THE EFFECT OF CURRICULUM DESIGN AND TALENT DEVELOPMENT PHILOSOPHIES ON EMPLOYABILITY SKILLS AMONG MALAYSIAN GRADUATES

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DEDICATION

This thesis is dedicated to my mother, Masriah Mahat and my husband, Walid Ashry who gave me the extensive courage and support in completing my thesis.

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ABSTRACT

The availability of a skilled workforce is necessary to support the transition of all economic sectors towards knowledge-intensive activities, drive labour productivity gains and attract investment into the country. However, there is an insufficient talent supply attributed to mismatches in workforce demand and supply associated with the problem of graduate employability. This study hypothesizes that the problem is caused by the unsatisfactory quality of higher education and ineffective management of talent development in the organization as organizations tend to focus only on exclusive philosophy. Based on literature reviewed, the relationship between curriculum design and talent development with employability skills has been widely studied. However, empirical evidence that states the effect of curriculum design and talent development philosophies on the employability skills among employed graduates is still lacking especially in the context of developing countries. Drawing on two main theories which are Human Capital Theory and Resource-Based View, this study aims to develop a conceptual framework to show the effect of curriculum design (curriculum vision, operationalization of curriculum vision, curriculum delivery and curriculum evaluation) and talent development philosophies (exclusive and inclusive) as an individual context on employability skills. The research was conducted within a span of three years among bachelor's graduates from public and private universities who are currently working. This study employed purposive sampling technique whereby the sample population composed of 299 employed graduates. The hypotheses were evaluated using Partial Least Squares (PLS) analysis, known as the Structural Equation Modeling (SEM) technique. The findings of this study revealed that curriculum design and talent development philosophies directly influence employability skills. This study contributes to the body of knowledge on the effect of curriculum design and talent development philosophies as the predictor of employability skills in one model, and validated talent development philosophies dimension (exclusive and inclusive) has a significant influence on employability skills. As a practical contribution, this study highlights the importance of universities in updating industry-relevant curriculum content and the industry in implementing broader investment in talent development to ensure a sufficient supply of talent.

ABSTRAK

Ketersediaan tenaga kerja mahir diperlukan untuk menyokong peralihan semua sektor ekonomi ke arah aktiviti yang berpusatkan ilmu secara intensif, memacu peningkatan produktiviti pekerja dan menarik pelaburan luar ke negara ini. Walau bagaimanapun, terdapat kekurangan sumber bekalan bakat disebabkan oleh ketidakpadanan permintaan dan penawaran tenaga kerja yang dikaitkan dengan masalah kebolehkerjaan graduan. Kajian ini membuat hipotesis bahawa masalah tersebut disebabkan oleh kualiti pendidikan tinggi yang tidak memuaskan dan pengurusan pembangunan bakat yang tidak efektif dalam organisasi kerana organisasi hanya memberi fokus pada falsafah ekslusif. Berdasarkan kajian lepas yang dikaji, hubungan antara reka bentuk kurikulum dan pembangunan bakat dengan kemahiran kebolehkerjaan telah banyak dikaji. Walau bagaimanapun, bukti saintifik yang menyatakan kesan reka bentuk kurikulum dan falsafah pembangunan bakat terhadap kemahiran kebolehkerjaan dalam kalangan graduan yang bekerja masih tidak mencukupi terutama dalam konteks negara membangun. Dengan menggunakan dua teori utama iaitu Teori Modal Insan dan Teori Berasaskan Sumber, kajian ini bertujuan untuk membangunkan kerangka konsep untuk menunjukkan kesan reka bentuk kurikulum (visi kurikulum, pengoperasian visi kurikulum, penyampaian kurikulum dan penilaian kurikulum) dan falsafah pembangunan bakat (ekslusif dan inklusif) sebagai konteks individu terhadap kemahiran kebolehkerjaan. Kajian ini dijalankan dalam jangka masa tiga tahun dalam kalangan graduan sarjana muda dari universiti awam dan swasta yang kini sedang bekerja. Kajian ini menggunakan teknik persampelan bertujuan dengan populasi sampel terdiri daripada 299 graduan yang bekerja. Hipotesis dinilai menggunakan analisis Kuasa Dua Terkecil Separa (PLS), yang dikenali sebagai teknik Pemodelan Persamaan Struktur (SEM). Hasil kajian ini menunjukkan bahawa reka bentuk kurikulum dan falsafah pembangunan bakat mempengaruhi kemahiran kebolehkerjaan. Kajian ini menyumbang kepada pengetahuan tentang pengaruh reka bentuk kurikulum dan falsafah pembangunan bakat sebagai penentu kemahiran kebolehkerjaan dalam satu model, dan dimensi falsafah pembangunan bakat yang di sahkan (ekslusif dan inklusif) mempunyai pengaruh yang signifikan terhadap kemahiran kebolehkerjaan. Melalui sumbangan praktikal, kajian ini menekankan kepentingan universiti dalam mengemas kini kandungan kurikulum yang berkaitan dengan industri, agar industri dapat melaksanakan pelaburan yang lebih luas dalam pembangunan bakat untuk memastikan kelangsungan bekalan bakat yang mencukupi.

