (Source: Department of Statistics Malaysia (2020))

On the other hand, Figure 1.3 shows that the Malaysian youth unemployment rate of 11.7% in 2019 was three times higher than the national rate of unemployment of 3.31% in 2019. According to Figure 1.3, Malaysia's youth unemployment rate was lower than the regional average rate of 13.5% in Southeast Asia and the Pacific, but it was the second-highest youth unemployment rate after Indonesia (Elder, Huynh, & Viegelahn, 2020). This was a concern, whereby Malaysia aims to achieve Vision 2020 by making it a regional learning hub, creating 3.3 million new job opportunities with 75% of graduates

employed in their relevant fields within six months of their graduation and it was expected to reach a high-income country status by 2020 (Lim, 2016).

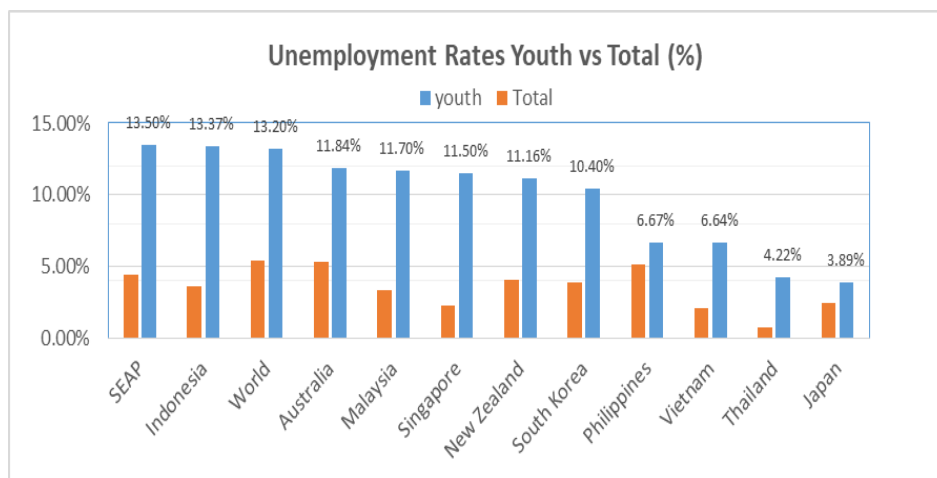


Figure 1.3 : Youth Unemployment across Southeast Asia and the Pacific in 2019
(Source: Elder et al. 2020)

Furthermore, by increasing the number of unemployed graduates in Malaysia, several studies were conducted to recognize the reasons behind this issue. Graduates' Tracer studies presented important data sources based on the graduates' responses to a survey that was administered by the Ministry of Higher Education (MOHE) in the 3–4 weeks surrounding convocation ceremonies. In 2019, the Graduates' Tracer study reported the following reasons of the unemployed graduates: 67.1% of unemployed graduates were still seeking for work, 11.8% were taking a break/traveling, 6.2% were waiting for placement to further the study, 4.9% had responsibilities towards family, 2.7% jobs offered were unsuitable for them, 2.3% opted not to work, 1.5% had health reasons, 1% were not interested to work, 1% lack in self-confidence to face the working environment and 1.5% had other reasons (MOHE, 2020).

Building on these statistics, the majority of graduates are still looking for work, whereby Chan, Ahmad, Zaman, and Ko (2018), Hossain, Yagamaran, Afrin, Limon, and Nasiruzzaman (2018), and Shakur, Sa'at, Aziz, Abdullah, and Rasid (2020) indicated that Malaysian fresh graduates face difficulties and obstacles to find a job upon graduation. According to Kenayathulla, Ahmad, and Idris (2019) and Omar and Rajoo (2016), they mentioned that as a result of globalization and rapid development of the economy and technology which have changed the nature of work, demanding workers who are more qualified and skilled to be hired. Therefore, most recent studies asserted that the competencies of new Malaysian graduates did not meet the workplace needs and development, which happens on an economic and technological level (Ab Rahman, Mohamed, Nasir, & Saidin, 2020; Alrifai & Raju, 2019; Kadir, Naghavi, & Subramaniam, 2020; Tahir et al., 2018).

On the other hand, Jamaludin, Said Ismail, and Mohamed Nor (2021) highlighted that unemployed people believed the principal cause of their unemployment was lack of suitable jobs for them in the market. However, the Graduates' Tracer study (2019) found only 2.7% of graduates indicated that the jobs offered were unsuitable for them (MOHE, 2020). According to the Malaysia Job Vacancies report (2018), it stated that job vacancies in Malaysia increased yearly, but the vacancies were filled only by some new graduates due to lack of skills and competencies. Abd Majid, Hussin, Norman, and Kasavan (2020) and Hanapi and Nordin (2014) also indicated that unemployment was caused by the graduates lack of work-ready skills and not due to lack of job opportunities. Moreover, the Ministry of Finance (MOF) 2019, indicated that unemployment among youth was due to several factors: i) lack of work experience, ii) lack of skills, iii) insufficient education levels and iv) incompatible skills to compete in the labor market. Shakur et al. (2020) suggested the demographic factors (age, gender and marital status), work experience and training as additional reasons for youth unemployment in the east coast of Malaysia. Additionally, Abd Majid et al. (2020) found that demographic factors (gender, location and parental education), besides endurance force, time management, research experience and activities involvement at the university predicted the graduate employability.

Most previous studies that addressed the factors of the graduates' unemployment in Malaysia agreed that graduate competencies were one of the key reasons for graduate unemployment (Ab Rahman et al., 2020; Alrifai & Raju, 2019; Chan et al., 2018; Hossain et al., 2018; Kadir, Naghavi, Subramaniam, & Aâ, 2020; MOF, 2019; Seng, 2018; Shakur et al., 2020). Moreover, the general opinion among stakeholders of Malaysian higher education indicated that the graduates leave the higher education institutions without equipping themselves with competencies and skills that are required by the workplace and industry (Alrifai & Raju, 2019; Suppramaniam, Siew, & Ainara, 2019; Zainuddin et al., 2019). According to Ab Rahman et al. (2020) and Pazil and Razak (2019), nowadays, all employers want newly employed graduates who possess the competencies that could enhance their companies' performance and growth. In other words, employers need graduates with quality, not quantity (Pazil & Razak, 2019).

