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**THE RELATIONSHIPS BETWEEN MANAGING TALENT  
PRACTICES, KNOWLEDGE MANAGEMENT AND  
ORGANIZATIONAL PERFORMANCE OF MALAYSIAN  
PRIVATE COLLEGES**



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**DOCTOR OF BUSINESS ADMINISTRATION  
UNIVERSITI UTARA MALAYSIA  
August 2017**

**THE RELATIONSHIPS BETWEEN MANAGING TALENT PRACTICES,  
KNOWLEDGE MANAGEMENT AND ORGANIZATIONAL PERFORMANCE  
OF MALAYSIAN PRIVATE COLLEGES**



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**Dissertation Submitted to  
Othman Yeop Abdullah Graduate School of Business,  
University Utara Malaysia,  
in Fulfilment of the Requirement for the Degree of Doctor of Business Administration**



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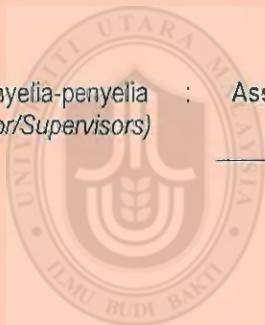
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## ABSTRACT

The purpose of this study was to investigate the organizational performance of private colleges in association with managing talent practices, and to evaluate the mediation role of knowledge management on the relationship between practices of managing talent attraction and recruitment, talent development and talent retention with the organizational performance of private colleges. PLS-SEM technique was deployed to test the hypothesized relationships in the model. A questionnaire was developed with 41 items adapted from previous validated scales. The survey method was used to collect quantitative data for all the variables in the study. The non-probability sampling approach of convenience sampling was utilized. 1300 questionnaires were administered to 260 private colleges in Malaysia. The unit of analysis was at the individual level. Five respondents per college were surveyed and this provided a sample size of 243 representing 49 private colleges. A response rate of 18.7% was achieved. Empirical findings in this study highlighted that managing talent development has a significant positive relationship with the organizational performance of private colleges. Knowledge management has a significant direct positive relationship with the organizational performance of private colleges. The practices of managing talent attraction and recruitment, talent development and talent retention show significant positive influence on knowledge management among private colleges. The mediation effects of knowledge management are statistically significant, and partially mediates the relationship between practices of managing talent attraction and recruitment, talent development and talent retention with respect to the organizational performance of private colleges. The model shows a moderately strong explanatory power, besides making some theoretical and practical contributions.

**Keywords:** managing talent attraction and recruitment, managing talent development, managing talent retention, knowledge management, organizational performance

## ABSTRAK

Kajian ini bertujuan untuk mengkaji prestasi organisasi kolej swasta yang berkaitan dengan amalan pengurusan pekerja yang berbakat. Selain itu, kajian ini juga menilai peranan pengantaraan pengurusan pengetahuan dalam hubungan di antara amalan pengurusan daya tarikan bakat dan pengambilan pekerja yang berbakat, pembangunan pekerja yang berbakat serta pengekalan pekerja berbakat dengan prestasi organisasi kolej swasta. Teknik PLS-SEM dibangunkan untuk menguji hipotesis perhubungan di dalam model. Borang kaji selidik dirangka dengan menggunakan 41 soalan yang diadaptasi daripada skala yang telah disahkan. Data dikumpulkan secara kuantitatif bagi kesemua pembolehubah yang digunakan dalam kajian ini. Persampelan yang tiada kebarangkalian digunakan bagi melengkapkan senarai kesemua unsur-unsur populasi. Sejumlah 1300 borang kaji selidik telah dihantar kepada 260 buah kolej swasta di Malaysia. Unit analisis yang digunakan adalah individu. Sekurang-kurangnya lima orang responden bagi setiap institusi kolej telah diambil dan ini menjadikan saiz sampel sebanyak 243 orang yang mewakili 49 buah kolej swasta. Kadar maklum balas yang diterima ialah 18.7%. Keputusan empirikal kajian ini menunjukkan bahawa pengurusan pembangunan pekerja berbakat mempunyai perhubungan positif yang signifikan dengan prestasi organisasi kolej swasta. Pengurusan pengetahuan mempunyai perhubungan positif yang signifikan terhadap prestasi organisasi kolej swasta. Pengurusan tarikan dan pengambilan pekerja berbakat, pembangunan pekerja berbakat dan pengekalan pekerja berbakat masing-masing meramalkan pengaruh yang positif signifikan terhadap pengurusan pengetahuan. Kesan pengantaraan pengurusan pengetahuan adalah signifikan secara statistik dan sebagai separa pengantaraan menghubungkan pengurusan tarikan dan pengambilan pekerja berbakat, pembangunan pekerja berbakat dan pengekalan pekerja berbakat dengan prestasi organisasi kolej swasta. Model kajian menunjukkan kuasa penjelasan sederhana kuat serta berjaya menyumbang secara teoritikal dan praktikal.

**Kata kunci:** penarikan dan pengambilan pekerja berbakat, pembangunan pekerja berbakat, pengekalan pekerja berbakat, pengurusan pengetahuan, prestasi organisasi



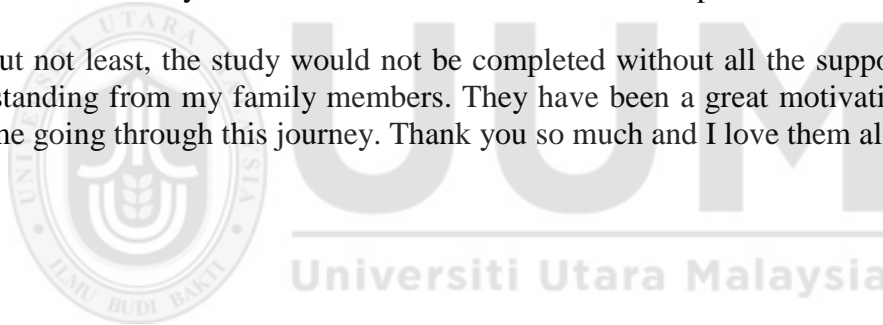
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# CHAPTER 1

## INTRODUCTION

### 1.1 Background of the Study

Ever since 1990, a sustainable growth in the Malaysian economy has continued to fuel the expansion of private higher education sector in the country (10<sup>th</sup> Malaysia Plan, 2011 – 2015). With the establishment of the Ministry of Higher Education (MOHE) in March, 2004 as a progressive step taken to develop and strengthen the Malaysian higher education sector in tandem with the country's economic growth, the government has finally recognized the contributions of private higher education institutions in meeting the social and economic needs of the country (Tham, 2011; Othman & Othman, 2014). It is also reckoned that the private higher education sector in the country has reached a high-performance level compared to other developing nations (World Bank, 2013). Such an accelerating growth of private higher education in Malaysia has resulted in a diversification of the educational institutions, which is seen in both profit-oriented and non-profit-oriented educational service providers in offering various programs of study using different modes of delivery to meet the changing requirements of the job employment market (Gapragasem, Krishnan & Mansor, 2014).

Alongside the government-supported public institutions, the number of private sector educational organizations has been growing and at the same time, complementing their public counterparts in providing education service to all school-leavers (Malaysia Education Blueprint, 2015 – 2025). Private higher education institutions in Malaysia are therefore an important sub-sector in the higher education industry which is also one of the sectors in the National Key Economic Areas (NKEAs). According to the Economic Transformation Program (ETP) Annual Report 2014, the rise of the private higher



education industry in the country which is due to removal of barriers to entry and its growing economy has further made Malaysia a regional educational hub for international students from all over the world. As such, the private higher education service sector in Malaysia is expected to contribute up to RM1.3 billion per year to the Gross National Income (GNI) from the year 2010 until 2020 through its private higher education liberalization policy (Shahar et al., 2015).

As the market for Malaysian higher education is rapidly expanding driven by the forces of globalization and privatization in contemporary higher education of recent years (Othman et al., 2012; Arokiasamy, 2012), the organizational performance of private universities and colleges in Malaysia is inevitably a function of the markets in which their businesses compete (Tan, Goh & Chan, 2015). The competition in higher education industry becomes intensified following the introduction of a pro-business higher education policy by the Malaysian government through the Private Higher Education Institutional Act 1996 and 2003 that liberalizes Malaysia higher education sector (Chai, 2007; Pillay, 2011). Many private entrepreneurs and business corporations alike have since ventured into the higher education sector to start running private colleges whereby the competitive pressure to minimize costs and maximize profits becomes the motive for entrepreneurial success (Zain, Jan & Ibrahim, 2013). With the business objective of making profit, these private colleges in Malaysia charge relatively high tuition fees when they offer diploma and degree courses to school-leavers in collaboration with foreign universities using a franchising model.

As local private colleges are privately-run organizations that are entrepreneurial-oriented, the survival of these education service providers invariably depends on the interaction and mechanism of the market (Wahid, Isa & Govindan, 2016). In light of

this, the business success of these private universities and colleges in Malaysia has primarily been evaluated not only from the standpoint of financial performance metrics such as business performance, value of the enterprise, operation costs, the level of debts and income growth, but also from non-financial performance indicators such as students and parents satisfaction, internal business processes, reputation as well as their competitiveness in education and service quality (Binden, Mziu & Suhaimi, 2014).

With the increasing number of private colleges in Malaysia conducting collaboration or twinning degree programs with foreign affiliate universities, the business of private higher education has turned into a lucrative multi-billion-dollar business when it recruits international students (Yajid et al., 2015) and it is set to become a burgeoning market for these private colleges to earn revenue (Tang & Hussin, 2013). This development bodes well to both private entrepreneurs and large corporations to invest into the business of private higher education by taking advantage of this opportunity to make money. Although many of these private higher learning institutions pursue a market-orientation approach in their marketing strategy to develop and expand businesses (Zebal & Goodwin, 2012; Wahid et al., 2016), such local colleges are still found to have yet achieved a competitive position in their market as they have not created a competitive advantage for them to be able to survive the cost of stiffer market competition (Tan, Goh & Chan, 2015).

By looking at the organizational performance of private colleges in Malaysia since the liberalization of higher education service sector in early 1990s, the number of private colleges has been seen rising rapidly from approximately 200 in the year 1990 to 482 in the year 2000. By 2005, the number of private colleges has increased to 532 at the back of a growing market demand for higher education programs (Othman et al., 2012). The

organizational performance of private colleges however has taken a turn for the worst when the number falls overwhelmingly to 393 in 2009, with which the growth rate has dwindled downward by 26% between 2005 and 2009. Although the number of private colleges in Malaysia is reportedly to rise again from 403 to 414 between 2011 and 2013 (Ministry of Higher Education, 2015), it is nonetheless falling to 402 in 2015 and the number of active private colleges is currently reported at 399 in 2016 (Ministry of Higher Education, 2016). Overall, a decline in the number of private colleges reflects upon their organizational performance that appears to be not sustainable over time and those underperforming private colleges that do not foster a competitive edge will be losing their competitiveness in the market and hence, they are forced to close down.

It is also reported that the Ministry of Higher Education constantly suspends licenses to operate by certain private colleges because of their low student enrolment and substandard quality which results in low business performance (Zain, Jan & Ibrahim, 2013). This worrying trend of organizational performance of private colleges is further exacerbated by a talent crisis that arises in Malaysia due to brain drain and migration of skilled and professional workers have threatened the business communities (TalentCorp, 2012), especially to the competitive success of private academic institutions that are relying on both talented teaching and administrative staff to maintain their students' quality of life at colleges, motivation for sharing of knowledge as well as the education quality at par with world-class standard (Shoemaker, 2014; Zain, Tahir & Ibrahim, 2013; Riccio, 2010).

Based on the World Talent Report (2016) by the International Institute for Management Development, Malaysia is ranked number 19 out of 61 countries in its ability to attract, develop and retain talent, falling from its ranking at 15<sup>th</sup> in 2015 and as such, the nation

is weak in terms of talent competitiveness supply. The fall in talent index that affects the overall Malaysia's ranking then poses a challenge to the competency of managing talent by higher education institutions, particularly to local private colleges in managing the necessary talent pool through attraction and recruitment, development and retention of talent practices to maximize their business performance. In relation to this, talent academic staff are regarded as the most important talent resource to the future growth and development of private universities and colleges (Robyn & Du Preez, 2013). This is because private education providers depend more on their academic staff's capabilities and commitment to thrive as compared to other industries.

In a similar vein, the World Federation of People Management Association (2012) has also reported that the private-sector business organizations are to gain a performance advantage when they practice good people management and as a result, experiencing substantially higher revenue growth and profit margins. But to small-and-medium private colleges in Malaysia however, the lack of intangible resources such as human talent and the expertise needed will adversely affect the scaling up of the organizational performance of these private colleges. According to Chong (2013), the business success of local private colleges in expanding their operations domestically or cross-border will be further limited when these private academic institutions are not well managing the skill and knowledge competencies of their teaching and administrative staff.

Nonetheless, some past researchers like Downe et al. (2012) and Isa and Ibrahim (2014) have asserted that the presence of human capital and talent is considered a vital asset to the organizations involved in the service industry, including higher education service sector in Malaysia to increasingly become more competitive and effective. This is further supported by some other researchers like Salih and Alnaji (2014) and Nizar et al.

(2014) whose studies have contended that the priority of managing attraction and recruitment, development and retention of intellectual capital to be institutionalized in creating a competitive position which will have a positive impact on the organization's productivity, reputation and performance. The private colleges in Malaysia therefore stand to benefit from the necessary practices of managing talent workforce in not only sustaining the organizational competitive advantage but are also adding market value to their institutional branding to stay ahead of competition in the higher education industry (Wee & Thinavan, 2013).

The practices of managing talented employees become a priority for educational industry leaders to achieve their business performance excellence. The practices of managing recruitment and retention of competent talent in private educational organizations, especially among private colleges in Malaysia requires a renewed focus on their employee value propositions (Hoo, Zainal & Chai, 2014), with greater flexibility to attract and retain a diverse pool of talent comprising of locals or a combination of both local and foreign talents to stay ahead in this difficult environment.

What follows is that managing talent attraction and recruitment among private colleges entails the internal and external sourcing of the best people for its developing pool of human talent in spearheading organizational success. Moreover, managing development of talent in private colleges is not only a pre-occupation of the human resource (HR) function but also requires the leadership support and recognition from the top management level of these private higher learning institutions in engaging talents to the organizational long-term growth (Dass, Muthaly & Annakis, 2015). While in managing talent retention among private education providers, it not only strives to improve employees' job satisfaction but is also aimed at reducing their turnover rate, especially

among talented academicians to preserve knowledge retention from being lost to competitors in the industry and to further enhance the image of the institutions as higher educational organizations (Moy, 2015).