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LIST OF ABBREVIATIONS

HEIs	-	Higher Education Institutions
HCD	-	Human Capital Development
TM	-	Talent Management
TD	-	Talent Development
MOE	-	Ministry of Education
HRM	-	Human Resource Management
ASTD	-	American Society for Training and Development
SCANS	-	The Secretary's Commission on Achieving Necessary Skills
MOHE	-	Ministry of Higher Education
HRD	-	Human Resource Development
NPE	-	National Philosophy of Education
PLS	-	Partial Least Square
RBV	-	Resource-Based View Theory
SEM	-	Structural Equation Modelling
PLS	-	Partial Least Square
CFA	-	Confirmatory Factor Analysis
EFA	-	Exploratory Factor Analysis
VIF	-	Variance of Inflation Factor
AVE	-	Average Variance Extracted
CR	-	Composite Reliability
R^2	-	Coefficient of Determination
f^2	-	Effect Size
Q^2	-	Predictive Relevance

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CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter comprises the study background, the main research problems along with the objectives of study. It begins with a brief introduction of employability competency, curriculum design, and talent development philosophies subsequently, followed by a statement of problem that address issues and gaps in the literature. Research questions and research objectives were obtained.

1.2 Background of Study

In the 21st century, dynamically changing job market and progressive technological change has pushed organizations to acknowledge highly skilled workforce as the most valuable asset, which is a determinant of competitive advantage, innovative and sustainability (Ananthan *et al.*, 2019). In the process of achieving the status of developed nation, talent availability is also important for a Malaysia, in aiding the shift of the whole sectors in economy to a knowledge-driven one as is the benchmark of development of any prosperous nation, attract outside investment, and drive labor productivity (World Economic Forum, 2011; Kenayathulla *et al.*, 2019).

In the process of looking for talented worker, the majority of employers are more inclined to find well-rounded employees who do not only possess the competency needed to work in the workplace, but also those who have the right attitude, are proactive and willing to learn, as it leads survival the organization products or services in the global market (Abdul Karim *et al.*, 2012; Abd Majid *et al.*, 2020). Many researchers in previous years have studied the quality, skills and

knowledge of employment, and from that, a number of skills considerable as fundamental competency of employability have been recognized. Many of these studies show the expectation from employers towards the graduates in which it is expected for them to have disciplinary and technical skills of the degree they obtained, along with their capability in demonstrating wide scope of skills and features (Buntat *et al.*, 2013; Collet *et al.*, 2015; McArthur *et al.*, 2017; Tanius, 2018; Kenayathulla *et al.*, 2019; Noah and Abdul Aziz, 2020).

However, youth unemployment poses pressing challenges for Malaysia. As the number of graduates continues to climb each year, students are facing tough competition amidst a shaky economy (Aun, 2020). A Tracer Study on Malaysian graduates by Ministry of Education (MOE) in 2016 showed that unemployment among new graduates was more than seven times the national rate, which was 3.1% (Ministry of Education, 2016). Meanwhile, MOE (2017) indicated that the rate had been consistent since 2010 (24.6%). It was slightly higher in 2011 and 2012 (25.6% and 25%, respectively), dropping in 2015 to 24.9% and declining yet again to 22.7% in 2016 (Ministry of Education, 2017). Even after six months of graduating from university, Malaysian graduates are reportedly still unable to secure a job. It's reported recently by MOE (2019) that 57,000 out of 173,000 (32.9%) graduates in 2018 remained unemployed after finding a job for six months. Moreover, most can only hold their first job for eighteen months (Marketer's Forum, 2012).

The key reason for this alarming state is because Malaysian firms face challenges in sourcing talent whereby graduates' expertise is inadequate to fulfil the job criterion of the industries and did not possess the required soft and interpersonal skills (Department of Statistics Malaysia, 2020; Wan Othman *et al.*, 2020; Talent Corporation Malaysia, 2016; CIPD, 2019). Many researchers have proven that proficiency, characters and awareness required for employment and to succeed in the corporate world are missing from the graduates (Abdullah *et al.*, 2020; Nazron, Lim and Nga, 2017).

Based on previous studies, most findings revealed that majority of Malaysian graduates have poor soft skills namely communication issue, problem solving and critical thinking, low self-confidence, and teamwork skill. For instance, the research conducted by TalentCorp in collaboration with World Bank in 2014, found that there was a mismatch of skills between graduates and employers with 81% lack of communication skills, 56% lack of creative thinking skills, and 51% lack of analytical skills (Figure 1.1). This survey has been conducted with Malaysian employer, covered 200 companies with approximately 245 000 employees (World Bank, 2014). Meanwhile, findings from (Kenayathulla *et al.*, 2019) indicated that the competence gained by Malaysian students is lower in terms of teamwork, information technology skills, and ethical skills.