Therefore, Abelha, Fernandes, Mesquita, Seabra, and Ferreira-Oliveira (2020), Nazron, Lim, and Nga (2017), and Sin and Amaral (2017) highlighted higher education institutions should pay more attention to develop graduate employability by identifying the graduate competencies required by stakeholders' perceptions. According to Yoong, Don, and Foroutan (2017), higher education institutions are given the primary responsibility to ensure that their graduates have employable characteristics upon graduation. Johan (2015) also found that one of the important performance indicators that showed higher education institutions are providing quality education is the employability of their graduates.

Interestingly, many recent studies highlighted that the Malaysian higher education institutions do not provide relevant foundational skills for the relevant job positions in the respective sectors (Abdullah, 2018; Ghani, Rappa, & Gunardi, 2018; Seng, 2018). This led to several studies asserted the importance of higher education improvements

and quality to enhance the graduate quality and employability (Aun, 2020; Hanapi & Nordin, 2014; Ma'Dan, Ismail, & Daud, 2019; Yusof & Jamaluddin, 2017; Perera, Babatunde, Pearson, & Ekundayo, 2017). Moreover, in recent decades, previous studies on employability around the world had shown that the quality of higher education was considered among the contributing factors in improving the employability that makes graduates most desired by employers (Boateng, Eghan, & Adu, 2015; Ciriaci & Muscio, 2014; Hanapi & Nordin, 2014; Lamagna, Villanueva, & Hassan, 2017; Martin, 2018; Pereira, Vilas-Boas & Rebelo, 2020; Martin, 2018; Støren & Aamodt, 2010). Therefore, the next subsection discusses the higher education and employability scenario in Malaysia.

1.1.1 Higher Education and Employability Scenario in Malaysia

Over the past 10 years, the expansion of the Malaysian higher education institutions and various academic programs has led to an increase in the number of graduates yearly (Ibrahim & Mahyuddin, 2017; MOHE, 2019). According to statistics provided by MOHE, the total number of graduates in the Malaysian higher education institutions in 2019 was 346,686. This was a significant increase compared to 194,219 in 2009 (MOHE, 2020). In addition, global recognition had risen on key dimensions, such as institutional quality, patents and research publication, as well as it became one of the top destination for international students. Nonetheless, the government and MOHE recognized that the higher education system needs to keep evolving to stay abreast with global trends in economy and technology (Rangel, Sueyoshi, & Samsudin, 2016). Therefore, preparing Malaysian graduates to work in this complex and ever-changing future will require an equally fundamental transformation of how higher education institutions operate.

In this context, MOHE has made an effort to improve the academic quality and identify factors that determine the quality and academic performance at world class level (Hassan, Asimiran, Rahman, & Kamarudin, 2008). Malaysia has started to develop higher education institutions by implementing the national quality assurance framework, whereby the Malaysian Qualifications Agency (MQA) that was established in 2007 ensures greater public accountability and transparency from higher education institutions, especially with regard to quality and their performances in the various university rankings (Lee, Sirat, & Da Wan, 2017). MQA had determined three major indicators to measure quality assurance in higher education institutions: (1) SETARA rating, (2) Self Accreditation Status, and (3) Certification ISO 9001:2015.

Furthermore, to assure the quality of higher education, the Malaysian Qualification Framework was approved in 2007 under MQA an instrument to set national classification of qualifications, level of learning achievements based on learning outcomes, whereby all academic programs in the Malaysian higher education institutions will be accredited only when it is in compliance with the framework. The framework defines at least eight standards program learning outcomes: 1) knowledge, 2) practical skills, 3) social skills and responsibilities, 4) values, attitudes and professionalism, 5) communications, leadership and team skills, 6) problem solving and scientific skills, 7) information management and lifelong learning skills, and 8) managerial and

entrepreneurial skills (MQA, 2017). Additionally, the Malaysian quality assurance in universities has been developed through educational regulations that focus on the government's objectives. This is to place Malaysia as the best learning hub in the Asian countries with international accreditation and excellence of its higher education sector (Yew, Seng, Ming, & Pillai, 2014) and formulating the national higher education plans and blueprint that focus on improving higher education quality and preparing graduates for the workplace (Economic Planning Unit [EPU], 2015; MOHE, 2012).

In 2007, the National Higher Education Action Plan (NHEAP), 2007 to 2010 (MOHE, 2007) and the National Higher Education Strategic Plan (NHESP) beyond 2020, were designed by MOHE to guide the development of higher education in Malaysia. This strategic plan aims to produce quality human capital that could fulfill the government's aspirations to improve knowledge capability and innovation and stimulate first-class mentality. The strategic plan unfolds four stages: the foundation stage (2007–2010), the enhancement and promotion stage (2011–2015), the excellence stage (2016–2020) and the sustainability and glory stage (beyond 2020) (Grapragasem, Krishnan, & Mansor, 2014). In Stage 1 and Stage 2, the Malaysian higher education system focused on four different fields: teaching and learning, governance, globalization and knowledge-based society. In general, designing NHESP is to strengthen higher education association as a regional and an international center for academic and educational quality. As such, the Ministry of Education (MOE) established a brand-new blueprint for that purpose (Zain, Aspah, Abdullah, & Ebrahimi, 2017).