In a related development, there is also a growing interest towards knowledge management in the Malaysian higher education (Ramakrishnan & Yasin, 2012). It is known that the institutions of higher learning are highly involved in the business of knowledge within the educational environment such as knowledge capturing, knowledge storing, knowledge diffusion, knowledge sharing and learning (Sulisworo, 2012; Nawaz & Gomes, 2014; Mahdinezhad et al., 2016) to develop a comprehensive knowledge community culture. Like most of the Malaysian organizations which have recognized knowledge management and identified it as a resource (Moshari, 2013), the higher education industry in the country also finds that knowledge management plays an indispensable role among these higher educational institutions to create knowledge for the development of the knowledge assets in achieving their organizations missions, goals and objectives (Yaakub, Othman & Yousif, 2014). Without the advancement of knowledge management, it becomes difficult for the Malaysian higher learning institutions to build a competitive advantage that could truly differentiate their organizational performance (Ali, Sulaiman & Cob, 2014; Attalah et al., 2015).

In this regard, the local colleges in the country that are still found lacking in the interest of managing organizational-related knowledge activities should emulate other business corporations in capitalizing their organizational knowledge and taking the initiative of managing knowledge to improve their business operations as well as for better decision-making (Yusoff, Mahmood & Jaafar, 2012; Mosconi & Roy, 2013). In fact, the study by Demchig (2015) has argued that higher educational institutions tend to neglect

knowledge at the organizational level apart from Yeh (2011) that indicates organizational knowledge is critical for the overall business success of the educational organizations. In light of this, private education providers that are competing in a fast-changing business environment nowadays should heed the call that it is the possession of knowledge assets in addition to the effort of managing knowledge are to achieve organizational profitability and strategic advantage (Nasiruzzaman, Qudaith & Dahlan, 2013; Yaakub et al., 2014).

Towards this end, the business of higher education for private colleges in Malaysia is unique in the manner that along with the use of information and communication technology, it involves the role of managing and collaborating existing knowledge for future reference by transforming individual knowledge to organizational knowledge to meet the business objectives of the organization which will in turn, help sustain the competitiveness of business performance of these private colleges (Lim, 2012; Norazman & Rahman, 2013; Yunus & Yasin, 2014). By managing talent practices therefore, the private educational organizations are set to establish organizational knowledge-base and its related activities through the social network among organizational employees which will eventually lead to a better organizational outcome.

As the Malaysia Higher Education Ministry (MOHE) is now gearing towards mobilizing talent in transforming the country's higher education system to become globally prominence (Malaysia Higher Education Blueprint, 2015 – 2025), this invariably becomes the business concerns among local private colleges of the industry to incorporate the practices of managing talent in recruiting and retaining key people in an effort to not only stay relevant in the contemporary Malaysian higher education landscape but also to preserve valuable knowledge that benefits the organizations.

Despite the importance of seeking and engaging talent workforce for sustaining organizational competitiveness within the higher education industry, it nonetheless remains under-investigated as to what managing talent practices are related to organizational performance of private colleges and whether the influence of managing talent practices on organizational knowledge management will contribute to a positive outcome on organizational performance of these Malaysian private colleges.

## **1.2 Problem Statement**

As outlined in the Malaysia Higher Education Blueprint (2015 – 2025), the emphasis on institutions of higher learning going forward is to mobilize and manage talents by attracting and recruiting, developing and retaining best people, including the search for talent beyond the local and national boundaries to propel Malaysia in achieving a quality higher education system with global prominence. This current development in the country's higher education service sector raises the organizational priority for the private colleges in Malaysia to compete and stay ahead of public institutions by looking into the practices of managing talent involving the management of talent attraction and recruitment, talent development and talent retention to drive their organizational performance in tandem with the vision of the Malaysian government to make Malaysia a regional hub for educational excellence. But there is still a limited understanding as to what level of managing talent practice is influential in contributing to the organizational performance of Malaysian private colleges.

As the search for talent continues, the existence of a talent gap that is worsened by the shortage supply of skilled and knowledge workers in the Malaysian talent market has stiffened competition between private colleges and other business organizations in attracting and recruiting the best employees (10<sup>th</sup> Malaysia Plan, 2011; ETP, 2014).



Although private colleges in Malaysia are free to attract and recruit talent from broader professional, business and international communities in meeting their organizational goals, many are still choosing to rely on channels and methods that are highly dependable on connection and network with existing people as this is considered cost-savings to fill up the job positions.

The process of attracting and recruiting competent employees such as senior management executives, departmental managers and heads of programs are either head-hunted, recommended by an insider or someone who has been working with the private college in the past whereas the advertisement on job postings is not widely circulated and temporary. Also, the local private colleges only recruit when a vacancy is readily open which has been left by previous key staffs however, the acquisition of talents through attraction and recruitment is not based on what the private colleges business needs and wants. Hence, a poor practice of managing talent attraction and recruitment will adversely affect the organizational performance of private colleges.

The current competitive environment in the tertiary education sector inevitably calls for continuous talent development among academic and non-academic staffs to achieve competitive success among Malaysian private colleges. In order to optimize on the leveraging of talent development in private colleges, the organizational talent especially academics are encouraged to incorporate leadership and motivational competencies in delivering a better outcome to organizational performance (Dass, Muthaly & Annakis, 2015). However, the private education providers such as private universities and colleges are still facing a dilemma of taking a proactive role in managing the development of their high-potential workforce, which has the capability to excel in their organizational workplace (Dass, Muthaly & Isa, 2014). Though what is more significant

underlying the shortcomings of managing talent development within the private academic institutions are the organizational culture in nurturing a diverse pool of talent as well as a lack of organizational support evolving from the top management leadership in upskilling key talents and as such, a change in the mindset is the first necessary step towards developing a human capital talent pool within the Malaysian higher education institutions (Azman, Sirat & Pang, 2016).

A scarce higher education quality talent coupled with a loss of knowledge and professional workers to other industrial sectors due to strong market competition has resulted in the practice of managing talent retention more than necessary in keeping competitive edge for organizational performance of the private colleges. The retention of talented employees is a cause of concern to these local colleges as competent employees who are disengaged from the organizations and consequently, these private colleges are losing highly qualified staff to other private business enterprises as well as to other institutions of higher learning that are able to offer better rewards and benefits.

Moreover, the issue of work-life balance in retaining talented employees, particularly the academic workforce in Malaysia private universities and colleges is reckoned to have an influence on their organizational performance (Ponnampalam, 2012). In this instance, a report of the Department of Statistics Malaysia (2015) on the number of academic staffs in private higher education institutions has shown a decline from 32,992 in 2010 to 24,476 in 2013 despite the growth in the number of private institutions over the years. Such a turnover rate among academic staffs in private institutions is considered high, in line with the studies by Zakaria et al. (2014) and Moy (2015) whereby talent retention of private college academic staffs and their intention to leave are becoming an issue of concern to the organizational performance. Without the proper

practice of managing key talent, the ability of private colleges to sustain and compete in the industry will decline.

In a similar vein, knowledge management among private colleges in Malaysia is still at its early stage, although it has been accepted by both the government agency of community colleges as well as public institutions of higher learning as a way to enhance organizational performance (Yusoff, Mahmood & Jaafar, 2012; Mohamad, Manning & Tatnall, 2013). Albeit the growing popularity of knowledge management in Malaysia higher education institutions, a number of studies (Norulkamar & Hatamleh, 2014; Aziz, Lotfi & Dahlan, 2015) conducted in the Malaysian higher educational organizations are reported to have encountered barriers to managing their organizational knowledge-base and its related activities in today's volatile market environment that depends on knowledge and know-how to thrive. From a business perspective therefore, knowledge management in higher education is vitally essential in gaining management know-how for Malaysian private colleges but which is still shortcoming to enable these local colleges excel further in their organizational performance (Mohamad et al., 2013). In addition, there are still inadequate empirical studies found to demonstrate the mediating role of knowledge management in the relationship between managing talent practices and organizational performance of private colleges in Malaysia.

Despite of a market-orientation strategy used to constantly drive student recruitment that could have only generated short-term monetary gains, the business success of these private colleges in the long-run is however, increasingly linked to the organizational-specific practices of managing talent. Nevertheless, it still remains under-investigated as to what specific practice in managing talent among the Malaysian private colleges could particularly contribute to their organizational performance. By examining the practices

of managing talent attraction and recruitment, talent development and talent retention among local private colleges in association with organizational performance, such managing talent practices would further effect the establishment of knowledge-related activities by transforming individual employee's knowledge to organizational knowledge to be managed and used in realizing competitive advantage for the long-term organizational success of Malaysian private colleges. In this regard, the role of knowledge management in bridging the gap between the practices of managing talent attraction and recruitment, talent development and talent retention with organizational performance is empirically examined within the context of Malaysian private colleges.

### **1.3 Research Questions**

Based on the above-discussed, this study aims to address the following research questions:

1. Does the organizational performance of private colleges relate to the practices of managing talent attraction and recruitment, talent development and talent retention in the Malaysian private colleges?
2. Does the organizational performance of private colleges relate to knowledge management in the Malaysian private colleges?
3. Do the practices of managing talent predict knowledge management of the Malaysian private colleges?
4. Does knowledge management mediate the relationship between practices of managing talent attraction and recruitment, talent development and talent retention on organizational performance of Malaysian private colleges?

#### **1.4 Research Objectives**

The purpose of this study is to investigate organizational performance of private colleges in Malaysia that is associated with the practices of managing talent and whether knowledge management is linked to the practices of managing talent in influencing the organizational performance of private colleges. In particular, the objectives of this research are:

1. to examine the relationship between the practices of managing talent attraction and recruitment, talent development and talent retention with organizational performance of private colleges in Malaysia.
2. to determine the relationship between knowledge management and organizational performance of private colleges in Malaysia.
3. to identify the prediction level of managing talent practices on knowledge management among private colleges in Malaysia.
4. to evaluate whether knowledge management mediates the relationship between practices of managing talent attraction and recruitment, talent development and talent retention on organizational performance of private colleges in Malaysia.

#### **1.5 Scope of the Study**

The scope of this study is focusing on the investigation of the practices of managing talent and perceived organizational performance among private colleges in Malaysia. As a business concerns, these local private colleges in the provision of tertiary educational services to school leavers aims to optimize their business profitability for sustainable organizational performance. A total of 420 private colleges across Malaysia are part of the members of the private higher education providers which have registered with the

Malaysian Qualifications Agency (MQA) and their programs or qualifications are currently listed in the Malaysian Qualifications Register (MQR). In order to ensure optimal business performance over the longer term, such private colleges are expected to embark on corporate practices of managing talent that are generally recognized as the organizational priority in acquiring, developing and retaining the best people with the effort to improve their competitive position in relation to talent and knowledge in continuously offering accredited tertiary educational programs and services vis-à-vis its competitors in their regional markets.

The best and competent employees of these private colleges who are regarded as organizational talent include both the managerial and teaching staff of all levels, among others are senior management, departmental managers, senior executives and senior lecturers with at least three years of working experience as well as heads of programs who have been critically positioned to meet the current business objectives of the organization. These individual employees are knowledgeable and they have a good understanding on the importance of managing talent practices for overall business success of the private colleges. Information required for this study in relation to the organizational performance of private colleges in Malaysia is collected from the targeted key personnel abovementioned and those that are not involved will then be excluded from this study.

## **1.6 Significance of the Study**

The findings from this study may be useful to HR practitioners, senior management of private colleges as well as academics that will not only provide quantitative evidence linking practices of managing talent to organizational performance of private colleges in Malaysia but also to extend a better understanding on how business performance within

the private colleges is influenced by the level of practices in managing talent that can be connected through knowledge management. This enables the private colleges to exploit strategic capabilities with the implementation of a more targeted talent strategy in leveraging organizational knowledge as a competitive tool to meet current and future business needs of the educational organizations. The study is also beneficial to academics and researchers who are interested in pursuing the subject and further the research study.

With the liberalization of Malaysian higher education sector in 1997, the increased competition in the domestic education market has posed a challenge for private colleges to sustain their business performance over time. A plethora of studies (Lockwood, 2006; Guthridge & Comm, 2008; Iles, Chuai & Preece, 2010; Golshan & Omar, 2011; Joyce & Slocum, 2012) have shown that, regardless of organizational size, business corporations across industry remain competitive and perform better when they adopt a holistic approach to talent management. This is certainly no exception to higher education institutions, particularly when local private colleges are operating in a knowledge-based business environment nowadays rely extensively on an increasing proportion of intangible organizational assets, which are talent and knowledge to succeed in a competitive marketplace (Nilson & Ellstrom, 2012).

Although organizational performance is shown to have a direct positive relationship with talent management by a number of past studies (Heinen & O'Neill, 2004; Morgan & Jardin, 2010; Schuler, Jackson & Tarique, 2011; Coulson-Thomas, 2012; Caul & Harvey, 2012; Guest & Bos-Nehles, 2013; Cappelli & Keller, 2014; Ulrich, 2015), the issue of how the influence on performance of an organization can be passed through from the management of talent is generally found to be unclear (Kianto et al., 2014).

These previous studies have neglected the importance of intermediate organizational variables through which talent management may influence an organization's performance. They have not sufficiently recognized that a desirable business performance of the organization is the result of knowledge management initiatives that can be derived from managing organizational talent. Without any interaction with knowledge management principles, the notion of talent management does not adequately explain how the practices of managing talent resource could pass on their influence to the business performance of an organization.

From the theoretical perspective, knowledge management is considered as the missing link in explaining the influence of managing talent practices towards organizational performance (Kianto et al., 2014). In this regard, the inclusion of knowledge management as a mediating variable into this study extends our better understanding on the interrelation between managing talent practices and organizational performance of private colleges in Malaysia and therefore, narrowing the research gap that exists in the past literatures linking the influence of practices in managing talent on organizational performance through the role of knowledge management. According to Kianto et al. (2014) and Inkinen, Kianto and Vanhala (2015), the business success of an organization that is dependent upon the effectiveness of managing intellectual asset allows the organizations to establish a set of good knowledge management activities that would in turn have a positive influence on organizational performance.

The practical relevance of this study is the recommendations made to private colleges in achieving a desirable outcome to their business performances in the longer term by undertaking the necessary specific practice to manage their talent resource for organizational success. This study further identifies areas of opportunity for private



colleges to set up a systematic way in managing organizational-related knowledge base so as to achieve organizational goals and make a positive influence towards their business performance. It therefore provides local private colleges two integrated approaches to formulating their organizational strategies for competitive success – inside out and outside in business approaches. A private college that undertakes the specific practice of managing its talent workforce (an inside-out approach) and then make use of organizational knowledge that can be derived from talented employees (an outside-in approach) in improving organizational competitiveness and advancing its long term business performance.

From the practical viewpoint, there is still a lack of empirical evidence shown as to what practices of managing talent are appropriate in eventually influencing the organizational performance of private colleges in Malaysia. Further up to our knowledge, little is also currently known about the organizational performance of private colleges in Malaysia that is linked to the practices of managing talent through the role of knowledge management. Since more research studies involving other industries by Malaysian corporations are needed before generalization is made, this study attempts to evaluate empirically the relationship between the practices of managing talent and organizational performance of private colleges in Malaysia and how this relationship is mediated by knowledge management towards organizational performance of Malaysian private colleges.