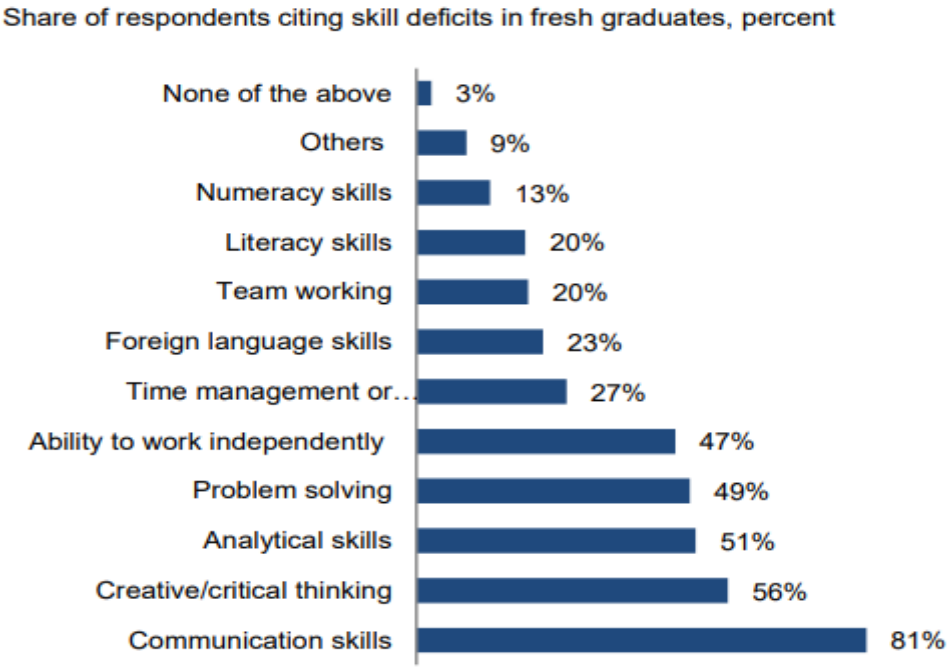

Figure 1.1 Fresh graduates from local universities lack soft skills (TalentCorp/World Bank, 2014, p.24)

Industry also has some negative comments about today's graduates based on employers' experiences during the job screening process. The review of Jobstreet.com revealed that employer surveys have repeatedly found that lack of language proficiency, especially in English, and shortcomings in communication (Daily Express, 2017), in addition to poor attitudes and personalities hinder employment

prospects of Malaysian graduates (Aun, 2020; Cheong *et al.*, 2016; Zainuddin *et al.*, 2019). Employer also revealed that the newbies also are display lower language proficiency especially in their chosen words during presentations, discussions and meetings (Ab Rahman *et al.*, 2019). Apart from that, the feedbacks from employers also added that most graduates are unable to apply the skills such as leadership, teamwork, critical thinking, and problem solving that would affect graduate employability in Malaysia (Azmi, Hashim, and Yusoff, 2018; Abdullah *et al.*, 2020; Kenayathulla *et al.*, 2019).

In addition, World Economic Forum claims that more than one third (36%) of all jobs across all industries require complex problem-solving as one of the core skills, rather than 1 in 20 jobs (4%) for physical abilities. It emphasizes that the demand for various skills in 2020 are concern toward soft skills more than technical skills (World Economic Forum, 2016). Thus, skills shortage among graduates is a serious constraint in Malaysia (Bank Negara, 2017) as graduate employability become salient because the demand of professionalism and expertise from the human resource are higher than ever before, and it has implications on the relationship between industry and academia (Baqutayan et al., 2019).

According to the study by Khazanah Research Institutes, graduates' skill mismatched to industry needs is because of education institution only emphasise on academic and professional qualifications, while employers prioritise soft skills and work experience (Khazanah Research Institutes, 2018). The report from Department of Statistics Malaysia further reiterates that industry-wide shortage of skilled and qualified human resources is due to the education quality deficiencies (Department of Statistics Malaysia, 2020). A study by World Bank also reported that education data supports the concerns of their expert panellist, that Malaysia has demonstrated declining education outcomes in terms of quality (World Bank, 2018). This problem indicates that education needs a massive rethink and what is being taught in universities needs urgent review (Hunter, 2020).

Previous works such as Shagrir (2015) and Turner (2014) have highlighted a long-standing argument regarding the function of Higher Education Institutions (HEIs) in bolstering the employability of graduates. For instance, the importance of universities and their educational systems in developing graduate employability competency and improving fragile economies have been emphasised in Mbah's (2014) study. The primary function of the HEIs is to produce a skilled and knowledgeable workforce that not only works with minimal guidance but also contributes effectively to the recruitment organization's recruitment (Abdul Karim *et al.*, 2012).

Nevertheless, other studies have highlighted some issues that remain such as the university's suitability in preparing students to face workplaces in ever-changing industries (Aziz *et al.*, 2016). There is a general perception that curriculum provided by HEIs is highly theory-heavy but lacks practical training that can be used in the labor market (Yazdi, 2013; Nguyen, 2014). HEIs may not really pay much attention to student development on vital component because it is difficult to produce hands-on scenarios in the curriculum, except when students go for industrial attachments. Griffin and Annulis (2013) discovered that the most common employer complaints revolved around new graduates that lacked decision-making, problem-solving, teamwork, and self-learning skills, instead, emerging from university with heads full of theories without the knowledge to apply them.

This gap directly affects the stability of human capital development (HCD) worldwide. Talent pool deficits are detrimental to maintaining sustained economy growth. With declining education standards and a shrinking talent pool, Malaysia's high-income status goals cannot be sustained in the long term (CIPD, 2019). In the Malaysian Education Blueprint 2015-2025, Ministry of Education proposes major reforms to Malaysia's higher education system through the collective efforts of all stakeholders by intensive and frequent industry and community engagement, collaboration, and partnerships, so that the higher education system can be transformed to prepare Malaysian graduates for the challenges and opportunities of an ever-changing world (MOE, 2015). In addition, the survey by the World Bank and Talent Corp (Bank Negara Annual Report, 2016) highlighted that to have industry-ready graduates, the task of educating future talent cannot be left solely in the university's

shoulder. Employers as well must carry the responsibility to provide graduate talent a transferable core skill in practice, combine with their academic knowledge, especially during their transition period of the first year of employment. Thus, these has led the concerns on organizations to implement an effective of talent management (TM) strategies, particularly focusing on talent development (TD), to ensure that they can access future employees with the required employability skills.