In 2012, MOHE launched the revised graduate employability policy, known as the National Graduate Employability Blueprint 2012–2017 (MOHE, 2012). The objective was to handle graduate employability challenges and issues with the expansion of higher education institutions in Malaysia using four major charters (MOHE, 2012). Firstly, the enrichment system intends to provide Malaysia with future human capital, who are (1) knowledgeable, (2) creative, (3) imbued with social and personal attributes and (4) able to compete in the global market of employment. Secondly, higher education institutions are also urged to provide local graduates with prospects to realize their professional dreams that would steer their passion in acquiring knowledge and skills within the efficient, committed and productive workforce conceptualization. Thirdly, higher education institutions are advised to design a better curriculum embedded with core competencies to equip graduates with attributes and skills required in the working environment. Fourthly, efforts to emphasize the achievement of sustainable employability for higher education graduates through an effective system should be institutionalized to respond to the actual needs of the workplace and the economy (MOHE, 2012).

Furthermore, the Malaysian Higher Education Blueprint (MHEB 2015–2025) ranked the Malaysian education system among the world's leading educational systems and enabled Malaysia to compete in the global economy (MOHE, 2015). These goals were built on five aspirations: access, quality, equity, unity and efficiency. These were identified as:

- i. Access: to improve tertiary enrolment rates from 36% to 53% and higher education enrolment from 48% to 70% by opening spaces for technical and vocational education and training (TVET) via private institutions and online learning.
- ii. Quality: includes quality of graduates, quality of institutions and quality of the overall system. The quality of graduates is to increase the present rate of graduate employability from 75% to more than 80% by 2025. On the quality of institutions, the Ministry aims to place one university in Asia's Top 25 QS (Quacquarelli Symonds), two in the Global Top 100 QS and four in the Global Top 200. Finally, on the quality of the overall system, the Ministry aspires to raise its *Universitas 21* (U21) ranking for research output from 36 out of 50 countries to the top 25 and increase the number of international students in higher learning institutions (HLIs) from 108,000 students to 250,000 students in HLIs and schools by 2025.
- iii. Equity: to ensure that all Malaysians have an opportunity to fulfill their potentials, regardless of background.
- iv. Unity: to ensure the enrolment in higher education institutions reflects a mixture of Malaysia's ethnicities, and thus aims to provide students with shared values, experiences and common aspirations.
- v. Efficiency: to place the educational system among the top 25 of 50 countries in the U21 output ranking that covers research, enrolment and employability (MOHE, 2015, p. E-4).

The Malaysian Higher Education Blueprint (MHEB 2015–2025) outlined 10 amendments that would enhance higher education excellence. Firstly, is to produce holistic, entrepreneurial and balanced graduates who could navigate and shape their future independently. It is also anticipated that the program would decrease the number of unemployed graduates by training them to be job creators rather than job seekers (Zain et al., 2017). The Malaysian Higher Education Blueprint (MHEB 2015–2025) also focused on improving the quality of higher education to achieve its target to produce qualified and skilled graduates.

As evidenced by the Malaysian national higher education plans and blueprint, there is a growing awareness on the need to shift the role of higher education institutions to provide graduates with a high level of competencies, and thereby increase graduate employability through focusing on improving higher education quality. In this regard, the Malaysian higher education achieved good quality level at the local and international levels (MOHE, 2018; QS World University Rankings, 2019; U21, 2019). Moreover, the Malaysian higher education system was ranked 27 overall according to U21 ranking in 2019, which included the assessment in terms of resources, environment, connectivity and output (U21, 2019).

The QS world ranking 2020 identified 20 Malaysian universities achieved noticeable progress in ranking, one public university, Universiti Malaya (UM) in the global top 100, and four public universities, Universiti Malaya (UM), Universiti Putra Malaysia (UPM), Universiti Kebangsaan Malaysia (UKM) and Universiti Sains Malaysia (USM) in the global top 200 (QS World University Rankings, 2019). Additionally, five public universities (UM, UPM, UKM, USM and Universiti Teknologi Malaysia [UTM]) joined the regional top 50 countries according to QS Asia university ranking 2020 (QS World University Rankings, 2019). The QS world ranking used the following six indicators to evaluate the universities: academic reputation, employers' reputation, faculty/students' ratio, citations per faculty, international faculty's ratio and international students' ratio (QS World University Rankings, 2019).

Moreover, it is essential to note that 71 higher education institutions were audited and rated by the Rating System for Higher Education Institutions in Malaysia (SETARA) '17, which was exercised in 2017. The SETARA '17 rating instrument covers higher education institutions' core functions (teaching, research and services). Overall, the reports given by SETARA '17 showed that the 71 institutions had commendable achievements. More specifically, 58 institutions were rated at Tier-4 (very good), five institutions were rated at Tier-5 (excellence) and eight universities achieved Tier-6 (outstanding), whereby five universities (UM, UPM, UKM, UTM and USM) out of eight universities were public universities (MOHE, 2018).

Irrespective of the increasing improvement in the quality of higher education institutions, in particular public universities, there are several gaps in competencies and skills between what graduates have acquired and what workplaces and industries required (Ab Rahman et al., 2020; Alrifai & Raju, 2019; Ma'Dan et al., 2019; Shakur et al., 2020). Furthermore, the Khazanah Research Institute (2018) pointed out that the increase in the rate of higher education graduates was not equivalent to the acceptable employability rates of these graduates in the labor market. Additionally, MOHE's statistics in 2019 indicated that the Malaysian public universities produced a higher number of unemployed graduates compared to other higher education institutions (MOHE, 2019).