## **1.7 Definitions of Key Terms**

### **i) Private Colleges**

Defined as private education operators which are run and backed by private entrepreneurs or large corporations through their investment into the provision

of tertiary education to school leavers established within the Malaysian private higher education system that co-exists with public education system in driving the human capital development of the nation (Yaakob et al., 2009).

ii) **Competitive Advantage**

The unique position that a business organization develops against its rivals that enables it to outperform competition on a consistent basis. A profit-driven private college is considered as having a sustainable competitive advantage when the organization is formulating a value-creating strategy not simultaneously being implemented by present or potential competitors and when this strategy is unable to be duplicated (Barney, 2001).

iii) **Organizational Performance**

The organizational performance of private colleges in Malaysia that is measured using the balanced scorecard approach which includes the financial and non-financial performance indicators (Binden, Mziu & Suhaini, 2014; Al-Hosaini & Sofian, 2015)

iv) **Management of Talent**

A systematic effort of managing attraction and recruitment, development and retention of talented employees which realize a competitive advantage that is critical to the business success of the organizations (Beardwell & Claydon, 2010; Rabbi, 2015; Quddus, 2015).

v) **Managing Talent Attraction and Recruitment**

The practice of selecting and acquiring competent employees with the right skill and knowledge to fill up critical job positions (Kumari, 2015).

vi) **Managing Talent Development**

The practice of developing incumbents through the processes such as coaching, mentoring, feedback, training and development and challenging employees in order to perform its tasks and functions with competence (Ibeh & Debrah, 2011; Dass, Muthaly & Isa, 2015).

vii) **Managing Talent Retention**

The practice of retaining high-potential employees for a maximum period of time with the aim of maintaining a competitive organizational workforce (Namusonge, Karanja & Iyria, 2014; Oladapo, 2014).

viii) **Knowledge Management**

The strategic planning, implementation and updating activities related to the knowledge-based assets in sustaining organizational performance (Kianto et al., 2014; Inkinen, Kianto and Vanhala, 2015).

## **1.8 Organization of the Chapters**

This study consists of five chapters and their layouts are outlined as follows:

Chapter 1 is an introductory chapter where the present study background is outlined and the research problem is discussed. In addition, the research questions are stated and research objectives to the study are identified with the significance and scope of this present study are also highlighted. Several definitions of key terms are listed as well.

Chapter 2 reviews the relevant literatures pertinent to the understanding on the relationships between the practices of managing talent attraction and recruitment, talent development and talent retention, knowledge management and organizational

performance of private colleges. Additionally, theories underpinned this study are resource-based theory and knowledge-based theory of the organizations which will be explained along with the main focus on managing talent practices and organizational performance of private colleges. This chapter also describes the possible linkage of knowledge management in understanding the relationship between managing talent practices and organizational performance.

Chapter 3 describes the overview of the research methodology that will be utilized in this study. This chapter will demonstrate the research framework by highlighting the independent variables, the mediating variable and also the dependent variable of interest used to this study followed by the hypotheses formulation. Apart from the sections on population and sampling, sampling technique as well as data collection procedures, this chapter also covers the operationalization of variables, instrumentation and measurement in addition to data analysis technique to be used before a pilot survey to report on reliability and validity of the measures. The chapter finally ends with some conclusions.

Chapter 4 presents the results of data analysis and discussion of main findings in relation to the underlying research objectives of this present study with a comparison to the findings of past studies. Conclusions are also made at the end of this chapter.

Chapter 5 provides the overview to this study and highlights some theoretical and practical contributions made from this study. While there are some limitations restricting this study, but it also proceeds to make recommendations related to the study as well as recommendations for future research before this chapter ends with some concluding remarks.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.0 Introduction

This chapter provides an overview to the organization performance that is underpinned by resource-based and knowledge-based theories of the organizations in order to develop an understanding on the practices of managing talent that are linked to the organizational performance of private colleges. Literatures relevant to the practices of managing attraction and recruitment, development and retention of talent, knowledge management and organizational performance of private colleges as well as the relationships among all these variables with regard to this study are reviewed.

#### 2.1 Talent Management Overview

The management of talent had a crucial role in achieving business success of an organization. This was what prompted the study to examine managing talent practices in relation to the organizational performance of Malaysian private colleges taking into account the shortages of skilled and knowledge professionals in the market for talent.

According to CIPD (2010), talent management involved the use of a wide-range of organizational specific techniques for identification of talent and development of potential in the organizations while in other instances, management of talent referred to how organizations attract, select, develop and retained talented key employees in an integrated and strategic way (Scullion & Collings, 2011). The study by Saxena (2013) viewed talent management as the practice of developing and integrating new employees, developing and retaining existing employees while attracting highly skilled employees to work for an organization whereas Oladapo (2014) had evaluated talent management

on five aspects of talent attraction, selection, engagement, development and retention of employees within the organizations to provide a competitive advantage for business success. Similarly, other researchers like Beardwell and Claydon (2010), Quddus (2015) and Rabbi (2015) had highlighted the management of talent as having to deal with attraction, recruitment, development and retention of key organizational talents for survival in an increasingly competitive market.

For the purpose of this present study, it followed the definitions by Beardwell and Claydon (2010), Quddus (2015) and Rabbi (2015) in investigating managing talent practices within the local private colleges that made up of a systematic effort in managing talent attraction and recruitment, talent development and talent retention to exert a positive outcome on organizational performance of private colleges.

### **2.1.1 Managing Talent Attraction and Recruitment**

The management of attraction and recruitment of talent from a human resource talent pool had been identified as one of the critical components of talent management for organizational success (Oladapo, 2014; Rabbi, 2015). It was understood as one of the key determinants referring to the process of acquiring suitable applicants for jobs, from whom among the right people with the right skill and knowledge could be selected (Kumari, 2015). According to Auranzeb and Bhutto (2014), managing talent attraction and recruitment was a combination of selection with employee and employer branding and choice. Without a good brand image, it became difficult to acquire the right talents. The attraction and recruitment of members from a pool of talents therefore was the first important task of talent management strategy (Iyria, 2013), in which key talent to the critical position could be sourced internally or externally to steer the organizations towards competitive performance.

According to Davis, Cutt, Flynn, Mowl and Orme (2007), internal sourcing of high-potential talent within the organization was more favourable to creating a talent pool since the employees had the knowledge of how business processes worked and this could be incorporated directly into the new position. The external sources on the other hand would be the best way of gathering talents when organizations wanted to bring cultural change and innovation. However, there had also been some discussions in past literatures that called for a balanced approach in attracting and recruiting talent from within and outside the organization (Cappelli, 2008; Collings & Mellahi, 2009).

In this study, the practice of managing talent attraction and recruitment was considered one of the imperatives in managing talented employees considering the shortages of talent in order to ensure continuity in critical key positions within the organization that distinguished organizational performance across the industry. By taking into account of the competent employees' knowledgeability and social skills during the attraction and recruitment processes, the organization increased the availability of a competent talent workforce for creating efficient and effective performance in knowledge-intensive tasks (Chen & Huang, 2009).

Although most organizations were found to struggle in recruiting high-potential employees over the past years, recent findings by CIPD (2015) reported that organizations still preferred hiring external key talent to fill pivotal positions over promoting internal candidates. This reflected the 'buy external talent' decision rather than 'make' still dominated investment in talent, albeit hiring new talent was merely part of the solution to address skill shortages. These organizations would favour individuals who had flexibility to cope with new external challenges, competition and changed processes. This current trend had implied a move beyond reactive recruitment

driven by vacancies to proactive anticipation on future workforce demands in strategic positions to meet current and future organizational needs (Cappelli, 2008). Although the task of acquiring the right talents to the right job appeared to be not easy, the reputation and branding of the organization was nevertheless taken into consideration in attracting key employees (Nizar et al., 2014). Organizations that manage their corporate brands effectively could attract the best people to gain advantage in the highly competitive marketplace (Iyria, 2013).

There were also several principles suggested in guiding the attraction and recruitment of talented key personnel. According to Davidson (2004), one had to have an open mind in sourcing talent from diverse fields; to be honest and acknowledging the cynicism and challenges inherently lied in the position; avoiding pitfalls such as a failure to provide proper personal and job specification, racing into recruitment without sufficient incentive in drawing up the advertisement and treating human talent like a commodity. What's more, people should be recruited with the ability in building capacity of others, engaging key staff in process and to be assertive in selecting truly good people who were more talented.

The organizations in the midst of managing attraction and recruitment of talented employees which could add value to the system, the position thus became the challenge and such a position should allow the individual employee to showcase his talent. But the individual talent would leave the organization if his talent was no longer evident in the job position. Hence, the management of talent attraction and recruitment focused on identifying what had made talent people interested in the position and to determine how they would want to be treated in the position.



While in attracting and recruiting talent performers, organizations were required to use various methods and techniques of selecting the right talent that reflected the culture and value of a particular organization (Iyria, 2013). This further implied that different tools and techniques were used in the recruitment process for potential employees to effectively participate in organizational goals. Cunningham (2007) stated that in order to acquire the best potential individual for the job, the candidate's values and work attitude should be the focal point during a recruitment process, instead of their specific skills and experience. The values and work attitude of the potential talent must also fit the characteristics of the organization; otherwise rectifying a wrong value fit choice would be costly to the organization.

According to Armstrong (2006), organizations should use various techniques and methods for recruiting the right talent. Guarino (2007) suggested a Quick Screen approach to recruiting talent that helped evaluate the match between a candidate's competencies and key aspects of the position so as to eliminate those who were not qualified for the job. Such an approach enabled organizations to source high performers, whose knowledge competencies might be further developed through in-house training and development. External talent could also be recruited through web technology, social media or other internet sources like vacancy websites or corporate websites and online advertisement (Galanaki, 2002; Jansink, 2015). There had been evidence showing that larger business corporation were more likely to implement sophisticated attraction and recruitment processes than smaller corporations, with a majority of smaller organizations depending on advertising and referrals as their managing attraction and recruitment practices of choice (Bacon & Hoque, 2005; Ekwoaba, Ikeije & Ufoma, 2015).

In the effort to recruitment of competent talent further, Furtmueller, Wilderom and Tate (2011) also suggested the use of e-recruitment as part of e-HRM rather than the traditional recruitment of face-to-face contact to match the knowledge and skills of individual employees with the needs of the organization faster and more efficiently. This was done with the readily available online databases of potential applicants, e-resume for screening and selection using analysis tools such as resume analysis programs as well as online pre-employment assessments that helped facilitate the identification of key talent sources from the limited pool of talent.

### **2.1.2 Managing Talent Development**

Managing talent development represented another important approach to the management of organizational talent (Novations, 2009; Scullion & Collings, 2011; CIPD, 2011), since a continuous improvement to all organizational functions, products and services were dependent on management development. While it was feasible for an organization to pursue a strategy that focused on acquiring talent from the external labour market, however such a strategy would unlikely be successful in the long term (Garavan, 2012). As a result, organizations would likely to make significant investment in talent development activities so that talented employees possessed the competencies to facilitate the implementation of business strategy. After all, talent development helped an organization deal with dynamic and uncertain demands and requirements (van Duuren & de Haan, 2009).

In managing talent development, a balance had to be struck between developing individual talent and value added to the organization. Learning and skills development as an organizational development intervention were significant factors for talent-focused organizations, particularly higher academic institutions that were fundamentally

related to key processes such as performance management (Davies & Davies, 2010; Mohan, Muthaly & Annakis, 2015) to meet their future organizational expectations. Talent development also included developing leaders through such processes as coaching, mentoring, feedback and challenging employees, in which it sought an improvement in attitude and effort in addition to motivation in the pursuit of desired goal (Colvin, 2008; Ibeh & Debrah, 2011; Davidson, 2013). Competent talents who had been well-developed were able to share their updated knowledge and skills while using their creativity to understand and improve the service in the organizations.

A review of past literature had noted a contradicting view on the understanding of talent development (Jansink, 2015). One was the development of talent should be universalistic and standardised (Hartmann, Fiesel & Schober, 2010) as opposed to another that talent development should be adapted to different positions (Claussen, Grohsjean, Luger & Probst, 2014) as not all individual talents could receive the same development to a key position. Other researchers such as Srivastava and Bhatnagar (2008) had suggested that talent development should be contingent on an organization's stage of development. Irrespective of whichever views, the outcomes to development efforts should be communicated clearly so that everyone involved in the process knew what was expected. Not only that, the literatures also acknowledged a lack of clarity in defining the conceptual boundaries of talent development and hence, warranted further clarification (Garavan, Hogan & Cahir-O'Donnell, 2009; Cook, 2010).

Following Garavan, Carbery and Rock (2012), their study defined the scope of talent development as the planning, selection and implementation of development activities for the entire talent pool to ensure that the organization has both the current and future supply of talent to meet strategic objectives and that development strategy is aligned

with organizational talent management processes. As such, organizational talent development processes had almost invariably targeted at strategic business needs in achieving the organization's goals. Prius (2011) asserted that talent development does not represent a 'pro-bono' investment on the part of organizations but rather it was an investment in organizational needs. Since talent development was organizational-driven, it emphasized a multiplicity of organizational needs including succession planning (Lawler, 2008), the implementation of business strategy (Scullion & Collings, 2011) as well as the progressive development of star employees (Groysberg, Lee & Abrahams, 2010)

But what had been made clear was organizations designed talent development processes that were exclusively unique to their organizations (Garavan, Carbery & Rock, 2012). It was also found that the approaches to talent development in organization were highly mixed. A CIPD (2011) study had shown that many organizations adopted an exclusive approach that focused on developing senior managers. While McKinsey Consulting Group initially advocated an exclusive approach to talent development, it later suggested a more inclusive approach that targeted development for not just 'A players' but also 'B players'.

Other researchers such as O'Leonard & Harris (2010) meanwhile viewed the inclusive approach to talent development a form of talent segmentation but by recognizing that all groups of employees had contributed successfully to the organization. Such an approach undertook the innovation perspective on talent in which all employees should be regarded as talented given their potential to generate creative ideas. Still, there were past studies such as van der Sluis and van de Bunt-Kokhuis (2009) and Ford, Harding and Stoganova (2010) called for a hybrid approach to talent development because it enabled

the organization to reap the potential benefits of both approaches. According to these researchers, a hybrid approach was believed to be more appropriate in terms of fairness and employee motivation.