However, many organizations struggle to develop and implement effective TD. According to the CIPD (2012) survey, only 6% of organizations consider that they have TD to be effective. Studies and researchers have shown that Malaysia is struggling to retain talent due to lack of potential employees with the right expertise and employability skills, including transferability skills (Nasir et al, 2012; EPU, 2016). Few studies also found that despite the initiatives taken by the government in various programs and initiatives to develop and produce key talented human capital, Malaysia is still short of talented people and lacking in managing their talents and to develop skilful resources (Ananthan et al., 2019; PwC, 2016). Meyers and Woerkom (2014) proposed that talent philosophy is an important factor affecting TD's effectiveness, yet still overlooked. This proposition and argument are based on the past literature on human resource management (HRM), which underlying philosophies about nature of human resources is the key determinants of the human resource (HR) practices effectiveness (Collings and Mellahi, 2009). Traditionally, TD has been based on exclusive philosophy, whereby it was directed at a small percentage of the workforce who performed better than the rest (Swailes, 2013; Lewis and Heckman, 2006). Exclusive philosophy face two central challenges that are unlikely to dissolve in the near future which is the global scarcity of talent, and it hampers the prediction of future talent needs. Investing in particular employees with very particular talents might turn out to be ineffective, because potential identification is impeded by the fact that today's organizations operate in very dynamic markets, so they cannot adequately forecast their future talent needs. Broader investment in various form of talent (inclusive philosophy) can help overcome these challenges as the other employees who not identified as talent who form the backbone of a business (Meyers and Woerkom, 2014).

In practice, the majority of organizations adopt exclusive philosophy to TM and TD particularly (Swailes, 2013; Gallardo-Gallardo and Thunnissen, 2016), but research by the Chartered Institute of Personnel and Development (CIPD, 2012) shows that inclusive philosophy is also fairly common. Whereas three fifths of organization reported having exclusive philosophy, two fifths had inclusive philosophy (CIPD, 2012). Further supported, studies by Hana & Lucie (2015) and Meyers et al. (2019) empirically found that organizations hold different talent philosophies either inclusive or exclusive for the development of employees' competencies. In addition, hybrid approaches that combine inclusive and exclusive philosophy also are possible (Stahl et al., 2012). In line with the framework of talent development philosophies coined by Meyers and Woerkom (2014), it shed the light that HR managers' idea about talent are differed markedly which affect the TM strategic actions and its effectiveness in utilizing their potential as well as securing a pool of talent within the organization.

The significance of employability has been highlighted in works of many past researchers. Although employability has been widely studied, knowledge on this topic is still limited, particularly in empirical studies on measuring graduate employability skills, which looks at its predictors and outcomes (Pool and Qualter, 2013; Minh Thang and Wongsurawat, 2016). Few studies have emphasized the role of TD (Martini and Cavenago, 2017; Hana and Lucie, 2015; Bozionelos et al., 2016) and university curriculum (Harry *et al.*, 2018; Ahmed *et al.*, 2019; Ritter et al., 2018) in developing the employability skills. Nevertheless, not much empirical research has been done to assess the role of HEIs and TD together in developing the employability skills of individuals. This gap in the research area has also been highlighted in a model proposed by previous scholars (Iyer and Dave, 2015; Pheko and Molefhe, 2016; Nillson and Ellstrom, 2012) which provide insight for researcher to test empirically. Besides, little evidence found on perspective towards TD (especially in exclusive and inclusive) and its consequences towards skill development in individual outcome as argued by Meyers and Woerkom (2014) and Rezaei and Beyerlein (2018) in their study. They highlighted in their research that both perspective towards TD (inclusive or exclusive) might overcome the general scarcity of talent by growing the exact forms of talent that are required.

Even though the academia and industry are two separate worlds within themselves, yet they should carry the same responsibility in terms of grooming the graduates. Therefore, it is indispensable to establish a solid link between HEIs and industries to foster employability in a nation to remain competitive in the global business environment (Baqutayan et al., 2019). Thus, the main focus of this research to investigate the practical approach that could be adopted to influence the employability skills of graduates, as well as the shortage of skilled worker. This study undertakes in minimizing those gaps through empirical examination of the correlation between curriculum design and employability skills, talent development philosophies and employability skills, and provide an efficient model of all three elements together. The implementation strategies in integrating the role of HEIs and the industry would ensure that graduates are competent to fill the skill gap requirement, which contribute to productivity and economic growth.

1.3 Problem Statement

The primary objective of this study is to fully comprehend the factors that influence or lead to employability skills among employed Malaysian graduates. The significance of employability has been highlighted in works of many past researchers. It has been discovered that HEIs play a significant part in building a highly skilled workforce through the entire process and system of education, which shapes student attributes (Jansen and Suhre, 2015). In line with this, a critical, indispensable teaching and learning component that could enhance the attributes that make an individual more employable, is curriculum design (Nixon and Williams, 2014; Nguyen, 2014). In particular, several studies have examined the university curriculum and provided evidence that supports its impact on employability skills (Jansen and Suhre, 2015; Harry *et al.*, 2018; Ahmed *et al.*, 2019; Aguila *et al.*, 2016). Under the theory of human capital (Schultz, 1963) it also provides a strong support for the important role quality of education in developing the talent and potential of people which in turn drives up the country's productivity and economic growth. Education provides productivity enhancing skills that employers value and reward, as well as increase their relative position among other suppliers of labour (Chhinzer and Russo, 2018).