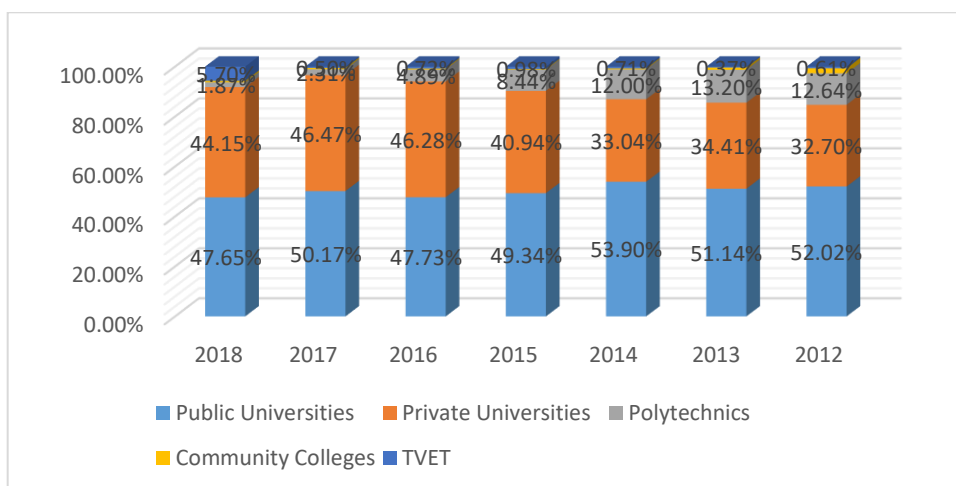


Figure 1.4 : Unemployed Graduates by Types of HEIs in Malaysia 2012-2018
(Source: Ministry of Higher Education 2019)

According to Figure 1.4 (which shows the unemployed graduates rate by the type of Malaysian higher education institutions from 2012–2018), there is a gap between the number of unemployed graduates from public universities and the number of unemployed graduates from other higher education institutions from 2012 to 2018. Although this gap is albeit with a gradual decline, in particular between public and private universities (in 2012; 32.7% from private universities and 52.02% from public universities, while in 2018; 44.15% from private universities and 47.65% from public universities), the majority of unemployed graduates are still from the public universities. This means that graduates from private universities are desired by employers and industries than graduates from public universities. This was consistent with Cheong, Hill, Fernandez-Chung and Leong (2016) who found that based on employers' perceptions on graduate employees' competencies, whereby Malaysian graduates who were degree holders from the private higher education institutions were ranked better than those from the public higher education institutions. Interestingly, many recent studies highlighted public universities graduates did not have skills and competencies required by the workplace based on the stakeholders' perceptions (Ab Rahman et al., 2020; Abdullah, 2018; Azli & Jambari, 2017; Cheong et al., 2016; Noorah & Zakiah, 2017).

1.2 Problem Statement

Graduate employability is the key factor that links higher education institutions and the workplace, and it aims to deliver qualified graduates with employability skills (Nesaratnam, Karan, & Von, 2018; Misni, Mahmood, & Jamil, 2020). Therefore, investment in higher education and human capital development to enhance the graduate competencies and employability have become the main issues in Malaysia (Ma'Dan et al., 2019). Since education quality is considered one of the factors that contributed to

prepare the human capital (Acemoglu & Autor, 2011; Yorke & Knight, 2004), several studies have investigated the importance of higher education institutions' quality to produce more employable graduates through determining the quality's dimensions that have an effect on graduate employability (Boateng et al., 2015; Ciriaci & Muscio, 2014; Ferns, Dawson, & Howitt, 2019; Lamagna et al., 2017; Martin, 2018; Støren & Aamodt, 2010).

In this context and based on previous empirical studies, the enhancement of graduate employability has been associated with quality dimensions, such as teaching and learning quality, curriculum and program, training quality, academic staff, research quality, university's reputation, selected students, learning environment, university's management, university's facilities and university's outcomes (Boateng et al., 2015; Ciriaci & Muscio, 2014; Hanapi & Nordin, 2014; Lamagna et al., 2017; Martin, 2018; Pereira et al., 2020; Martin, 2018; Støren & Aamodt, 2010; Yusof & Jamaluddin, 2017).

Among these dimensions, curriculum and program dimension is considered the dimension, which was given more attention by related previous studies for having a positive significant effect to enhance graduate employability (Boateng et al., 2015; Ciriaci & Muscio, 2014; Lamagna et al., 2017; Martin, 2018; Misni et al., 2020; Pereira et al., 2020). Pereira et al. (2020) found that based on the European key stakeholders' perceptions (students, employers and academics) the development of curricula that provided graduates with working life competencies and key skills increased their employability. However, Boateng et al. (2015) revealed that graduates from Ghanaian universities indicated the quality of programs offered by their universities had equipped them adequately for the workplace.

As for the academic staff's quality dimension, several studies examined the quality of academic staff as a predictor of graduate employability that helps to improve the graduates' knowledge and skills (Ferns et al., 2019; Ciriaci & Muscio, 2014; Hanapi & Nordin, 2014; Md-Ali, Shaffie & Yusof, 2016). Ferns et al. (2019) revealed that the quality of the teaching staff and their work experiences supported the graduate employability skills during their academic life. According to Hanapi and Nordin (2014), academic staff should have good characters and personal qualities, as well as professionally and socially competent, because they are not only bound to their daily task of educating, but their behavior become examples and models to students (Kamarolzaman & Sepikun, 2011; Md-Ali et al., 2016).

Many empirical studies also showed that quality training was a strong predictor of graduate employability (Boateng et al., 2015; Nesaratnam et al., 2018; O'Leary, 2017; Pereira et al., 2020). Internships are considered of great importance to increase graduate employability, as well as being the best means of cooperation between universities and the workplace (Pereira et al., 2020; Puad, 2018). On the other hand, the existing literature suggested higher education institutions need to communicate with the stakeholders to identify the graduates' qualifications and competencies required in the workplace (Pazil & Razak, 2019; Zainuddin et al., 2019). According to the Malcolm Baldrige National

Quality Award 2003 Educational Criteria [MBNQA], higher education institutions' top management is responsible for recognizing the students and stakeholders' needs to achieve the required quality (National Institute of Standards and Technology [NIST], 2003). Therefore, a few previous studies proposed that top management's commitment had a positive effect on graduate employability (Fajonyomi, 2008; Mohamad, Muhammad, Hussin & Habidin, 2017; Romle et al., 2016).