### **2.1.3 Managing Talent Retention**

As a final struggle in the war for talents, retention of talent implied that the organizations aimed to retain their talented employees for a maximum period of time (Namusonge, Karanja & Iyria, 2014). Hence, the priority of managing talent retention dealt with sustaining high-potential competent employees in the organizations and minimizing turnover of these employees in a bid to increase productivity and service delivery (Auranzeb & Bhutto, 2014; Osaro, 2016). These researchers understood the importance of retaining talent employees because a failure in managing talent retention would result in high business costs. The harmful effect of talent turnover to an organization's productivity led to high costs of recruitment and development of key talents. It was found that organizations that were undertaking the necessary measures to retain high-potential talent not only reduced turnover (Sharma & Bhatnagar, 2009) but also prevented the organization from spending huge amounts of money and time to search for the right talent among a pool of human capital to replace those that had left (North, 2011; Saxena, 2013; Bhattacharyya, 2015).

The study by Tymon, Stumpf and Smith (2011) had emphasized the practical significance of managing talent retention to organizations as it eliminated recruitment and selection, on-boarding costs of their replacement, maintaining continuity in areas of expertise and supported a culture in which rewards were merit-based. Further study by Chikumbi (2011) found that successful management of talent retention also involved goal-planning of the organization through to succession planning. In most instances,

managing talent retention strategy of the organizations might not always be successful in retaining talent employees but it was necessary to ensure that existing talented, worthy and committed employees contributed to achieving the current and future business needs of the organizations (Namusonge, Karanja, Iyria, 2014).

Much had already been written about talent retention within the organization from past literatures on talent management. Most organizations in facing the problem of talent shortages today would do their best to retain key talents due to the benefits accrued to the organizations. Effective talent retention practices began with good hiring practices, in which qualified and motivated people would stay longer with the organizations (Osaro, 2016). The management practice of talent retention, according to Karunathilaka, Yajid and Khatibi (2015) was a challenging organizational task as retaining talent could be regarded in two ways, which included how talented people retained within the organization and how talents were retained within the individual. Because of this, organizations executed talent management practices with the aim of maintaining high talent retention rate.

A recent development on the study of managing talent retention highlighted that talent retention and talent turnover were no longer two sides of the same coin (Cardy & Lengnick-Hall, 2011; Reitz & Anderson, 2011). These researchers claimed that the reasons why a high-potential employee remained at a job were not the reverse of the reasons why that same individual employee might leave. Moreover, they also criticised that far less attention had been paid to retention of talent employees as opposed to considerable focus was given to talent turnover. This was also supported by the study of Loan-Clarke et al. (2010) that described managing employees retention as an almost unexplored research topic.

A literature study further revealed that there were a number of factors that influenced talent retention at both the job and organizational levels (George, 2015). Such factors identified to make sure talent employees continued to stay at the organization from past studies included competitive remuneration and benefits (O’Callaghan, 2008; Hausknecht, Rodda & Howard, 2009; Pitts, Marvel & Fernandez, 2011), positive work environment (Moncarz, Zhao & Kay, 2008; Satyawadi, Ghosh, Joshi & Shadman 2013; Wood, Mansoor, Hashemy, Namey, Gohar, Ayoubi & Todd, 2013), developmental opportunities and growth (Tymon, Stumpf & Smith, 2011; Kroon & Freese, 2013), work-life balance (Kyndt, Dochy, Michielsen & Moeyaert, 2009; Karatepe, 2013; Deery & Jago, 2015), organizational culture (Ghapanchi & Aurum, 2011), socialization (Allen & Shanock, 2013); employee empowerment and engagement (Andrews & Wan, 2009; Laschinger, Leiter, Day & Gilin, 2009; Tarique & Schuler, 2010) and perceived management support (Joo, 2010; Mignonac & Richebe, 2012; Paille, 2013).

## **2.2 Knowledge Management**

Nonaka (1994) and Nonaka and Takeuchi (1995) had defined knowledge as a dynamic human process through justification of personal principle towards the truth. They argued that knowledge was created through conversion between tacit and explicit knowledge via the process of socialization, externalization, internalization and combination. This knowledge concept was abstract and comprised epistemological and ontological dimensions. It followed that knowledge within an organization resided in many different places such as databases, knowledge bases, filing cabinets as well as people’s minds to be transferred and used for the organization to have a competitive advantage (Rosmaini, Rusuli & Norazlin, 2010; Mohamad et al., 2013). While knowledge was predicted as the only source of competitive advantage in the future that

enabled the organizations to compete (Meier, 2011; Hana, 2013), knowledge management could then be thought of as a deliberate strategy of disseminating the right knowledge to the right people at the right time and helping members of an organization to share and put information into action in ways that will improve processes, business decision-making and organizational competitiveness (Goh et al., 2010; Hana, 2013).

With the emergence of a knowledge-based economy, the growth of knowledge management became more important for organizations in achieving competitive advantage and so managing knowledge involved not only managing the knowledge of the people, but it also was managing an organization's proprietary technology, systems and its employees (Chowdhury, 2012). According to Zack and Singh (2010), corporate strategy aligned with knowledge management was vital for value-adding and achieving business results. Knowledge management grounded in knowledge-based view nevertheless, according to Chilton and Bloodgood (2013) was primarily aimed at protecting organizational knowledge from the use by competitors in gaining a competitive advantage for the organizations.

Other scholars in the past such as Toffler (1990), Quinn (1992), Drucker (1993) and Stewart (1997) had generally agreed that a sustainable competitive advantage for organizations would be accomplished through knowledge management in the new millennium. As such, the term knowledge management could be applied to a wide spectrum of activities designed to manage, exchange or enhance intellectual assets within an organization with the purpose of knowledge management was to retain and leverage an organization's knowledge asset in realizing its optimal value for overall success (Rastogi, 2000; Bollinger & Smith, 2001).



A critical review of past literatures further found knowledge management was complex without universally acceptable definitions because it had multiple interpretations comprising different forms of knowledge management (Turner & Minonne, 2010; Ragab & Arisha, 2013). Despite of having no consensus on what knowledge management was (Haggie & Kingston, 2003), knowledge management had been adopted and proliferated in business organizations and as such, knowledge management were a critical factor for organizational sustainability (Suresh, 2012). While knowledge embedded and retained in human capital had enabled business organizations to deliver distinctive capabilities for performance competitiveness (Saremi, 2009; Mbhalati, 2012; Hana, 2013), previous studies by Halawi, Aronson and McCarthy (2005), Wang, Ahmed and Rafiq (2008) as well as Mills and Smith (2011) however, had found that work on knowledge management was still empirically and theoretically underdeveloped. Similar to many business corporations, knowledge management had also been encompassed within the Malaysian higher educational organizations, as was highlighted in the studies by Yaakub, Othman and Yousif (2014), Nawaz and Gomes (2014) and Attallah et al. (2015) which focused on the role and practices of knowledge management in higher education for organizational success. Further still, a study by Yeh (2011) indicated that while academic knowledge served the primary purpose of the institutions of higher learning, organizational knowledge had been critical to the overall business success of the educational organizations. Demchig (2015) nonetheless argued that higher educational institutions tend to neglect knowledge at the organizational level. Hence, those private universities and colleges which were not able to cope with the changes in knowledge and its management would not be able to improve their organizational outcomes.

As the management of organizational knowledge was extended to knowledge-based institutions in identifying knowledge gaps for better performance outcomes, for instance in universities and colleges whereby knowledge management activities involved knowledge creation, transfer and utilization that were deeply ingrained in these academic institutions for their organizational performance (Siadat et al., 2012; Fullwood, Rowley & Delbridge, 2013; Yaakub, Othman & Yousif, 2014). There are numerous studies conducted in the past (Ali, Sulaiman & Cob, 2014; Yaakub, Othman & Yousif, 2014) that had identified successful factors of knowledge management in Malaysia higher educational organizations, among others are organizational culture, top management support and IT infrastructure. Other scholars such as Bhusry, Ranjan and Nagar (2011) and Marouf and Agarwal (2016) had also contended that institutions of higher learning benefitted from knowledge management implementations in several areas, including curriculum and academicians' development, managing of academic administration strategies, researches output, enhancing students' outcomes as well as their institutional reputations.

### **2.3 Organizational Performance of Private Colleges**

The organizational performance of private colleges in Malaysia in this study was essentially one of the most important constructs to be focused on and yet subjective in evaluating the private higher education business performance and their actions over time other than to compare the relative performance of the organization against its rivals within the same industry. To most researchers in the field of management study therefore, organizational performance was not only a critical component of empirical research in formulating a business policy but it also had frequently been used as a final dependent variable in the study (Richard et al., 2009; Santos & Brito, 2012).

In essence, the organizational performance of those profit-oriented enterprises including local private colleges determined the business existence as a going concern in a competitive ever-changing environment. Several strategic management researchers such as Dess and Robinson (1984) in the past outlined three major perspectives often used in conceptualizing organizational performance. The goal approach in defining organizational performance was based upon explicit goals or goals which could be implied from the behaviour of organizational members. The system resource approach to organizational performance assessed the performance of an organization in terms of key external and internal factors from which the organization was depended for survival. Lastly, the constituency approach viewed the organization as existing to benefit numerous constituencies internally and externally to the organization.

Organizational performance had been used as a yardstick for business entities to measure their performance to meet the organization's goals and objectives (Gharakhani & Mousakhani, 2012; Al-Damoe, Sharif & Abdul Hamid, 2013). Another similar study by Ebrahimi, Moosavi and Chirani (2016) recognized organizational performance as the outcome in the evaluation of an organization and it thus had been measured based on its goals and objectives. To other researchers such as Madella, Bayle and Tome (2005), organizational performance was the ability to acquire and process physical resources and human capital properly to enable the organization in achieving its goals, whereas Stankard (2002) generally defined organizational performance as a product of the interaction among various departments and sectors within the organization. The study by Ouekouak, Ouedraogo and Mbengue (2013) also concurred but further extended organizational performance as covering both financial and non-financial dimensions. Moreover, some past researchers like Gibson and Birkinshaw (2004) as well as Ebrahimi, Moosavi and Chirani (2016) had demonstrated that sustainable organizational

performance was rooted in exploiting existing capacities and exploring of new opportunities.

It followed that several authors like Davis, Schoorman, Mayer and Tan (2000), Birdi, Clegg, Patterson, Robinson, Stride, Wall and Wood (2008) as well as Moideenkutty, Lamki and Murthy (2011) had argued that organizational performance should be measured through financial success (i.e. sales growth, profit growth and etc) whereas others like Chang and Chen (2002) as well as Boselie, Dietz and Boon (2005) viewed non-financial performance measure such as quality of products and services, employees productivity and image of the organization as having a significant impact on organizational performance. According to Richard et al. (2009) however, financial performance (i.e. profitability, return on assets and return on investment), market performance (i.e. sales and market share) and shareholder's return (i.e. total shareholder's return, economic value added and etc) were inevitably the resulting outcomes to businesses for profit-driven organizations as compared to non-profit organizations in which their organizational performance was relatively complicated to define (Winand, Rihoux, Qualizza & Zintz, 2011).

On the other hand, the study by Venkatraman and Ramanujam (1986) had proposed two domains in measuring organization performance, which involved the financial domain reflected by profitability, growth and market value while the operational one which entailed non-financial competitive aspects such as customer satisfaction, quality, internal process efficiency, innovation, employee satisfaction and reputation. Lee and Choi (2003) compared the success of an enterprise with others by gauging its market share, growth rate, profitability and innovation in determining organizational performance. Coupled with Kaplan and Norton's (1992) balanced scorecard (BSC)

approach which had become a commonly used business performance management tool, Bruns and McKinnon (1993), Evans (2005), Umashankar and Dutta (2007), McPhail, Herington and Guilding (2008) as well as Khan (2010) all had sought a balanced view to organizational performance by combining both financial and non-financial performance indicators to reflect the overall conditions of the business and thereby, translating an organization's mission and strategy into a set of performance measurements to gauge organizational performance.

The balanced scorecard (BSC) concept developed by Kaplan and Norton (1992) had been used as a strategic management tool to measure the organizational performance in achieving business strategies and key objectives in four balanced perspectives – financial, customer, internal business process and learning and growth. It had also been adopted in academic institutions of higher education over the world especially in the Western countries to serve those institution's needs (Rollins, 2011; Aljardali, Kaderi & Levy-Tadjine, 2012). Nevertheless, institutions of higher learning in Malaysia comprising public and private universities and colleges were not employing the balance scorecard approach widely as a crucial tool for their organizational performance measurement (Binden, Mziu & Suhaimi, 2014; Al-Hosaini & Sofian, 2015). Instead, the mentioned researchers had proposed the use of balance scorecard framework throughout the four perspectives to align with the institution's missions, policies and goals within the Malaysian higher education sector. As such, the organizational performance of private colleges in Malaysia in this present study had been guided by these four perspectives outlined in the balance scorecard management approach in measuring financial and non-financial performance of the private colleges.

It followed that a review of past studies on organizational performance had also found a lack of consensus about its precise definition, inconsistency in its measures as well as having problems of dimensionality with the performance construct (Crook, Ketchen, Combs & Todd, 2008; Richard et al., 2009; Santos & Brito, 2012), all of which had limited the advances in theory and understanding of the concept. This was supported by the study of Winand et al. (2014) that claimed little consensus on the conceptual consistency of organizational performance because the meanings of performance differed dependent upon how success was defined by the organization. Since mission and goals clearly varied among different types of organizations, this required different definitions with regards to performance. Owing to this, researchers should investigate and measure organizational performance in different ways. With this, our present study incorporated both financial and non-financial performance measures as this would enable individual employees of the organizations to accurately evaluate the success of their business unit's performance.

Despite the complexity of organizational performance with its dimensionality still debatable, past researchers such as Dess and Robinson (1984) as well as Santos and Brito (2012) emphasized that empirical research should operationalize performance using accurate, available measures by taking into account a selection of conceptual framework that defined organizational performance, research objectives and characteristics. Moreover, Dess and Robinson (1984) had also found that most researchers in the field of strategic management study often encountered problems obtaining objective measures of selected aspects of organizational performance such as profitability and growth that were reliable and valid. Meanwhile, there were also researchers like Covin (1991) who had found no apparent differences between subjective and objective organizational performance measurements. While

acknowledging the unidimensionality of organization performance construct, for the purpose of this study, the organizational performance of private colleges was thus defined as a multidimensional construct (Glick, Washburn & Miller, 2005), which implied that all the financial and non-financial performance indicators used to measure the business performance of private colleges were in line with the four perspectives (i.e. financial, customer, internal business process and learning and growth) of the balanced scorecard management approach.

For an organization to desire a high performance level moreover, according to Madella, Bayle and Tome (2005), the organization had to input the necessary resources and transformed them efficiently during throughput to achieve the relevant and targeted outcomes. Researchers such as de Waal (2007) believed that the high performance of organizations invariably revolved around specific goals achievement, improved financial outcomes, customer satisfaction or productivity. This was further affirmed by other researchers such as Sheehan (2011), Al-Damoe, Yazam and Ahmid (2012) and Richman (2015) that the organization was to achieve a better performance outcome by managing and developing the organization's human asset that would have improved its competitiveness over a longer period of time in addition to being able to adapt well to changes and react to these quickly as compared to its peer groups in the industry. The organization which was being managed for the longer term through the setting up of an integrated and aligned management structure and to continuously improve its core capabilities by truly treating employees as its main asset. Towards this end, managing good people and knowledge well could translate into the betterment of the organizational performance of private colleges too.