At the same time, employability skills also depend on the number of practices organisations provide to build an employable workforce (Jansen, 2018). This is acknowledged in various studies that imply the importance for organization to provide organizational support through development activities to enhance the employability skills of their employees (Martini and Cavenago, 2017; Hana and Luce, 2015; Bozionelos *et al.*, 2016). Almost all companies recognize TD as the solution for producing employees with the right competency and employability skills for the issue of talent shortage and mismatch skill between demand and supply (Morgan and Jardin, 2010). Moreover, recent studies have emphasized the role of the employer in providing TD to enhance the generic skills or employability of talent (Nilsson and Ellström, 2012; Pheko and Molefhe, 2016). This argument is deeply rooted in literature on the Resource-Based View of the firm (RBV; Barney, 1991), according to which highly valuable and unique resources like employee talents can help to outperform competitors. Organization who focus on competency development amongst their employee will turn these resources to be valuable and can deploy them to create unique value-added to the organization by their level of employability skills. In order to ensure that organization can access future employees with the required employability skills, they need to come up with effective strategies for managing their talent, particularly focusing on TD (Hogg, 2014).

However, from the reviewed literature, less attention has been given particularly in empirical studies measuring these two variables together in a one model as a predictor of employability skills. Most of the studies conducted only on the individual role by university or by industry. As mentioned in the background of study, employability skills are not the responsibility of education institutions alone; industrial organisations are also equally responsible (Su and Zhang, 2015). Nilsson and Ellström (2012) supported that formal learning in higher education are not capable enough to prepare graduates for the challenge in work environment, as careers are become more flexible, unstable, and subject to change, crossing boundaries, and becoming more global. Becker (1964) re-introduced the view of Human Capital Theory and posits the labor supply perspective of human capital that workers' skills are special type of capital that can be invested in. This perspective of human capital appears as one-dimensional concept which not only about education, but also various abilitities, attitudes and work-related values (Mocanu *et al.*, 2014). This gap in the research area

has also been highlighted in a model proposed by previous scholars (Iyer and Dave, 2015; Pheko and Molefhe, 2016) which provide insight for researcher to test empirically. Both models emphasized on employability establishment should be shared among current players of the labour market which is HEIs and employees, so that the supply and demand of labour market will be balanced. Therefore, the employees' awareness of the skills that they will need to remain employable can be enhanced by realizing the opportunities to develop their skills at the organizational level. It is also been highlighted in a past study which found that further research is still needed to assess the effectiveness of teaching and learning strategies in developing highly sought-after employability skills among graduates (Alias *et al.*, 2013) as well as, studies about TD focus on technical and generic competency (Garavan *et al.*, 2012).

In line with the framework of talent development philosophies coined by Meyers and Woerkom (2014), it shed the light that HR managers' idea about talent are differed markedly which affect the TM strategic actions and its effectiveness in utilizing their potential as well as securing a pool of talent within the organization. It is essential to analyse to what extent the organization taking the perspective towards TD be it exclusive or inclusive as the area of research is marked with pressure over the talent nature and the struggling of organizations to implement effective TD. However, it has been overlooked in TD literature, which tends to focus only on the exclusive model and emphasize TD leadership (Garavan *et al.*, 2012). Having a traditional view like this may add to the global scarcity of talent in which it's overly focuses on star performers only (Meyers and Woerkom, 2014). Nevertheless, little evidence found on perspective towards TD (exclusive and inclusive) and its consequences towards skill development in individual outcome which has been argued by Meyers and Woerkom (2014) and Rezaei and Beyerlein (2018) in their study. They highlighted in their research that both perspective towards TD (inclusive or exclusive) might overcome the general scarcity of talent by growing the exact forms of talent that are required.

In addition to the theoretical gaps, there are some contextual gaps in the literature regarding the possible ways to enhance the employability skills of graduates' employee particularly in developing countries such as Malaysia. According to the literature, many studies have been done to date, largely been conducted in the context

of developed economies especially in European countries (Martini and Cavenago, 2017; Bozionelos *et al.*, 2016; Jansen and Suhre, 2015). Hence, it is remained largely underexplored in an Asian context. According to our knowledge it is the first research looking for the relationship of curriculum design, talent development philosophies and employability skills in Malaysia as a developing country and attempts to fill some contextual gaps in this area. Thus, this study undertakes in minimizing these gaps through empirical examination of the correlation between curriculum design and employability skills, talent development philosophies and employability skills, and provide an efficient model of all three elements together.

With today's competition in the market ever growing, talent employees represent as a key source of organization's competitive advantage. However, there is insufficient talent supply reported globally. The world sees a huge deficit in the labor force that threatens economic growth (Iyer and Dave, 2015). World Economic Forum (2011) reports that shortage of skilled labor affecting 25 countries by 2030. In 2012, McKinsey and Company predicts the same situation as the labor market will be alarming by 2020. The report highlighted three phenomena of global talent shortages which; i) nearly 40 million shortage of high-skilled workers in the global labor market; ii) a shortage of 45 million secondary and vocational education workers in developing countries; iii) and up to 95 million unskilled workers in advanced economies (McKinsey and Company, 2012). Besides, Grant Thornton Malaysia (2013) reported that 62% of organizations in Malaysia find it difficult to find the right people with the right skills, while 48% identify talent shortages as obstacles for future growth (Figure 1.2). In sum, inadequate supply of skilled workers will fail to meet the demand for labor in the coming decades (Olson, 2015).