Furthermore, several studies highlighted that the university's reputation is a prerequisite for university graduates to gain a competitive advantage in the labor market (Awang-Hashim et al., 2015; MacLeod, Riehl, Saavedra & Urquiola, 2017). Therefore, several empirical studies mentioned that the university's reputation was considered as one of the factors that affected graduate employability (Abdullah, 2018; Jun, 2017; Nogales, Córdova & Urquidi, 2020; Yusof & Jamaluddin, 2017). Furthermore, teaching and learning dimension was found to predict graduate employability according to several past studies (Boateng et al., 2015; Ciriaci & Muscio, 2014; Lamagna, Villanueva & Hassan, 2017; Martin, 2018; Støren & Aamodt, 2010). Teaching and learning dimension included quality of student's selection and admission system, assessment of student's performance, faculty/students ratio, evaluate quality of academic staff, evaluate curricula, and infrastructure and facilities (Lamagna et al., 2017; Kuria & Marwa, 2017; Martin, 2018; Orr, Usher, Haj, Atherton, & Geanta, 2017; Patria, 2013; Zachariah, 2007).

As noted above, there were various studies that addressed the significant effect of higher education's quality on graduate employability worldwide based on stakeholders' perceptions. However, only a few studies were conducted in Malaysia (Abdullah, 2018; Hanapi & Nordin, 2014; Misni et al., 2020; Nesaratnam et al., 2018; Yusof & Jamaluddin, 2017). To close this literature gap, it is timely to investigate the effect of higher education's quality on graduate employability in the Malaysian context based on stakeholders' perceptions.

Conversely, most studies in Malaysia on graduate employability during the last decade focused on the role of graduate competencies to enhance their employability by identifying competencies that were required by the workplace and industries (Ab Rahman et al., 2020; Abu Samah, Abashah, & Saraih, 2018; Alrifai & Raju, 2019; Chan et al., 2018; Kenayathulla et al., 2019; Pazil & Razak, 2019; Roslan, Ping, Sulaiman, Jalil, & Siaw, 2020; Ting, Marzuki, Chuah, Misieng, & Jerome, 2017; Zainuddin et al., 2019). Among the competencies investigated in past studies included the following: English language and communication skills, knowledge and academic skills, practical skills and work experience, social skills and responsibilities, generic skills and professional skills, leadership and teamwork, decision-making and problems solving, information management and lifelong learning skills, managerial and entrepreneurial skills, learning abilities and thinking creatively, and passion and ethical commitment (Ab Rahman et al., 2020; Abu Samah et al., 2018; Alrifai & Raju, 2019; Chan et al., 2018; Kenayathulla et al., 2019; Law & Kue, 2020; Maegala, Suhaila, Hasdianty, Marini, & Hazwan, 2021; Othman, Abdullah & Romli, 2020; Pazil & Razak, 2019; Roslan et al., 2020; Suppramaniam et al., 2019; Ting et al., 2017; Zainuddin et al., 2019).

All previous studies had asserted based on stakeholders' perceptions that competencies were considered as the key factor that made graduates more employable upon graduation. Furthermore, a few empirical evidences revealed that graduate competencies played a mediating role in the relationship between the quality dimensions of higher education and employability (Abou-Shouk, Abdelhakim, & Hewedi, 2014; Boateng et al., 2015, Patria, 2013). Based on these findings, graduate competencies are deemed to be a noteworthy construct in improving graduate employability. However, to the best of knowledge applicable in this study, graduate competencies have not been tested as mediator on the relationship between the quality dimensions of higher education and employability in the Malaysian context. To fill in this gap, the current study has taken the initiative to investigate the mediating effect of graduate competencies on the relationship between the quality of public universities and graduate employability.

Besides, a considerable amount of literature highlighted that the graduates from Malaysian public universities lack the competencies to fulfill the employers' needs and demands. According to Abdullah (2018), the competencies of graduates from leading Malaysian public universities were low when assessed from the employers' perspectives. Ab Rahman et al. (2020) also discovered most fresh graduates from public universities lack communication skills. Azli and Jambari (2017) supported this statement and stated that engineering graduates' communication skills from research universities were rated as average from the employers' perspectives. According to Nooriah and Zakial (2017), a large number of first degree graduates from public universities were still jobless due to poor communication skills and lack of experience and also pursued studies irrelevant to the workplace. Based on a study conducted by Abd Majid et al. (2020), they found that low competencies and skills among graduates, particularly first degree graduates from public universities, caused them to be unable to fulfill requirements of the workplace and industries. Furthermore, a survey conducted by MOHE on fresh local graduates reported that graduates of public universities, who were still unemployed had poor communications skills, lack of the English language proficiency and poor attitudes (Balakrishnan, 2017).

According to the above statements, Malaysia faces weak employability among graduates from public universities due to lack of competencies and skills, although the public universities have achieved a significant achievement in terms of higher education quality. This issue contradicted the human capital theory, which assumed that investment in education is constantly linked to better income and job opportunities (Becker, 1962; Schultz, 1963). Some advocates of the human capital theory asserted that the increases of learning efforts did not lead to equivalent economic gains because of declining quality education, unbalanced and politically motivated education system (Bronchi, 2003; Castronova, 2002; Crepez & Moser, 2004). Therefore, the current study examined the relationships among the quality of public universities, graduate competencies and employability in Malaysia. Additionally, it focused on the role of graduate competencies as a mediator in a model proposed in this study, through extending the human capital theory to include the quality of higher education as the human capital source. Moreover, the study's fundamental objective was to examine the mediating effect of graduate competencies on the relationship between quality of public universities and graduate employability from stakeholders' perceptions.