## **2.4 Theories underpinning the Study**

Two theories guided this present study – the resource-based theory and knowledge-based theory of the organizations were invoked in understanding the interrelationships between practices of managing talent and knowledge management with respect to organizational performance of private colleges in Malaysia.

### **2.4.1 Resource Based Theory**

Resource-based theory of the organization served as the underpinning theory to this research study as it established the possibility to link managing talent resource of the organization to its competitive advantage and hence, a positive performance outcome to the organization over time (Rabbi, 2015). This theory of firm based on talent management postulated that talent had been the only resource of organizations which essentially provided a basis for sustainable competitive advantage and therefore, organizations should focus on talent and the capabilities deriving from talent.

In relation to the resource-based theory of the organization was the more recent talent-based view of the firm which stated talent was the only resource that might help organizations in sustaining a competitive advantage and therefore, organizations must put a focus on recruiting, developing and retaining their talented workforce (Rabbi, 2015). This pool of talented individuals who were equipped with skills and knowledge was considered a strategic resource for the organization because they created value to the organization and were difficult to replace and replicate by competitors (Barney, 1991). A study by Hiltrop (1999) had also recognized talent resource as a strategic organizational asset that became the main creator of a sustainable competitive advantage in high performance organizations. Meso and Smith (2000) similarly claimed



that a sustainable competitive advantage was the only result of the organization's strategic assets.

Resource-based theory developed by Penrose (1980) in the past was applied to explain differences in performance between organizations within an industry which was attributed to variances in organization's resources and capabilities (Roos, Bainbridge & Jacobsen, 2001; Wiklund & Shepherd, 2003; Hoopes, Madsen & Walker, 2003). To the extent that an organization possessed and capitalized on strategic resources, it expected organizational performance to be strong (Wernefelt, 1984; Coff, 1999). Such differences in performance arose when well-succeeded organizations acquired valuable resources that others did not have, thereby allowing the organization to capture economic rents and consequently higher returns. In other words, competitive advantage that emerged within the organizations when they were capable to accumulate and utilize resources effectively which in turn determined their overall organization performance. As such, the ability to develop and leverage the value of these intangible assets, resources and capabilities underlying the organizations therefore helped established core competencies and capabilities that became the source of competitive advantages for superior performance (Prahalad & Hamel, 1990; Collis & Montgomery, 1995; Markides, 1997; Bogner, Thomas & McGee, 1999).

Further still, resource-based theory that particularly focused on the competitive dynamics of the organization internally, its resources and capabilities possessed to explain the variation in profit and performance of the organizations (Wernefelt, 1984; Barney, 1991; Grant, 1991; Peteraf, 1993; Makhija, 2003). The resources, assets and capabilities the organization possessed were utilized to build its competitive advantage that generated economic wealth (Dess, Gupta, Hennart & Hill, 1995). Amit and

Schoemaker (1993) also concurred by recognizing that the type, magnitude and nature of resources (or resources heterogeneity) and capabilities were important determinants in their capacity to generate economic returns to the organizations. What is more, Helfat and Peteraf (2003) concluded that the resource based theory provided an explanation for the heterogeneous competition based on the premise that close competitors differed in an important way through their resources and capabilities.

From a strategic perspective of the resource based theory, the organizations were then assumed as a collection of not easy to imitate resources and capabilities that formed distinct competencies and capabilities to influence their evolution and strategic growth options (Winter, 1987; Dierickx & Cool, 1989; Coff, 1999). Furthermore, the strategic value of the organizational resources and capabilities could be increased by the difficulty of acquiring, duplicating or replacing these strategic resources as they were usually founded in organizational history (Amit & Schoemaker, 1993). According to Barney (1991), resources and capabilities which were rare, socially complex, imperfect imitability and non-substitutability had enabled the organization to sustain its competitive advantage. This was further supported by the studies of Makhija (2003) and Wright et al. (2009) that internal intangible resources such as human capital and talent rather than tangible resources were able to create and sustain competitive advantage to positively influence the competitive position of the organization.

In terms of talent-based view of the firm that was drawn from the resource-based theory argued the practice of managing talent attraction and recruitment in sourcing competent talents internally and externally were not only reinforcing strategic resources of the organizations and increasing firm individuality but also to create organizational competitive advantage that had yet realized in the past to better compete against their

rivals (Hatch & Dyer, 2004). According to Lewis and Heckman (2006) and Wright, Dunford and Snell (2001), the recruitment of key talents was managed based on the requirements of the strategic role and capabilities in question such that the job positions to the right talents were identified depending on their value, rareness, inimitability and uniqueness consistent with the resource-based view theory.

The resource-based view also provided a plausible explanation to investment in managing talent development as a potential source of gaining competitive advantage because it resulted in skills that were valuable, inimitable and not easily duplicated as competencies and capabilities of the organizational talent workforce improved. It was especially useful in the context of talent development within the organizations due to its focus on content issues (Eisenhardt & Martin, 2000). Festing and Eidems (2011) had argued that the processes of supporting talent development had to be understood so that this could contribute in achieving competitive advantage. In such circumstances, a clear career development path was required for talents to be more accountable for the organization's future needs. Learning and development of organizational talent workforce therefore became necessary for businesses that were operating in a fast-paced business environment meant the organizations could acquire new skills and techniques to stay competitive in the industry.

Managing talent retention shaped according to resource-based perspective had held talent employees as an intangible strategic resource in which their knowledge and expertise was built within an organization over time had become firm-specific which created a barrier against duplications by other firms and hence, this formed a basis for the organization's competitive position in the market (Kamoche, 1996; Luthans & Youssef, 2004). In the practice of managing talent retention to constantly sustain

competitive advantage, it was necessary for organizations to engage their individual employees in a viable organizational environment in retaining knowledgeable talent (Acharya & Jena, 2016) and also by the way in which the organizations responded to the needs of talent employees (Osaro, 2016). Since the main purpose of managing retention of talent was to prevent the loss of competitive advantage from the organization that eventually benefitted its competitors, therefore the successful practice of managing talent retention contributing to organizational strategic advantage was by developing appropriate mechanisms such as rewards, autonomy and image (Al-Damoe, Yazam & Ahmid, 2012) in addition to further address such areas of concern whereby a lack of commitment and dissatisfaction among talent workforce could result in their intention of not to stay longer into the future and thus, the organization would be at risk of losing its competitive position in achieving optimal business performance (Mehta, Kurbetti & Dhankar, 2014).

#### **2.4.2 Knowledge Based Theory**

From the resource-based view, organizations that managed talent resources ultimately fostered a competitive advantage to improve the competitive position and performance of the organizations (Michaels, Handfield-Jones & Axelrod, 2001). It however still fell short of explaining how by engaging in the management of talent could influence the competitive success of the organization over time. Such a gap that existed in the resource-based perspective could be filled with knowledge management rooted in knowledge-based theory of the organization. Past literature reviewed had widely acknowledged that knowledge-based theory of the organization was built and extended on resource-based theory (Conner & Prahalad, 1996; Huizing & Bouman, 2002; Helfat & Peteraf, 2003; Balogun & Jenkins, 2003). What had been expounded by the resource-

based perspective on the aspects of resources and capabilities was further extended to knowledge-based theory that articulated the creation and a sustainable competitive advantage for organizations by emphasizing strategic capabilities via intangible knowledge resources with the use of knowledge management ((Halawi, Aronson & McCarthy, 2005; Kiessling & Harvey, 2006).

In aligning with knowledge-based theory, resource-based management also encouraged firms to pay closer attention to knowledge and its acquisition, creation and utilization within organizations to create competitive advantage (Chuang, 2004). This was aligned with the study by Darroch and McNaughton (2002) that had maintained the management of knowledge resource encompassed the creation of knowledge, management of the flow of knowledge within the organization, and the use of knowledge in an effective and efficient manner for the long-term benefit of the organization.

The knowledge-based perspective had further affirmed the sharing and transfer of tacit and explicit knowledge of individuals and groups within an organization that could give rise to strategic resources and hence, enabling some organizations to outperform others (Kogut & Zander, 1992). Knowledge which was created and held by individual employees, not organizations and as such, knowledge was suggested as the most strategically important asset for the organization (Grant, 1996; Carneiro, 2000; De Carolis, 2002). The organization that was knowledge-based would acquire a set of distinctive capabilities that enhanced the chances for competitive growth and survival (Claycomb, Droge & Germain, 2001). Other than that, firms which had the capability to apply knowledge could also significantly cut costs and achieved better performance outcomes (Claycomb et al., 2001, Pauleen, Corbitt & Yoong, 2007).

In addition, the nature and content of knowledge bases which led to a set of capabilities differed among firms. Because of these differences, it had long-term effect on the relative performance of the firms (Grant, 1996). In view of this, the challenge that lied ahead in the knowledge-based view of the organization, according to Grant (1996) was the coordination effectiveness among organizational members because their knowledge was specialized and had to be integrated. The creation and sharing of knowledge practiced by organizations as a whole should be meaningful and the knowledge must be applied in such a way to make it valuable (Armistead, 1999). Scholars such as Pfeffer and Sutton (1999) maintained that knowledge generated should be used in improving a product, a process or services to benefit the organizations.

The study by Zack (1999) postulated that the emergence of competitive advantage due to the strategic use of knowledge resources and capabilities, of which organizational knowledge asset was believed to be the most significant in today's hyper competitive environments or in an environment experiencing radical discontinuous changes (Malhotra, 2000). Other researchers such as Malerba and Orsenigo (2000) and Ariely (2003) had also considered knowledge as organizational capabilities that formed the basis for competition. This knowledge was embedded and carried through multiple entities including organizational cultures and identity, policies, routines, documents, systems and employees' experiences.

Organizations on the other hand, were regarded as heterogeneous entities loaded with knowledge (Hoskisson, Hitt, Wan & Yiu, 1999) and hence, organizational knowledge was the capability members of an organization had developed to draw distinctions in the process of carrying out their work, in particular concrete contexts, by enacting sets of generalization whose applications depended upon historically evolved collective

understandings (Tsoukas & Valdimirou, 2001). As such, an organization learnt if any of its units acquired knowledge that it recognized as potentially useful to the organization. The ability of an organization to integrate knowledge held by individual employees within the organization delivered sustainable competitive advantage for organizational success (Grant, 1996a; Spender, 1996). Consequently, the organization could be described as an institution for integrating knowledge (Grant, 1996a).

Further still, the knowledge-based view considered organizational learning to play an important role in the sustainability of the competitive advantage. The organization's capabilities that comprised knowledge resources were only valuable when integrated with other individual capabilities to formulate organizational knowledge specific to that particular organization (Sveiby, 2001; Hitt, Bierman, Shimizu & Kochhar, 2001). Organizational knowledge acquired and utilized through productive learning among its employees allowed the organization to exploit its capabilities for competitive advantage and success (Cook & Yanow, 1995). This was also highlighted by Matusik and Hill (1998) in the relationship between organizational knowledge and its competitive advantage influenced by the capacity to integrate and apply knowledge. The sustainability of the knowledge-based competitive advantage for an organization was nevertheless, attributable to better understanding and managing of knowledge throughout the organization despite its competitors had invested substantially to acquire similar knowledge for its advantage (Curado, 2006).

## **2.5 Talent Management and Organizational Performance**

Past researchers such as Dawn and Biswas (2013) and Cappelli and Keller (2014) had contended that management of talent as one of the most important factors in realizing competitive advantage for sustaining long-term organizational success. With an

increasingly intense competition facing business corporations in the market, it thus became inevitable for organizations to develop a comprehensive approach to managing talent in addressing their competitive position and thereby, accelerating organizational success. In particular, researchers such as Bethke-Langenegger, Mahler and Staffelbach (2011) found that the practices of managing talent with a focus on strategy had significantly influenced the attractiveness of the company, customer satisfaction, the achievement of business goals and corporate profits. Therefore, organizations that prioritized the management of talent were arguably to have better positioned in building a successful business (Schuler, Jackson & Tarique, 2011; Sheehan, 2012). In other words, organizations which recognized the importance of talent management were able to achieve and sustain competitive advantage than those organizations that did not.

Without doubts, talent management deemed as a decisive concept in strategic human resource management shaped the development of human capital and talents in order to achieve organizational excellence (Nizar et. al, 2014). Therefore, a number of past researchers (Beheshtifar, Nasab & Moghadam, 2012; Kehinde, 2012; Taie, 2015; Karunathilaka, Abdul Yajid & Khatibi, 2015) had provided strong theoretical and practical considerations to the organizational priority of managing talent that played a key role in improving business performance outcomes. Because of the advantages to individual employees as well as to organizations, business leaders found it worthwhile to continuously invest in optimizing talent and managing quality talent to inculcate a culture of excellence and hence, contributing to higher investment returns and a superior business performance (Schiemann, 2014; Guest & Bos-Nehles, 2013; Coulson-Thomas, 2012).



What followed then was a growing volume of research documenting the significant influence on organizational performance that was positively linked to talent management (Heinen & O'Neill, 2004; Lockwood, 2006; Guthridge & Komm, 2008; Scullion, Collings & Caliguiri, 2010; McDonnell, 2011; Kehinde, 2012; Vaiman, Scullion & Collings, 2012; Liu & Pearson, 2014, Rabbi, 2015; Ulrich, 2015). Such studies had established the effects of managing talent to organizational performance by providing the organizations an effective framework in their implementations of talent management strategies for business success. As an organizational function, talent management continued to gain prominent attention not only by many large corporations in the US (Handfield-Jones, Michaels & Axelrod, 2001; Frank, Finnegan & Taylor, 2004; Oladapo, 2014) but also globally in driving business results and creating organizational value, thereby making talent management an effective means for organizational performance improvement (Stahl et al., 2007; Farndale, Scullion & Sparrow, 2013; Tarique & Schuler, 2010; Scullion & Collings, 2011; Garavan, 2012; Nijveld, 2014; Sparrow & Makram, 2015).

Despite having a positive relationship between talent management and organizational performance as what had been claimed in the past, other researchers such as Armstrong (2012) and Karunathilaka, Abdul Yajid and Khatibi (2015) were uncertain about organizational performance that was positively-linked to talent management in the business world. In particular, Armstrong (2012) argued that talent management strategies did not have a direct relationship with organizational performance. According to Karunathilaka, Abdul Yajid and Khatibi (2015) moreover, even if organizations had embarked on the strategic priority of talent management, they were still not able to achieve organizational performance.