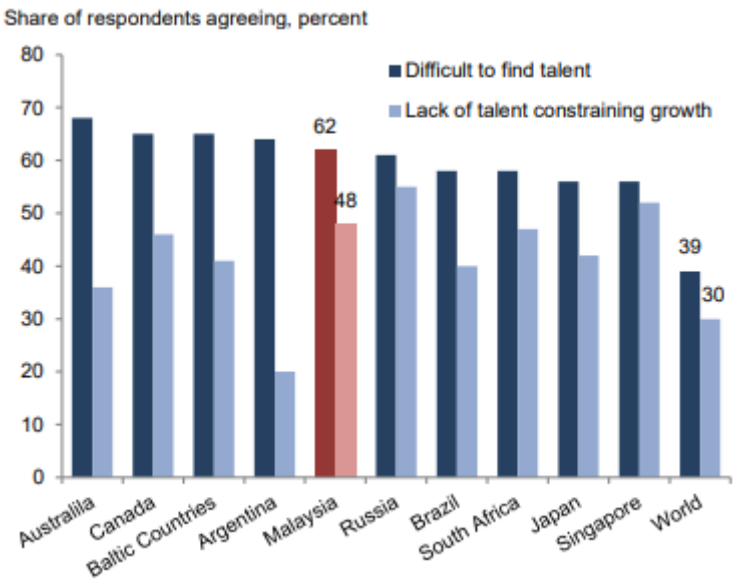

Figure 1.2 Firms say they cannot find fresh graduates with the necessary skills (Grant-Thornton International Business Report, 2013)

Insufficient talent supply, in which the workforce demand does not match the talent supply might be due to the problem associated with graduate employability. Downe *et al.* (2012) argued that main reasons for unemployability is because of the gaps exist in terms of key competencies in the workforce. Many researchers have proven that proficiency, characters and awareness required for employment and to succeed in the corporate world are missing from the graduates. It's worrying knowing the fact that many graduates are ill equipped to face the challenging workplace and do not have what it takes to earn and maintain a job, with employers complaining about their lack of employability skills and despondent job performance (Jeswani, 2016).

This issue of mismatch skills of talent supply stemming from the low quality of higher education. The quality of curriculum design in higher education has received critical discussion over the past several years on the practicability of curriculum (Aziz *et al.*, 2016). Studies conducted revealed several issues on curriculum design and complains by graduates. There are issues that often arise between higher education and industry in terms of curriculum design that are more theoretical than practical (Nguyen, 2014; Harry *et al*., 2018; Ahmed *et al*., 2019). For instance, research conducted by The Chartered Institute of Personnel and Development (CIPD) revealed that graduate workers feel that their degrees are not equipped with the right skills. The

content of the curriculum learned is outdated as graduates unable to cope with industry changes (CIPD, 2010). Similarly, few years after, the same problem still arise. A study by Tran (2013) and Zhao et al. (2017) found that most students and graduates blame their university for not providing proper soft skills. There is a lack of employability skills embedded into their syllabus or in the objective of teaching courses and programs at the university. Some of the students said that the university does not provide enough activities to develop their skills (Tran, 2013; Ahmed *et al*., 2019). While the other students also complain that they have to take responsibility for their career orientation due to lack of university guidance (Tran, 2013; Harry *et al*., 2018).

To be employable, graduates should have a good mix of academic and practical skills. People with employability skills could adapt well to changes besides gaining more opportunities to advance in their career (Yusof *et al.*, 2012). Mansour and Dean (2016) agreed with the above, stressing that HEIs should implement approaches that would ensure students are adequately prepared to successfully take up a wide variety of jobs. Universities must realise that employability skills go way beyond securing or searching for a job; graduates should also have skillsets, individual techniques, and attributes that would ensure they succeed in their jobs as well. Therefore, to keep up-to-date with the employers' demand for graduate skills in the market, HEIs must restructure their curriculum.

In order to ensure the effectiveness of the HCD, responsibility for developing talent must be taken by both the university and industry. However, the area of research is marked with pressure over the talent nature and the struggling of organizations to implement effective TD. For example, study by Ananthan et al. (2019) shows that Malaysia is still facing difficulties in managing their talents and to develop skilful resources. TD is important for country such as Malaysia that is moving towards being developed country whereby the government pays serious attention to increasing human capital through TD. In order to strengthening TD, the government will bring in place a bottom-up approach to minimize the centralized approach whereby training and career path being offered equally to employees (Ananthan *et al.*, 2019). The employees who are not been identified to be talented, will do not have the opportunity to thrive in an organization, and organizations may lose the opportunity to develop the employees

who may play a leading role (Al Ariss *et al.*, 2014). Thus, an important strategy for "zero talent outages" is by shift toward more inclusive TD in the future (Meyers and Woerkom, 2014).

Overall, as discussed above, employability skills that determine graduate talent should be integrated into the curriculum design in higher education and employers have the responsibility to improve the first year of employment for graduate talent, as an effective management during this transition period can positively impact the return on investments and retention which will reduce the percentage of talent deficit. Therefore, this study's primary purpose is focusing on identifying these significant skills of employability within HEIs graduates, as a requirement of the employers located in Malaysia. Are graduates equipped with those skills? Given the growing concern about talent shortage due to problem of graduate employability skills, this study investigates the employability skills possessed by graduate employees, and determine how far current TD and curriculum design implemented contribute to their level of employability skills.

Based on the aforementioned problems, this study investigates the effect of curriculum design and talent development philosophies on employability skills of talent graduates in Malaysia as a developing country. This may further our understanding of the impact of HCD by HEIs and industries in countries that share the similar background with Malaysia. University curriculum design, TD and employability skills are highly related to each other. The employability pull factors are highly depended on the education-based employability, and industry participation in developing skills pipeline (Iyer and Dave, 2015). This study looks for the impact of HCD by HEIs and industry at the individual employees rather than organizational level. Therefore, the direct effect of curriculum design and talent development philosophies is the main focus of this research. This can be explained by an orientation toward curriculum design component (Anderson and Rogan, 2011) and inclusive and exclusive philosophy (Meyers and Woerkom, 2014).