1.3 Research Objectives

This study addressed the following objectives:

- 1- To examine and explore the effects of quality determinants in public universities on graduate employability.
- 2- To examine the effects of quality determinants in public universities on graduate competencies.
- 3- To examine the effect of graduate competencies on graduate employability.
- 4- To assess the role of graduate competencies as a mediating variable on the relationships between the determinants of public universities' quality on graduate employability.

1.4 Research Questions

In relation to the above objectives, the study formulated the following research questions and hypotheses:

- 1- What are the effects of quality determinants in public universities on graduate employability?
- 2- What are the effects of quality determinants in public universities on graduate competencies?
- 3- What is the effect of graduate competencies on graduate employability?
- 4- To what extent do graduate competencies mediate the relationship between the quality determinants of public universities on graduate employability?

1.5 Significance of the Study

The Malaysian national education adopts a philosophy that aims to produce people who are “intellectually, spiritually, emotionally and physically balanced and harmonic and these are based on a firm belief and devotion to God. Such an effort is designed to produce Malaysian citizens who are knowledgeable and competent, possess high moral standards, responsible and capable of achieving a high level of personal well-being, as well as able to contribute to the harmony and betterment of the family, society and nation at large” (MOHE, 2007, p. 4). This philosophy was established in 1989 and continues to be the basis in the transformation of education in Malaysia. It is the foundation of the Malaysian values and ethics, which are considered to be the “critical building blocks” in achieving Vision 2020 (EPU, 2010). This study considered the graduate competencies, employability and quality of public universities by investigating the current problems faced by the graduates of Malaysian public universities and the research gap presented in literature review. Therefore, the significance of the current study is multifaceted with theoretical and practical issues.

The present study had several theoretical significances. Firstly, the human capital theory explained that the investment in education and training leads to better income and job

opportunities (Becker, 1962; Mincer, 1958; Schultz, 1961). In this study, the relationships between quality dimensions in public universities, graduate competencies and employability were examined by extending the human capital theory to include education quality into account as part of the human capital investment (Acemoglu & Autor, 2011; Rumberger & Thomas, 1993). This enhances individual's skills, efficiency and knowledge that lead to the accumulation of human capital (Au et al., 2008; Kwon, 2009). Then, wages and future employment opportunities were determined by the accumulated human capital level (Swanson & Holton, 2001). Consequently, the extended human capital theory could be a comprehensive theoretical framework to understand the effect of the public universities' quality on graduate competencies and employability. Therefore, the study's findings showed a theoretical significance on the applicability of human capital theory in explaining the effects of public universities' quality on graduate competencies and employability.

Secondly, this study provided an integrative framework on public universities' quality and graduate employability by investigating the mediating effect of graduate competencies. To date, most previous studies on graduate employability in Malaysia only focused on determining the graduate competencies, which enhance employability (Ab Rahman et al., 2020; Abu Samah et al., 2018; Alrifai & Raju, 2019; Chan et al., 2018; Kenayathulla et al., 2019; Pazil & Razak, 2019; Roslan et al., 2020; Ting et al., 2017; Zainuddin et al., 2019). Therefore, there is still limited understanding on the role of public universities' quality to improve graduate competencies that are reflected to make graduates more employable. Consequently, this study contributed to employability literature by suggesting the graduate competencies as a mediator between the relationship of public universities' quality and graduate employability.

Thirdly, this study examined the relationships among public universities' quality, graduate competencies and employability by employing a mixed method triangulation design, in which the perceptions of two stakeholders' graduates and employers who recruited them were studied using quantitative and qualitative methods to obtain the graduates and employers' perceptions. The triangular design is considered a useful way to address the problem from multiple perspectives (Stoker, 2011; Senge, 2000) and to validate and support quantitative results by qualitative results (Charoenruk, 2006; Heale & Forbes, 2013; Jick, 1979). This approach might provide a better understanding of this issue, however, only limited studies used this approach. Therefore, this study contributed to the growing literature in using triangulation to investigate these relationships.

Lastly, this study also incorporated various constructs that were identified based on theoretical and empirical evidences (Boateng et al., 2015; Ciriaci & Muscio, 2014; Hanapi & Nordin, 2014; Lamagna et al., 2017; Martin, 2018; Pereira et al., 2020; Martin, 2018; Støren & Aamodt, 2010; Yusof & Jamaluddin, 2017). Furthermore, a model was presented to explain the causal relationships between the quality determinants in public universities and graduate employability by determining the graduate competencies as a mediator. The current study tested the effect factors that affected graduate competencies and made them more employable in the Malaysian context. Therefore, the study contributed to the body of knowledge by presenting empirical evidence on the factors of

the quality that predicted graduate competencies and employability in public universities. Consequently, it would help explain the graduate employability of public universities and bridge the research gap.

From a practical perspective, this study also had several practical significances, which might be useful for public universities, employers and graduates. Higher education institutions play a key role in preparing their students for the workplace (Aun, 2020; Ma'Dan et al., 2019; Yoong et al., 2017). Therefore, this study provided guidelines for the public universities on the graduates' strengths and weaknesses regarding employability and identified the competencies required by the employers in equipping their graduates. Furthermore, this study could benefit the public universities students to identify the competencies and skills which are required by the workplace to prepare them for the transfer from university to the workplace.

Moreover, by using the Structure Equation Modelling (SEM), the study would provide valuable insights into how the aforementioned variables jointly affect or enhance graduate competencies and employability. The SEM reveals how sets of variables define constructs and the relationship among these variables (Bryne, 2010). Therefore, this study would help public universities to highlight the quality dimensions that supported the graduate employability to maintain continuous improvement.