It appeared that some other organizations had instead continuously performed without implementing the organizational-specific approach to management of talent (Armstrong, 2012). As a result, reasonable doubts had arisen concerning whether talent management served the purpose of achieving organizational performance or if there could be any other strategy to be added with regard to the positive relationship between talent management and organizational performance. To address this issue further, a number of past studies such as Armstrong (2012) and Karunathilaka et al. (2015) had claimed it was business strategies which were aligned with the organizational priority of talent management that had changed the relationship between talent management and organizational performance.

In another related development to the domestic private higher education, the importance of managing talent practices in enhancing the business performance of profit-motivated higher educational organizations had still remained under-investigated. The private higher educational institutions such as private universities and colleges might have difficulties in meeting its current and future business needs and thereby losing their competitiveness in the industry if without having the right number of talented administrative and lecturing staff (Riccio, 2010; Lavania, Sharma & Gupta, 2011). The study by Samah, Abdullah, Jusoff and Mohd Isa (2009) had further concurred that both institutions of higher education and business corporations commonly shared strong corporate values and such a parallel set of values, beliefs and work-related culture played a prominent role in motivating these institutions to follow the practices of business corporations in managing competent talent workforce to produce a positive organizational performance for long-term business success.

Towards this end, the sourcing of talent performers for sustainable organizational growth was equally important for every practitioner serving in a business corporation as to those serving in the academic fraternity (Lavania, Sharma & Gupta, 2011). In this regard, those well-established local private academic institutions such as Taylor's, Sunway's and KDU's that had been operating long enough in the industry appeared to have prioritized the practices of managing talent in expanding and maintaining a pivotal talent pool for productivity, profitability and sustainable development of the business where human talent investment not only could help encourage students' motivation but also to improve organizational competitiveness over time (Shoemaker, 2014).

### **2.5.1 Talent Attraction and Recruitment and Organizational Performance**

The practice of managing attraction and recruitment within an organization was aimed at securing the number and quality of employees with the right skills and knowledge that were needed to meet the organizational goals and objectives at minimum cost (Henry & Temtime, 2009; Ofori & Aryeetey, 2011). In light of this, organizational performance of private colleges was often related directly to the people employed within the business, meaning that competent individuals with the skills and knowledge had to be acquired and hired to sustain organizational success. Traditionally, managing talent attraction and recruitment had matched 'people-skills' to specific job requirement so as to meet the organization's needs and expectations in a competitive business environment (Chowdhury, 2012). It had also been learnt that seeking competent employees deemed as talents was a challenge to many organizations, but when wrongly attracting and recruiting the candidates who were not capable would not work out well to the organizations as this came with huge negative costs which businesses could not afford (Gamage, 2014).

From the viewpoint of the resource-based theory, it was suggested that organizations should constantly evaluate their workforce to maintain the right people with the right skills to sustain competitive advantage but a failure to do so, organizations should make-up for the shortfall by deploying appropriate attraction and recruitment practices. Available evidence from past studies had shown there was a positive and significant relationship between attraction and recruitment with the performance of an organization (Katou & Budhwar, 2006; DeVaro, 2008; Syed & Jama, 2012; Gamage, 2014; Ekwoaba, Ikeije & Ufoma, 2015). Therefore, managing attraction and recruitment of potential employees that was positively related to organizational performance implied the success of an organization relied on the quality of its workforce who had been acquired into the organization through attraction and recruitment exercises. According to Sinha and Thaly (2013) further, by adopting the qualitative system in the process of attraction and recruitment helped organizations to grow and expand as they had been able to get the right employees for their vacancies.

### **2.5.2 Talent Development and Organizational Performance**

As soon as talented employees were attracted and recruited, whether internally or externally, the strategic human resource management function should be implemented in such a way as to managing the development of talents to meet the expectations of both the individuals and organizations. Organizations deployed the approaches of talent development to enhance knowledge, skills, competencies and attitude of their employees to achieve organizational performance (CIPD, 2010). In most instances, managing development of talents enabled the organizations to inculcate a learning culture among employees within the organizations. This led to the creation of a learning organization when the management supported learning and development of high-

potentials as business investment for the common good of the organization as a whole. According to CIPD (2010), Niazi (2011) and Farrukh and Waheed (2015), the mechanisms for creating a learning organization included training and development, coaching, mentoring, e-learning, in-house development programs in addition to succession planning. Such mechanisms therefore were considered as talent development strategies to be executed in maintaining competitive advantage to achieve organizational performance. Moreover, several studies by Davis, Maggie and Flynn (2007) as well as Auranzeb and Bhutto (2014) had also noted that the development of talented staff was essentially importance to the success of business objectives.

### **2.5.3 Talent Retention and Organizational Performance**

For businesses competing in a fast-changing environment nowadays, talent retention had become a primary concern for business leaders in strategically managing individual talent to drive organizational success. In fact, Mendez and Stander (2011) stressed that a company needed to invest in retaining high-potential employees in order to be successful. In other words, HRM studies had shown that without the effort to retain high performers, organizations would be left with an understaffed, less qualified workforce which critically hindered their capabilities to stay competitive, more so when the organizations faced with an impending shortage of talented employees who possessed the requisite knowledge and ability to perform at higher levels (Hauknecht, Rodda & Howard, 2009). By having human capital retention practice incorporated into the organizational policies and practices, this would enhance the company's profitability, competitiveness as well as productivity level due to having satisfied long-termed employees who had been willing to contribute their skills and knowledge in achieving desirable business results (Scullion & Collings, 2011).

Not only that, many organizations had also recognized managing retention of talent as a strategic opportunity to maintain a competitive edge (Oladapo, 2014; Mehta, Kurbetti & Dhankhar, 2014). This was supported by Philips and Edwards (2008) who maintained that company's stakeholders had a high regard for human capital and so organizations should ensure their talented staff were retained within the organization as they delivered a competitive advantage over the competitors. According to Chikumbi (2011) and Maliku (2014) further, the ability of an organization to be able to retain their high performers signalled a competitive success and reflected the organization as not only a valued place of work but there were also positive consequences to its business performance that benefitted the organization.

## **2.6 Talent Management and Knowledge Management**

The domain of knowledge management that was linked to talent management within a knowledge-intensive organization had hardly received any systematic attention (Whelan, Collings & Donnellan, 2010). According to Schroevers and Hendriks (2012), the connections between talent and its management on the one hand and the domain of managing organizational knowledge as a learning organization on the other appeared to be logical and seemingly fruitful. Past researchers had described talent and talent management in terms of achieving competitive advantage and organizational performance. Both talent and knowledge were closely related entities and since knowledge was mainly derived from talented people, thereby managing talent from a knowledge-based perspective was exactly those organizational knowing and learning capabilities that could be managed in the flows of knowledge within the organization to gain a competitive edge.

A number of early studies by Scarbrough (2003), Wong (2005) and Hislop (2009) had in fact, acknowledged the significant role of HRM practices in knowledge management. According to Hislop (2009), by specifically developing loyalty and commitment of workers to create, share and utilize knowledge, HRM policies played a critical role in supporting organizational knowledge management. It was therefore understood that the ultimate goal of HRM is to identify and select the high-potential employees, to use appropriate remuneration, training and evaluation mechanisms to bring out the best talent available in them, which was subsequently contributing to organizational knowledge. By enabling the flows of knowledge and learning as a focus in organizations while in the pursuit of strategic talent management practices, individual talents who had been attracted and recruited, developed and retained with whom their skills and knowledge formed the strategic competencies crucial for organizational survival growth (Crisp & Reid, 2007; Poorhosseinzadeh & Subramaniam, 2012; Schroevers & Hendriks, 2012). Similarly, there were also several past studies (Vance & Vaiman, 2008; Whelan, Collings & Donnellan, 2010; Whelan and Carcary, 2011; Urbancova and Vnouckova, 2015) that highlighted the effective management of talent who possessed critical knowledge could be leveraged to improve management of knowledge within the organization in a knowledge-based economy.

The practices of managing organizational talent regarded as knowledge and skilled workers that led to knowledge management initiatives had become a driving force of organizational competitive advantage in a dynamic, complex business environment through which organizational innovation-performance could be managed (Brewer & Brewer, 2010; Wang & Wang, 2012; Atapattu & Jayakody, 2014). Nevertheless, the interaction between management of talent attraction and recruitment, talent development and talent retention with knowledge management in supporting

organizational competitiveness for business success had not been fully understood. Still, few studies had empirically investigated the relationship between specific talent management practices and organizational knowledge management, in which it would necessarily call for further study into this area (Whelan & Carcary, 2011).

### **2.6.1 Linking Talent Attraction and Recruitment to Knowledge Management**

With the growth of a knowledge-based economy in the wake of globalization, scholars were not only concerned with the emergence of a knowledge-based organizational management, but they also increasingly paid attention to whether knowledge could be integrated with organizational talent attraction and recruitment process (Chowdhury, 2012; Schroevers & Hendriks, 2012). It was thought as one of the foremost human resource management issues and also a relatively new concept to be explored. By aligning the strategic priority of talent attraction and recruitment with knowledge management, business firms could create competitive advantage through new skills and knowledge from these knowledgeable talents acquired internally or externally. This showed that managing knowledge of the organization to gain competitive advantage could be traced back to better people employed in the organization with better knowledge and ability, which was done only by attracting and recruiting the right individual employees on-board based on their knowledge and competency.

Going forward, when attracting and recruiting individual talents, knowledge-intensive organizations need to portray themselves as organizations having a clear focus on the personal self-development of these talented employees in a diverse challenging environment (Schroevers & Hendriks, 2012). However, a number of past studies had suggested that high-potential talents were recruited to fill knowledge gaps as opposed to fill narrow, specialized roles. (Lengnick-Hall & Andrade, 2008; Whelan and Carcary,



2011) within the organizations. By and large, the decision to recruit key talent depended on the organization's knowledge management approaches. To knowledge-intensive organizations such as those involved in rendering IT, financial and professional services, they could select and recruit talent individuals who were able to identify problems, articulate them for capture in a knowledge database and use information to solve problems or alternatively, organizations could acquire individuals with critical and analytical skills, who could share knowledge through a strong social network of contacts among firms.

### **2.6.2 Linking Talent Development to Knowledge Management**

Within the knowledge management setting, talent development emphasized learning and development by building on the skills and enhancing the knowledge of employees so that the organization became a learning organization. The management of talent development was therefore necessary not only to overcome a brain drain of corporate knowledge (Jones, 2008) but also to support the development of high-potential employees throughout the life-cycle with the organizations (Schiemann, 2014). Combined with knowledge management, a continuous learning and development atmosphere within the organizations had to be constantly provided to enable knowledgeable individual talents to adapt their knowledge to new situations (Schroevers & Hendriks, 2012). Such an approach had been known to have great influences on the organization's knowledge base as the development of talent employees maintained an updated knowledge base and competitiveness.

In addition, talent development through effective competency-based training helped promote knowledge management related competencies such as strategic planning and collaboration, information skills and relationship management that were relevant to

advance employees' knowledge capabilities needed in carrying out organizational role (Debowski, 2006; Abel, 2008). Succession planning and mentoring programs as part of the processes in developing talent workforce had enabled organizations to replace key knowledge holders should they leave the organization to ensure knowledge protection apart from preparing high-potential talent in filling key roles to drive organizational performance (Garavan, Carbery & Rock, 2012).

### **2.6.3 Linking Talent Retention to Knowledge Management**

It had been brought to our attention that the management and preservation of organizational knowledge became a primary tool in accelerating competitiveness and developing strategic capabilities to respond to market changes. In this regard, retention of key talents played an important role in motivating self-development and allowing them to apply their individual knowledge in any business practices that was critical for organizations to adapt to the volatile business environment (Schroevers & Hendriks, 2012). With the strategic role of talent retention in maintaining a long-term relationship between talented employees and the organization as well as with its stakeholders, organizational knowledge and learning could therefore be successfully managed, retained and advanced.

In a similar vein, the findings from studies by Bessick and Naicker (2013) and Urbancova and Vnouckova (2015) had noted that the management of talent retention could lead to the management of organizational knowledge, from which knowledge sharing and retention might arise from the effective managing of knowledge employees who were deemed as organizational talent (Levy, 2011; Horvat, Sharma & Bobek, 2015). When knowledge talent left the organization, they would not only leave with rare, valuable and hard to imitate knowledge but also took away with them critical

knowledge about who they know (Parise, Cross & Davenport, 2006; Hofer-Alfeis, 2008), which was important in getting a task or assignments done. A loss of organizational knowledge due to talent turnover became a critical concern to the organizations as this had resulted a loss of competitive advantage to outperform market competition (Urbancova & Linhartova, 2011; Martins & Meyer, 2012).

Knowledge loss was widely understood to have a series of repercussion to the existence of organizations, which had called for appropriate actions in managing talent to overcome knowledge discontinuity (Daghfous, Belkhodja & Angell, 2013). To mitigate knowledge loss, it had therefore been suggested that effective planning of talent retention programs to ensure organizational knowledge management which included monetary and non-monetary initiatives that should be built upon the understanding of the organization's accumulated knowledge base as well as of what motivated talent employees to be committed to work, to be productive and to develop knowledge, skill and expertise from a network of contact (Cunningham, 2007; Whelan & Carcary, 2011; Govaerts, Kyndt, Dochy, Baert, 2011).

## **2.7 Knowledge Management and Organizational Performance**

The role of knowledge management that was critical to the performance of business organizations had clearly been documented in numerous past research studies (Boumarafi & Jabnoun, 2008; Turner & Minnone, 2010; Liao, 2011; Andreeva & Kianto, 2012; Perez-Arrau, Suraj, Heisig, Kemboi, Easa & Kianto, 2014; Inkinen, Kianto & Vanhala, 2015; Valmohammadi & Ahmadi, 2015; Salami & Mercy, 2015). Better knowledge management system helped retain organizational knowledge by preventing information exodus which in turn provided a competitive advantage for long-term organizational success. This was also found consistent with other studies by

Suresh (2012), Darvish, Mohammadi and Afsharpour (2012) as well as Darvish and Nazari (2013) that knowledge management influenced business system not only by inculcating a harmonious atmosphere among employees, but also increasing profitability and ensuring organizational competitiveness and sustainability.

Knowledge management was further regarded as of utmost importance to create and add value to the business (Anand, Kant, Patel & Singh, 2012). However, the extensive study of the impact of knowledge management on organization performance, several researchers argued that there was still lacking of empirical evidence on the relationship between knowledge management practices and organizational performance in the literature (Inkinen, Kianto & Vanhala, 2015; Yaghoubi & Maleki, 2012). To other past researchers (Whelan & Carcary, 2011; Kianto et al., 2014), knowledge management was a business practice that still remained in development despite of it as being an effective tool to generate competitive advantage that benefits organizational performance.