1.4 Research Questions

These gaps led to the development of six research questions. This study, then, seeks to address the following research issues:

RQ1: What is the level of curriculum design practices by higher education institutions as perceived by employed graduates?
RQ2: What is the level of talent development philosophies by industry as perceived by employed graduates?
RQ3: What is the level of employability skills as perceived by employed graduates?
RQ4: Is there any positive relationship between curriculum design and employability skills?
RQ5: Is there any positive relationship between talent development philosophies and employability skills?
RQ6: Is there any effect of curriculum design and talent development philosophies on employability skills?

1.5 Research Objectives

Considering the importance of the employability skills for the availability of skilled workforce and towards Malaysian economy and productivity, this research attempts to achieve the following objectives based on the problem statement:

RO1: To determine the level of curriculum design practices by higher education institutions as perceived by employed graduates
RO2: To determine the level of talent development philosophies by industry as perceived by employed graduates
RO3: To determine the level of employability skills as perceived by employed graduates
RO4: To identify the relationship between curriculum design and employability skills
RO5: To identify the relationship between talent development philosophies and employability skills

RO6: To determine the effect of curriculum design and talent development philosophies on employability skills.

1.6 Significance of the Study

The contribution of the present research towards existing knowledge is seen in several ways. Firstly, this study is important as it develops its own conceptual framework by introducing talent development philosophies as second independent variables. Previous studies suggested that it is favorable to focus on TD research discussing in terms of generic and technical competencies (Garavan *et al.*, 2012; Mehdiabadi and Li, 2016). In addition, few researchers (Nillson and Ellstrom, 2012; Iyer and Dave, 2015) suggested that formal learning in HEIs might not have enough capability to produce students that are ready to serve for work in direct, hence, this research plays a role in contributing to the body of knowledge with the exploration of effects among two variables together, curriculum design and talent development philosophies on employability skills in individual context.

On top of that, this study proposes to search for the effect of curriculum design and talent development philosophies on employability skills in Malaysia as a developing country from an individual perspective. There have been a numerous number of TM studies conducted in developed economy context and it is very much from a western lens (David G. Collings, Hugh Scullion *et al.*, 2011; McDonnell *et al.*, 2012). None to our knowledge has been conducted before on these three variables together, so the study outcomes would somehow benefit the ongoing knowledge particularly in this area.

Besides, the present study also contributes to organization. The findings of this study will assist organization in Malaysia in minimizing talent shortage by efficiency in managing talent as a critical success factor of an organization. Investing in particular employees (exclusive philosophy) might turn out to be ineffective. The employees who have not been identified to be talented, will not have the opportunity to thrive in an organization, and organizations may lose the opportunity to develop the employees

who may play a key role. More inclusive philosophy can help overcome the inefficient of TD. Organizations may be able to implement one talent development philosophy that applies to one group of workers, and another philosophy to another group of workers. Therefore, being efficient and inclusive in developing graduate workforce, it will resolve the mismatch in demand and supply of labor, besides enabling the participation of Malaysians as a whole and allow them to obtain benefits generated from the country's economic growth.

On the other hand, results of this research will suggest universities on paying more focus in the development of curriculum and teaching staff for the sake of improving students' work-related qualities. Specifically, an integration of theory and practice in university teaching, and the re-evaluation process that can be performed regarding their techniques of teaching-learning so that their graduates could possess required employability skills.

1.7 Scope of Study

The scope of study is a guide to researchers to facilitate studies conducted within the scope basis. The scope also facilitates the collection of information which only focused on selected respondents. Since this study focused on employability skills which at the individual level, the research population aimed at examining HEIs in Malaysia through a target population comprised the graduates of public and private universities who pursued Bachelor's Degree in 2013-2015 (i.e. 3 years), and employed within Klang Valley. This criterion was employed based on previous studies, which focused on the employed graduates within 3 years of graduation on self-perceived employability, and skills learned in university as their mind are still fresh about their past graduating university. Determining the impact of curriculum design and talent development philosophies towards employability skills is this study's primary objective, therefore it is important that respondents have graduated and have been employed.

This research is focused in Klang Valley, Malaysia particularly based on several reasons. Although some HEIs collect the data about their graduates, but the information is limited, not always accessible, and it is also considered to be highly sensitive and non-public. Only few universities can disclose the graduates' information which is too little the number of graduates' information has been shared. Thus, due to time and financial constraints, researcher decided to distributed the questionnaire by several methods to reach the target respondents via enumerators who is working in few of SL1M companies in area of Kuala Lumpur (e.g. MBSB, PNB, TNB and Sime Darby); and in person to the postgraduate's part-time students in university which researcher studying (UTM).

Skills development or employability skills is the most important concept in determining the effectiveness of curriculum design in higher education and training provided by industry. The literature has highlighted a number of variables, which has influence towards employability skills. However, this study covers only two variables that are derived from the literature review and discussed in this study. This study focus on curriculum design (vision, operationalisation of vision, delivery, and evaluation) and talent development philosophies (exclusive and inclusive philosophy) as independent variables, and employability skills as the dependent variable. The purpose of this research is explaining the variables, which can affect employability skills. Therefore, this study only focuses on the elements contained in the independent variable and dependent variable specified only.

1.8 Operational Definition of Variables

In carrying out the study, there are some specific terminologies used and the definitions are as follows:

1.8.1 Employability Skills

Employability skills is a quality of the individual including abilities along with personality in facilitating the gaining of employment and security of a person in their work context for their personal, and work benefit (Mccowan, 2015). In this study, employability skills refer to the skills possessed by the respondents through university curriculum and training by industry.