On the other hand, the current study would enable employers and governmental bodies to understand the level of competencies possessed by public universities graduates. Employers and governmental bodies might need to identify the competencies that public universities graduates lack by providing them with these competencies during internships or training programs (Nesaratnam et al., 2018; O'Leary, 2017; Puad, 2018). Therefore, this study could help formulate the appropriate recruitment strategy and identify the aspects that should be focused on during the students' training program, either during their academic life or before starting the job.

1.6 Scope of the Study

The present study was limited to only investigate the effect of the quality determinants of public universities on graduate competencies and employability in Malaysia. It also focused on the role of graduate competencies as a mediator between the determinants of public universities' quality and employability. Several predictors influence the graduate employability (Abd Majid et al., 2020; Ferns et al., 2019; Hanapi & Nordin, 2014; Seng, 2018; Zainuddin et al., 2019) and several quality dimensions in higher education also impact graduate employability (Boateng et al., 2015; Ciriaci & Muscio, 2014; Hanapi & Nordin, 2014; Lamagna et al., 2017; Martin, 2018; Pereira et al., 2020; Støren & Aamodt, 2010). However, the current study selected seven quality dimensions in higher education based on previous empirical evidence, namely university's reputation, admission requirements, top management's commitment, quality of academic staff, academic program and curriculum, infrastructure and support facilities and the quality of training.

This study was conducted in the Klang Valley in Malaysia. According to Hossain et al. (2018), the fresh graduates in the Klang Valley suffered from increasing unemployment due to the lack of graduates' attributes and employability skills. Moreover, MOHE's statistics in 2019 indicated around 31.6% of higher education graduates were from the Klang Valley, as well as 33.6% of unemployed graduates were also from the Klang Valley (MOHE, 2020). The percentage of unemployed graduates is considered high due to most highly skilled jobs created are dominant in the two states (Kuala Lumpur and Selangor). In Kuala Lumpur, 85% of new jobs created in the state fall under the highly skilled category, whereas in Selangor, it was 42% (DSM, 2016). Based on the current study's problems, this study focused on leading public universities located in the Klang Valley, whereby employers considered the competencies of Malaysian graduates who graduated from leading public universities do not meet the workplace needs (Abdullah, 2018).

According to MOHE (2019), there were six public universities located in the Klang Valley [Universiti Malaya (UM), Universiti Putra Malaysia (UPM), Universiti Kebangsaan Malaysia (UKM), Universiti Teknologi MARA (UiTM), Universiti Islam Antarabangsa Malaysia (UIAM) and Universiti Pertahanan Nasional Malaysia (UPNM)]. Among these universities, this study only selected three public universities (UM, UPM and UKM), which have been recognized as leading universities at both the local and universal levels according to the results of SETARA '17 (MOHE, 2018), QS Asia university ranking 2020 and QS World University Rankings (2019).

Besides that, this study identified graduates and employers as key stakeholders based on previous studies in the same area. Graduates and employers as the main stakeholders are ultimately and directly affected by higher education outcomes (Azmi, Hashim, & Yusoff, 2018; Caballero, Vázquez, & Quintás, 2015; Tang & Hussin, 2011; Ulewicz, 2017). Moreover, many researchers perceived graduates as a valuable source of information about higher education institutions and workplaces (Ferns et al., 2019; Kumar, 2017; Labanauskis & Ginevičius, 2017). Conversely, the employers' perceptions provide insight on competencies and skills needed by the workplace (Chan et al., 2018; Hossain et al., 2018; Pazil & Razak, 2019; Ting et al., 2017). Therefore, the study's respondents were Malaysian graduates from three public universities, which were UM, UPM and UKM and the employers who recruited graduates of these three universities through a period from 2015 – 2017 all over Malaysia.

According to the Graduates' Tracer study 2019, local graduates represented 95.3% of the total graduates in 2019. Moreover, 60% of these graduates remained unemployed a year after graduation and a majority of these unemployed graduates were bachelor's degree holders (MOHE, 2019). Moreover, Youssef (2014) indicated that graduates could provide sufficient information about their transition process to the workplace after one year. Therefore, this study identified the local bachelor's degree graduates, who graduated at least one year ago to respond to the questionnaire. This study also included graduates who graduated from 2015 to 2017. As suggested by Kong and Jiang (2011), graduates who have been in the labor market for more than three years after graduation

should be engaged in different forms of employment and have more information about employability.

To obtain the perceptions of graduates and employers, this study employed a mixed methods triangular design. In mixed methods research, triangulation has been praised as a strategy for exploring viewpoints revealed through divergent data (Campbell, Goodman-Williams, Feeney & Fehler-Cabral, 2020). According to Senge (2000), a triangular design approach permits to study the problems from multiple points of view, providing a richer and ultimately more useful way of addressing the issue. Moreover, the current study restricted its scope to human capital theory (Becker, 1962; Schultz, 1963; Swanson & Holton, 2001). It clarifies the relationships between the public universities' quality, graduate competencies and employability. It also looks into the graduate competencies mediating effect on the relationship between public universities' quality and graduate employability.

1.7 Definition of Key Terms

Researchers need to define terms that are used in their research to assist the readers to understand about the study (Creswell, 2009). Therefore, the following key terms used in this study are clarified as follows:

Graduate Employability (GE)

According to the National Graduate Employability Blueprint 2012–2017, “employability could be defined as the potential of obtaining and building a fulfilling career through continuous development of skills, which could be applied for each other, possessing the set of attributes and skills that match those required by industries, taking the responsibility for self-development through learning and training, either through the employer or self-initiatives, adopting the concept of life-long learning and being employed according to the level of qualification, functional competencies and being rewarded accordingly in terms of their wages and benefits” (MOHE, 2012).

Graduate Competencies (GC)

The definition of graduate competencies was adopted from Mulder's et al. (2009) definition, which highlighted a new concept of competency in university education. Competency is “a series of integrated abilities, which consisted of clusters of knowledge, skills and attitudes necessary for conditional task performance and problem-solving and for being able to function effectively in a certain profession, organization, job, role and situation”.