Moreover, some early studies concerning the knowledge-based view of the organization had sought to understand how performance differences between organizations that were accrued due to their different stocks of knowledge and their capabilities varied in developing and using knowledge (Kogut & Zander, 1992; Grant & Spender, 1996). By leveraging knowledge management, organizations utilized knowledge asset to realize the potential of creating competitive advantage that had positively linked to organizational performance (Theriou, Maditinos & Theriou, 2011; Chen & Fong, 2012; Jelena, Vesna & Mojca, 2012; Urbancova & Vnouckova, 2015). In other words, knowledge management made a difference to organizational performance in a way that the more an organization put in place managerial practices and activities to support

efficient and effective management of knowledge, the more likely the organization could benefit in achieving a high business performance. By the same token, knowledge management when utilized appropriately in supporting the institution as a learning organization could also deliver a competitive advantage for academic institutions so as to distinguish the it from others in the academic marketplace and thereby, achieving positive organizational outcomes (Laal, 2010; Peng, Jiang & Zhang, 2013; Nawaz & Gomes, 2014; Zwain, Teong & Othman, 2014)

## **2.8 The Mediating Role of Knowledge Management**

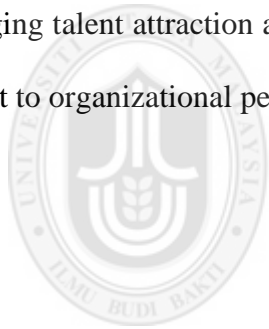
Knowledge management not only served as an antecedent to organizational performance, but it was also a medium between individual factors and organizational performance (Alshekaili & Boerhannoeddin, 2011). An extensive literature review had revealed the role of knowledge management as a mediating variable through which human factors influenced performance within the organizational context. Such a mediating relationship was conceptualized based on the resource-based view. Several past studies had shown that knowledge management mediated positively the relationship between strategic human capital practices and organizational performance (Alshekaili & Boerhannoeddin 2011; Wan Daud, Zainol, Mansor & Hadi, 2014). Moreover, there were other instances whereby the study by Zheng, Yang and McLean (2010) highlighted the mediating role of knowledge management in the relationship between organizational culture, structure, strategy and organizational effectiveness. Similarly, the study by Kmiecik and Michna (2012) also investigated the mediating role of knowledge management in the relationship between market orientation and growth of small and medium-sized enterprises. Other researchers such as Haghghi, Bagheri and Kalat (2015) had found knowledge management processes to mediate

creative organizational learning and factors in the knowledge management infrastructure.

Knowledge management initiatives undertaken by the organization that stemmed from the effective managing of intellectual capital were expected to benefit the organization in enhancing its eventual performance (Kianto, Ritala, Spender & Vanhala, 2014). The knowledge-based perspective had posited that the availability of talent would help drive activities of knowledge management in transforming individual knowledge into organizational knowledge and key competencies to deliver sustainable competitive advantage for business success (Whelan & Carcary, 2011; Ciabuschi & Martin, 2012). However, the findings from Kianto et al. (2014) suggested that knowledge management in mediating the effects of managing intellectual asset towards organizational performance had yet to be fully examined. In light of this, identifying the level of managing talent practices to interact with knowledge management that positively influenced the organizational performance of private colleges underlined the rationale of this study.

## 2.9 Conclusion

A literature study was conducted to understand the state of research associated to the organizational performance of Malaysian private colleges within the higher education business sector. Past literatures in relation to the underlying theories and conceptualization with regard to this study were highlighted. Beginning with a review on talent management comprising the practices of managing talent attraction and recruitment, talent development and talent retention followed by knowledge management and later, organizational performance of private colleges, it also demonstrated the relationships among all the variables of interest used in this study as well as the rationality of knowledge management in mediating the relationships between managing talent attraction and recruitment, talent development and talent retention with respect to organizational performance.



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## CHAPTER 3

### Research Methodology

#### 3.0 Introduction

This chapter outlines the methodology used to investigate the relationship between organizational performance of private colleges that is linked to the practices of managing talent attraction and recruitment, talent development and talent retention and the mediating effects of knowledge management on the relationship between the practices of managing talent and organizational performance of private colleges. The chapter also discusses the hypotheses development, research design, measures and instrumentation as well as sampling and population, data collection and procedures involved. Finally, this chapter addresses the technique of data analysis with a preliminary report on the findings of a pilot study.

#### 3.1 Research Framework

Resource-based and knowledge-based perspectives of the organizations serve as the underpinning theory guiding this study. The resource-based theory on organizational performance is based on the premise that organizational resources and capabilities are those that ultimately determine the performance of an organization. To the extent that an organization possesses and leverages its strategic resources such as human talent and intellectual asset to sustain a competitive advantage could exert a positive influence on the organization performance. As such, the organizational performance of private colleges is significantly influenced by the theoretical framework of the resource-based perspective, from which the resource-based theory recognizes the availability of talent workforce as intangible strategic resources to the organizations for their business



success while the practices of managing talent employees have led the local private colleges to further exploit their knowledge competencies through a set of knowledge management initiatives, which is then expounded by the knowledge-based perspective to primarily develop a sustainable source of organizational competitive advantage to outperform market competition over time (Grant & Spender, 1996).

Based on the reviews of past literatures, the research framework to this study is developed in examining the relationship between the practices of managing talent attraction and recruitment, talent development and talent retention and the perceived organizational performance of private colleges in Malaysia and whether the role of knowledge management mediates the practices of managing talent in influencing the organizational performance of private colleges. The research framework framing this study is illustrated as below.

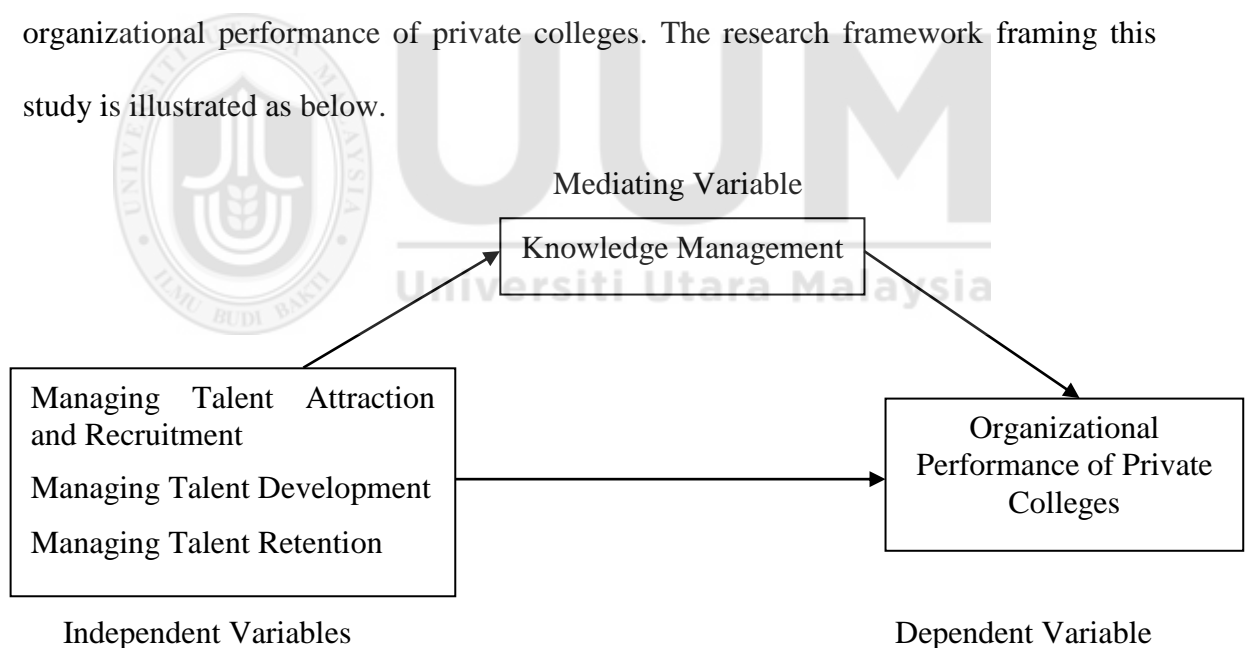


Figure 3.1

*Research Framework*

The proposed framework above has identified three main constructs – managing talent practices, knowledge management and organizational performance of private colleges in which all of the constructs are expected to have a positive relationship with each

other in the model. The independent construct of managing talent practices in this study has managing talent attraction and recruitment, talent development and talent retention as three separate components that make it up, whereby each is a predictor (or independent) variable to explain the organizational performance of private colleges which is then regarded as the outcome (or dependent) variable. The model shows that organizational performance of private colleges is positively related to the practices of managing talent, from which each of these practices of managing talent is predicted to have a direct positive influence on knowledge management while knowledge management has a direct positive relationship with organizational performance of private colleges. It also illustrates knowledge management as a mediating variable that links the relationships between managing talent attraction and recruitment, talent development and talent retention with respect to organizational performance of private colleges in Malaysia.

### **3.2 Research Hypotheses**

The following hypotheses are formulated in relation to the research questions and research objectives underlying this study:

- H1: There is a significant positive relationship between managing talent attraction and recruitment with organizational performance of private colleges.
- H2: There is a significant positive relationship between managing talent development and organizational performance of private colleges.
- H3: There is a significant positive relationship between managing talent retention and organizational performance of private colleges.

- H4: Knowledge management has a significant direct positive relationship with organizational performance of private colleges.
- H5: Managing talent attraction and recruitment has a significant direct positive influence on knowledge management.
- H6: Managing talent development has a significant direct positive influence on knowledge management.
- H7: Managing talent retention has a significant direct positive influence on knowledge management.
- H8: Knowledge management significantly mediates the relationship between managing talent attraction and recruitment and organizational performance of private colleges.
- H9: Knowledge management significantly mediates the relationship between managing talent development and organizational performance of private colleges.
- H10: Knowledge management significantly mediates the relationship between managing talent retention and organizational performance of private colleges.

### **3.3 Research Design**

This research study is broadly related to the positivism paradigm emphasizing on the quantitative approach that assumes there is one objective, true reality that can be discovered by means of rigorous empirical study (Creswell, 2009). The researcher and reality are independently separated with the role of the researcher is to uncover reality

scientifically. The nature of knowledge, according to positivist research paradigm is based on verified hypotheses. Positivism is identified as the most suitable belief in guiding this study since it involves exploratory analysis and testing of proposed hypotheses based on underlying theories in order to explain the relationship between the exogenous variables and the endogenous variable.

For this study, the quantitative research approach is therefore applied to ensure that the findings reflect the population, and in particular that population from which the sample is drawn (Vanderstoep & Johnston, 2009). There are two common research methodologies within quantitative research to be adopted by a researcher – survey research or experimental research (Creswell, 2009). A survey research methodology is then adopted to extract exactly the same information from all the target population. Survey method is a structured method of data collection in which standardised information to describe the study's variables can be collected from representative target respondents using a predesigned questionnaire (Kumar, Abdul Talib & Ramayah, 2013).

The survey method is also considered to be a more appropriate empirical research method to attain the research objectives. It provides an overview of a representative sample of a targeted population (Mouton, 2001). By using the survey method in this study therefore, its purpose is not only to collect a larger amount of data in a relatively short period of time but more importantly, to operationalize the constructs described in the theoretical framework by compiling a questionnaire and explore the extent to which performance level of private colleges is influenced by the factors of managing talent within the private educational organizations.

The research instrument for this study is developed using measurement scales validated from previous studies. Since this study employs a survey method, according to Straub

(1989) and Bryman and Bell (2011), it is better to reuse previously existing validated instruments as the reliability and validity testing of the measures have been taken place and this allows the researcher to know about the measurement qualities of these existing measures that will be adapted to the study.

Prior to the beginning of the full study, a pre-test and a pilot test involving the administration of a preliminary version of the questionnaires is conducted to assess reliability and validity of the instrument. The pre-test is conducted in the presence of a HR professional and an academician in the field of human resource management. According to Bryman and Bell (2011), it is desirable to conduct pre-testing and a pilot test in order to establish the instrument's content validity as well as to detect any problems associated with the measures. The actual data collection starts after fulfilment in terms of reliability and validity of the measures are achieved. A second-generation statistical technique namely Structural Equation Modelling (SEM) analysis technique using Partial Least Square method (also called PLS-SEM) is employed to predict the relationships among variables.

### **3.4 Operational Definition**

Managing talent practices in this study is operationalized as managing talent attraction and recruitment, talent development and talent retention in providing a competitive edge that contributes to the improved performance of the organization (Oehley, 2007). The management of talent practices in this study thus consists of three separate components making up the independent construct, in which managing talent attraction and recruitment has 5 items, talent development and talent retention each has 6 items respectively. All measurement items are identified from a partial talent management

competency model developed by Oehley (2007). The response format is based on a five-point Likert scale ranging from (1) 'strongly disagree' to (5) 'strongly agree'.

Knowledge management is founded in the literature studies on knowledge-based view of the organization (Grant, 1996). According to the knowledge-based view, knowledge is considered the most strategic intangible asset that an organization can possess and leverage while an organization is described as an institution for integrating knowledge. Knowledge management therefore is a process of transforming individual knowledge into organizational knowledge as a strategic asset and capability that is valuable, rare and difficult to copy and replicate. This study therefore operationalizes knowledge management as the observable organizational activities that are related to the ability in locating and sharing useful knowledge that influences many different aspects of organizational performance simultaneously (Zack, McKeen & Singh, 2009). Knowledge management in this study comprises 14 items that are adapted from a research study by Zack, McKeen and Singh (2009). The items are measured on a five-point Likert scale anchoring at (1) 'strongly disagree' and (5) 'strongly agree'.

The organizational performance of private colleges is a subjective measure because accounting information of private colleges omits organizational intangible assets that are important to measure competitive success in the future. Organizational performance is thus operationalized as the perceived business performance of organizations comprising both financial and non-financial performance metrics (Slavkovic & Babic, 2014). The use of financial indicators emphasizes a shareholder's approach to the concept of performance, particularly by focusing on HR practices and systems contributed a sustained competitive advantage through enhancing skills and human capital. Meanwhile, the use of non-financial indicators is then consistent with the

stakeholder's approach that places an emphasis on the objectives of other constituencies apart from financial competitiveness that determines the business performance of an organization. In combining these two approaches, the organizational performance of private colleges in this study is measured using 10 items comprising both financial and non-financial performance indicators which are then adapted from the previous research study by Slavkovic and Babic (2014). The items are measured on Likert's seven-point rating scales ranging from (1) 'strongly disagree' to (7) 'strongly agree'.

### **3.5 Instrumentation and Measurement**

The research instrument of this study is a formal standardized questionnaire. The questionnaires are suitable as a data collection mechanism after the measures are found and the constructs for this study have been identified (Sekaran & Bougie, 2010). Further, such questionnaires are used when the researcher is interested to analyse statistically the data to test the proposed hypotheses for a conclusive study (Kumar, Abdul Talib & Ramayah, 2013). Statements are formulated to operationalize the constructs. All the constructs used in the instrument for this study and their indicators have been developed from past research studies by Oehley (2007), Zack, McKeen and Singh (2009) as well as Slavkovic and Babic (2014) and which were previously validated and tested for reliability prior to distribution.