1.8.1.1 Communication Skill

Communication skill is the ability to clearly and concisely articulate thoughts and suggestions (SCANS, 1991). In this study, communication skill measures the ability of employed graduates to engages in verbal and nonverbal elements as well as the capability to use language either oral or written to get a message across.

1.8.1.2 Thinking Skill

Thinking skill is the ability to make decisions, consider risks and generate alternative and innovative ideas (SCANS, 1991). In this study, thinking skill measures the ability of employed graduates to think critically, creatively, innovatively and analytically, and the ability to apply the knowledge and skills in different contexts and to devise solutions to unfamiliar problems.

1.8.1.3 Management Skill

Management skill is the ability of managing one's time, resources and temperament in achieving set out tasks (SCANS, 1991). In this study, management skill measures the ability of employed graduates to organize schedule on time, and ability in the personnel and project management of the business.

1.8.1.4 Informational Management Skill

Information management skill is the ability to obtain and manage material resources and documentation (SCANS, 1991). In this study, information management skill measures the ability of employed graduates acquiring and evaluate data, interpreting and communicating information from numerous supplies.

1.8.1.5 Teamwork Skill

Teamwork skill is the ability to work constructively with others on a common task (SCANS, 1991). In this study, teamwork skill measures the ability of employed graduates to participate collaboratively between individual work and teamwork, and respect and contribute suggestions and ideas to the team.

1.8.1.6 Leadership Skill

Leadership skill is the knowledge and application of leadership qualities in managing teams, relationships and the development of the skills of others (SCANS, 1991). In this study, leadership skill measures the ability of employed graduates to lead projects, motivated team through coordination and persuasion, guide them to success.

1.8.1.7 Entrepreneurship Skill

Entrepreneurship skill is the ability to identify of initiatives and enterprise skills (SCANS, 1991). In this study, entrepreneurship skill measures the ability of employed graduates in business plans development and business opportunities identification.

1.8.1.8 Personal Qualities

Personal qualities are the personal values that are seen to contribute to harmony and productivity within workplace (SCANS, 1991). In this study, personal qualities measure the ability of employed graduates to displays high standards of ethical and integrity, conscientiousness, self-management, and believe in own self.

1.8.1.9 System and Technology Skill

System and technology skill are the ability to understand, use, and maintain technology (SCANS, 1991). In this study, systems and technology skill measures the ability of employed graduates to select and apply appropriate technology related to task; consider how technology could apply and used to benefit the task; and maintaining and resolving complex equipment issues.

1.8.2 Curriculum Design

Curriculum design is a several components that are interrelated and are important to be consider in designing the curriculum (Anderson & Rogan, 2011). In this study, curriculum design refers to the features that universities need to consider in designing their curriculum programs.

1.8.2.1 Curriculum Vision

Curriculum vision is the course and learning goals, and outcomes, which needed to be achievable for students (Anderson and Rogan, 2011). In this study, the curriculum vision measures employed graduates' perception on the universities' objective in terms of skill and competencies, concept, and content of courses that realistic and achievable.

1.8.2.2 Operationalization of Curriculum Vision

Operationalization of curriculum vision is putting the goals into action, by determining the appropriate resources, structure and curriculum content (Anderson and Rogan, 2011). In this study, the operationalization of curriculum vision measures employed graduates' perception on the universities' goals execution in terms of teaching staffs, teaching content and material, and the activities of knowledge development.

1.8.2.3 Curriculum Delivery

Curriculum delivery is teaching and learning style to achieve learning outcome (Anderson and Rogan, 2011). In this study, the curriculum delivery measures employed graduates' perception on the universities' technique for teaching the course in terms of foster an in-depth approach to learning, the development of conceptual understanding, and problem-solving ability.

1.8.2.4 Curriculum Evaluation

Curriculum evaluation is assessing students' satisfaction and belief that they are receiving quality education (Anderson and Rogan, 2011). In this study, curriculum evaluation measures employed graduates' perception on the universities' assessment instrument in terms of evaluating quality of teaching, courses or learning benefits, and lesson observation.

1.8.3 Talent Development Philosophies

Talent development philosophies is belief about nature and values of talent which affecting talent development effectiveness (Meyers and Woerkom, 2014). In this study, talent development philosophies refer to two types of philosopy that support TD's perception and approaches being practiced by industry, which are exclusive and inclusive philosophies.

1.8.3.1 Exclusive philosophy

Exclusive philosophy is a belief that talents is high-performer and high-potential who demonstrate exceptional ability, skills and achievements in the organization (Meyers and Woerkom, 2014). In this study, exclusive philosophy measures employed graduates' perception on TD's approaches on employees who show potential and get access to specialized TD's opportunities.

1.8.3.2 Inclusive philosophy

Inclusive philosophy is belief that every employee possesses certain positive traits and can become a top performer in any domain through adequate training (Meyers and Woerkom, 2014). In this study, the inclusive philosophy measures employed graduates' perception on TD's approaches among all level of employees in the workforce and entitled to equal opportunity of training.

1.9 Summary

The focus of this study is twofold: to develop an understanding of the relationship between curriculum design and talent development philosophies with employability skills; and to investigate the direct effect of curriculum design and talent development philosophies on employability skills among Malaysian graduates. This research can assist universities and industry to implement practical approach that could be adopted to ensure that graduates are competent to fill the skill gap requirement, which contribute to productivity and economic growth.

This chapter has discussed the background of the research variables, followed by the problems faced by them in higher education institutions and industry in Malaysia. Subsequently, the objectives, research questions, significance and the scopes were also described in this chapter. Lastly, the conceptual and operational definitions of this study were stated. The following chapter concerns the literature review.

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