University's Reputation (UR)

In the current study, university reputation refers to the image which the university has gained according to various university ranking systems and the perspectives of multiple stakeholders. This definition was adapted from Munisamy, Jaafar and Nagaraj (2014) and Sung and Yang (2008).

Admission Requirements (AR)

In this study, admission requirements refer to the standards that are determined by higher education institutions and MOHE in the transition of students from secondary education to higher education and to ensure that the enrolled students will succeed in the programs. This definition was adapted from Boyles et al. (2005) and Lawrence and Pharr (2003).

Top Management's Commitment (TM)

In the current study, top management's commitment refers to the leading board of the university (directors, department heads, deputy deans and deans), who are committed to implementing quality management, providing the requirements of the quality process and continuous improvement. This definition was adapted from Saraph et al. (1989) and Moore et al. (2010).

Quality of Academic Staff (AS)

The academic staff's quality indicates the competencies and qualities possessed by the academic staff. These competencies are described as the capacity to perform a duty (Spencer & Spencer, 2008).

Academic Program and Curriculum (PC)

Curriculum is identified as the tradition, which is taught in schools, a set of subjects, subject content, a program or course of study, a set of materials, a sequence of courses, a set of performance objectives, everything that takes place within the school, including extra-class activities, guidance and interpersonal relationships and other activities that the school plans (Olivia, 1997).

Infrastructure and Support Facilities (IF)

Musa and Ahmad (2012) defined infrastructure and facilities in higher education institutions as the physical resources and facilities involved directly or remotely in the educational system's learning and teaching process.

Quality of Training (QT)

Training in the current study is a learning activity or arranged and planned process to modify knowledge or skills and behavior via working to reach effective performance in future activities. This definition was adapted from Armstrong (1999), Cole (2002) and Gomez-Mejia et al. (2007).

1.8 Organization of the Thesis

This thesis is organized into five chapters. Chapter 1 provides an introduction to the thesis, which includes the research background, problem statement, research objectives, research questions, significance of the study, scope of the study and operational definitions of key terms used in the thesis. Chapter 2 provides the literature review on higher education's quality, graduate employability and competencies. The study's main variables are based on an array of works in literature. Furthermore, this chapter presents the related theory that clarifies the relationships between variables. It provides the conceptual framework and hypotheses development. Chapter 3 discusses the study's research methodology, specifically, the research paradigm and design, study population and sample, research instruments and data collection and analysis procedures. Chapter 4 presents the results and discussions of the study. It begins with the demographic profile and descriptive information. It then tests the hypotheses to determine the direct effect between independent variables, mediator variables and dependent variables, as well as the mediation analysis to examine the indirect effect. This chapter also includes the findings and discussions of the qualitative study. Finally, Chapter 5 provides a summary of the major findings and some concluding remarks. It discusses the theoretical and practical contribution of the results. The recommendations and limitations of the study are also presented in this chapter. Figure 1.5 represents the structure of the thesis.

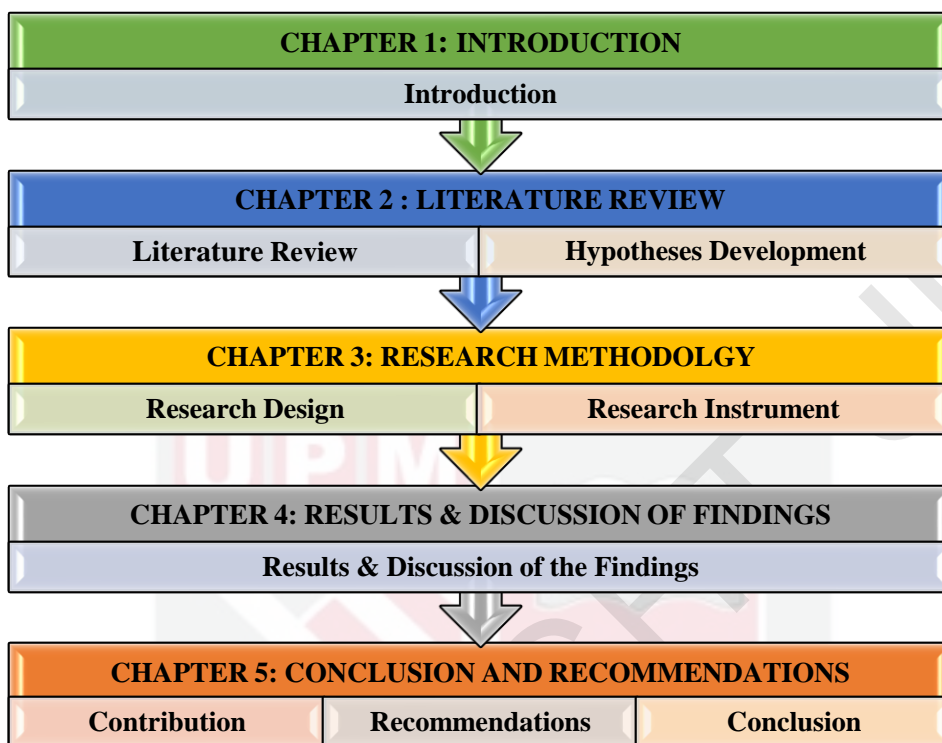


Figure 1.5 : Structure of the Thesis

1.9 Chapter Summary

This chapter provided an overview of the study’s background by illustrating issues on quality in higher education, graduate competencies and employability. The problem statement was highlighted to justify the need for the proposed research. The research objectives, questions and research hypotheses were derived to understand the relationships between public universities’ quality, graduate competencies and employability. Moreover, they helped to examine the mediating role of graduate competencies. The chapter also presented the significance of the study. The important definitions of terms used throughout the study were also mentioned and the scope of the current study was clarified. The next chapter discusses the literature review related to the study.

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