Results from the reliability test by Oehley (2007) have shown Cronbach's alpha values ranging from 0.84 to 0.90 for talent management competency measures which include talent recruitment, talent development and talent retention. The reliability value for knowledge management practices reported to be 0.88 in the study of Zack, McKeen and Singh (2009), which is above the acceptable level of 0.70 required for exploratory

research. As for the reliability of organizational performance measure, the study by Slavkovic and Babic (2014) has indicated Cronbach's alpha coefficient of 0.949.

In constructing the multiple item measurement scale in the questionnaires, an attempt is made to include questions only if they are necessary in achieving the research objectives of this study as well as to avoid jargons and technical terms while ensuring clarity as far as possible and with this, the questions are expressed in such a manner that is simple and easy to understand by the respondents so that complete and accurate information can be obtained. Changes are also made to the selected items to be fit into the context of this study. Close-ended format is then used for all the question items to not only help respondents make quick decisions among the several defined alternatives available before them but it is also helpful to the researcher in handling and coding the information easily.

As predesigned questionnaires are used as a tool to collect primary data from the targeted respondents on all variables of interest including perceived organizational performance measure of private colleges and as such, the questionnaires survey form used in this study is divided into four sections – section one contains demographic variables regarding the respondent's gender, ethnicity, age, educational level, years' of working experience, job position and job roles; section two measures managing talent practices and this includes three individual components, namely managing talent attraction and recruitment (5 items), talent development (6 items) and talent retention (6 items); section three measures knowledge management in which it consists of 14 items and section four contains 10 items related to the measurement of organizational performance of Malaysian private colleges.



In this study therefore, measures for organizational performance of Malaysian private colleges are adapted from Slavkovic and Babic (2014). The practices of managing talent attraction and recruitment, talent development and talent retention measurement scales respectively are adapted from Oehley (2007). Meanwhile, knowledge management measures are adapted from Zack, McKeen and Singh (2009). A Likert Scale of 1 – 7 is used for measures of organizational performance of Malaysian private colleges whereas the scale of 1 – 5 is used for measures of managing talent attraction and recruitment, talent development, talent retention and knowledge management as part of procedural remedies in this study’s design to control common method biases by methodologically separating the measures so that the respondents could complete the measurements of the independent variables and the measurements of the dependent variable under two different conditions or circumstances (Podsakoff, MacKenzie & Lee, 2003).


Table 3.51 below lists all the variables, measurement items and scales used in this study.

Table 3.51

*Variables, Measurement Items and Scales*

Coding	Variables	Measurement Items	Sources	Scale
OP	Organizational Performance of Private Colleges	<ol style="list-style-type: none"> <li>1. The organization is capable of reducing costs of operation although its business is fast expanding.</li> <li>2. Income growth of the organization is better in comparison to the competitors.</li> <li>3. Employees’ productivity of the organization is better in comparison to the competitors.</li> <li>4. The organization is characterized by the satisfactory profitability level.</li> <li>5. The organization has better quality higher educational courses in comparison to the competitors.</li> </ol>	Slavkovic & Babic, 2014	Likert Scale of 1-7

		<ol style="list-style-type: none"> <li>6. The organization provides better quality service in comparison to the competitors.</li> <li>7. Satisfaction of clients from the organization is better in comparison to the competitors.</li> <li>8. The organization responds quickly to technological changes to meet its business needs.</li> <li>9. The organization is capable of solving new problems quickly.</li> <li>10. The organization has a good reputation.</li> </ol>		
TAR	Talent Attraction and Recruitment	<ol style="list-style-type: none"> <li>1. The organization prioritizes time to interview potential candidates.</li> <li>2. The organization has a good overall knowledge of human resource (HR) recruitment processes.</li> <li>3. The organization consistently appoints high calibre employees to key positions.</li> <li>4. The organization devotes time to attend to the filling of a vacancy.</li> <li>5. The organization ensures that vacancies do not remain open for not more than 6 months.</li> </ol>	Oehley, 2007	Likert Scale of 1-5
TD	Talent Development	<ol style="list-style-type: none"> <li>1. The organization has a genuine interest to foster the training and development of people.</li> <li>2. The organization carries out an objective assessment of individual's development needs.</li> <li>3. The organization encourages the coaching of staff one-on-one.</li> <li>4. The organization provides feedback for staff developmental purposes.</li> <li>5. The organization actively creates developmental opportunities for potential employees.</li> <li>6. The organization meets with staff for their career planning sessions.</li> </ol>	Oehley, 2007	Likert Scale of 1-5
TR	Talent Retention	<ol style="list-style-type: none"> <li>1. The organization builds a good working relationship with all employees.</li> </ol>	Oehley, 2007	Likert Scale of 1-5

		<ol style="list-style-type: none"> <li>2. The organization allows flexibility of time for staff to attend to their family matters.</li> <li>3. The organization ensures that employees have adequate resources to complete their work.</li> <li>4. The organization reduces employees from job stress.</li> <li>5. The organization assures that workload is full but not excessive.</li> <li>6. The organization makes the effort to be aware of its employees' personal circumstance that might affect their work.</li> </ol>		
KM	Knowledge Management	 <ol style="list-style-type: none"> <li>1. We explicitly recognize knowledge as a key element in our strategic planning exercise.</li> <li>2. We benchmark our organizational knowledge against that our competitors.</li> <li>3. We have developed a knowledge strategy that maps knowledge to organizational value creation.</li> <li>4. We are able to identify sources of expertise within our organization.</li> <li>5. Our employees are valued for their knowledge.</li> <li>6. We look for opportunities to learn more about our clients.</li> <li>7. We look for opportunities to learn more about educational products.</li> <li>8. We look for opportunities to learn more about educational services.</li> <li>9. We look for opportunities to learn more about technologies for organizational internal operations.</li> <li>10. Our organization encourages the sharing of knowledge among staff.</li> <li>11. Our organization encourages the use of knowledge for mutual benefits.</li> <li>12. We have effective internal procedures for transferring best practices throughout the organization.</li> <li>13. We exploit external sources of knowledge effectively.</li> </ol>	Zack, McKeen & Singh, 2009	Likert Scale of 1-5

		14. Our knowledge management group is a recognized source of value creation within the organization.		
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### 3.6 Population and Sampling

As this present study is interested in investigating the organizational performance of private colleges from the practices of managing talent perspective, then the targeted population is organizational talent workforce comprising academic and non-academic staff among the Malaysian private colleges that contribute to the business success of these educational organizations. The sampling frame for this study is then identified from the Malaysian Qualifications Register (MQR), a national register maintained by the Malaysian Qualifications Agency (MQA) that serves as the reference list to the registered private colleges in Malaysia with their accredited programs.

On the other hand, sampling is the process of selecting a sufficient number of elements from the population so that a study of the sample and understanding of its characteristics would make it possible to generalize such characteristics to the population elements (Kumar, Abdul Talib & Ramayah, 2013). In other words, the sample for this study should be drawn in such a way that it is a true representative of the entire population of interest. The study further notes that the appropriateness of a sample size depends upon many factors, among others are psychometric properties of the variables, the strength of the relationships among the variables considered, the complexity and size of the model, the amount of missing data and the distributional characteristics of the variables considered (Marcoulides & Saunders, 2006).

In this study therefore, a sampling technique of multi-stage sampling is utilized where the sampling is carried out in two or more stages using smaller and smaller sampling

units at each stage. That means for a given targeted population, it is divided into stages for sample selection to make the sampling process more practical. The study as such, uses multistage sampling of a two-stage sampling design whereby at the first stage, it selects a sample of 20 private colleges from each of the 13 states in Malaysia identified from a sampling frame of Malaysian Qualifications Register (MQR) and then at the second stage, it selects 5 targeted individuals representing talented academic and non-academic employees who are senior management, departmental managers, senior executives, senior lecturers as well as heads of programs (HoPs) from each of these 20 private colleges to form a sample group.

### **3.6.1 Unit of Analysis**

The unit of analysis refers to the subject that is being studied in the research, in which the data is being collected from these units (Kumar, Abdul Talib & Ramayah, 2013). Therefore, the unit of analysis in this study is at the individual level that represents both academic and non-academic staff of the private colleges. It is understood that the implementation of managing talent practices can be broadly inclusive to all levels of employees within the educational organization. The management of talent is about finding ways to maximize the contribution of each key talent individual that can give to the organizations. The fact remains that talented individual's knowledge is the starting point of organizational knowledge, hence focusing at the level of individual also helps to identify how the practices of managing organizational talent can drive knowledge management initiative by converting the individual talent's knowledge into knowledge for the organization as a whole to be managed and used which will in turn contribute to the organizational performance of private academic institutions.

### **3.6.2 Sampling Technique**

Using a two-stage sampling design, this study at the primary stage has selected a sample of 20 private colleges from each of the 13 states in Malaysia and at the secondary stage then, the study selects 5 individual respondents comprising both academic and non-academic staff from a sample of 20 private colleges in each state in Malaysia using convenience sampling method. This will result in 1300 individual respondents from 260 private colleges to be included in our study sample group. Those not involved are not chosen and will therefore be excluded from the sampling unit.

The non-probability sampling approach of convenience sampling is thus used in this study since we could not obtain a list of all the elements of the population from which the sample is drawn. Convenience sampling approach is appropriate as the collection of information is from individual talented employees holding various key positions in the private colleges who are conveniently available or can be accessible to provide it for the researcher to use. These individual employees are tasked with academic and non-academic roles within the private colleges concerned, from whom they are drawn as targeted respondents to provide the information necessary for this study. Convenience sampling is also used when the researcher wishes to cover a large number of survey quickly and cost effectively, however it suffers from selection bias and generalizability in this case is also restricted (Kumar, Abdul Talib & Ramayah, 2013; Sekaran & Bougie, 2010).

### **3.6.3 Data Collection Procedures**

In measuring the variables of interest in this study, the quantitative data is collected from a survey using formal standardized questionnaires that will enable the researcher

to explore the relationships between the practices of managing talent, knowledge management and organizational performance of private colleges. Since the study is a quantitative cross-sectional study, all the variables in this study are measured at the same point of time and hence, data is collected once to enable the researcher to address the research questions. The method of data collection is primarily through the conventional mail survey but some are personally administered confining to the vicinities of Kuala Lumpur and Selangor State for this present study.

The mail survey is chosen as a tool because of its low cost with a wider coverage of geographical area for a survey-based study. However, the response rate for mail survey is typically low, particularly in organizational research where the response rate of mail questionnaires is 10% to 20%, for which case is considered low in Malaysia (Abdullah Lee, Jamaludin & Abdul Talib, 2013). With a low return rate, it is difficult to establish the representativeness of the sample as those responding to the survey do not at all represent the population they are supposed to (Sekaran & Bougie, 2010). In view of the difficulty involved, each mail survey for this study thus consists of a post-paid self-addressed envelope in a bid to increase the rate of responses to mail questionnaires.

A hardcopy mail survey is sent out by addressing to HR Managers of the private colleges. The HR Managers are considered to be the suitable addressees because they are likely to be part of the management team in implementing strategic human capital management to meet the business needs of the private academic institutions. It is also within the role of HR Managers to assign and allow the most appropriate staff who has experiences and knowledge in answering the questionnaires. In this study therefore, questionnaires survey forms together with the covering letter are reached out to HR

Managers of the private colleges concerned followed by making a request that such questionnaires to be filled up by the available targeted respondents.

At the pre-data collection stage, the researcher begins with making telephone calls to HR Managers of the local private colleges to establish contacts and to further notify about the forthcoming survey. Through telephone contacts, it is also to explain the objectives of the survey to this study coupled with seeking consent to allow both their academic and non-academic staff respond to the questionnaire items. This is to encourage the staff involved to actively participate in the survey. After the HR Managers indicating their willingness to participate in the survey, a hardcopy questionnaire survey packet consisting of a letter stating the purpose of the study, the required set of questionnaires survey forms together with a self-addressed stamped envelope are included and this package is subsequently delivered to the private colleges.

During the data collection stage, each of the respondents is required to elicit their responses on each of the 41 items contained in the questionnaires, in which the instructions are clearly outlined to guide the respondents in completing the survey. The respondents including academic and non-academic staff filling key roles are targeted because they are in a good position to assess the extent of the practices of managing competent talents in relation to the organizational performance of their respective colleges in the industry. They are also considered the most likely informants since they are the best people with skills and knowledge critically deployed to contribute to the business performance of their educational institutions.

From a sample of 20 private colleges selected from each state in Malaysia, a total of 5 targeted respondents per college institution are used and the total number of actual respondents surveyed from a sample of 260 private colleges eventually provides a



sample size required for this study to test the hypothesized relationships. It follows that the target respondents surveyed are senior management, departmental managers, heads of programs (HOPs), senior executives and senior lecturers with more than 3 years of experience who have been employed by the participating private colleges.

The study is also concerned with handling of missing data that arises from the post-data collection stage. It is not unusual that some respondents may not answer all items in the questionnaires. This is due to the respondent's being unclear of the questions or it could also be due to a lack of willingness to do so. When the missing value is more than 15% of the overall items, according to Hair et al. (2014), the response then has to be removed. But if it is less than 15%, Hair et al. (2014) suggests using mean value replacement method.

Once the responses from the questionnaires are received, it is at first loaded into IBM SPSS version 22 and subsequently the data set is being transformed into an Excel CVS file to generate raw input for the SmartPLS 2 application. By extracting the Excel CVS file into SmartPLS 2 software, this data input collected pertaining to all the latent variables used in this study is now ready to be fit into measurement and structural models for validation purpose, from which the outputs generated are then analysed by employing the variance-based approach to PLS-SEM.

### **3.7 Technique of Data Analysis**

All quantitative data set collected relating to the variables of interest used is first and foremost to be input into SPSS spreadsheet to generate demographic profile of the respondents and also a descriptive statistical report including mean and standard deviation to provide a general picture of the characteristics of the test variables of this

study. This is then followed by a preliminary analysis to check for normality of data distribution, the problem of multicollinearity as well as potential common method biasness prior to further executing PLS-SEM analysis.

A test of normality of data in this study is investigated using statistical tests such as Kolmogorov-Smirnov and Shapiro-Wilk normality tests before assumptions can be made that the observed data is obtained from a normally distributed population and this is in addition to skewness and kurtosis about distribution of data from samples whether it is normal (Lay & Khoo, 2009).

The study is then moving on to detect multicollinearity phenomenon among independent variables, in which two or more independent variables are highly correlated which affects the coefficients of independent variables in a multiple regression model (Kumar, Abdul Talib & Ramayah, 2014). The assessment on collinearity diagnostic is conducted by using two indicators, which are tolerance and Variance Inflation Factor, VIF whereby VIF is  $1/\text{tolerance}$ .

In examining the possibility of common method variance bias that arises from using a single questionnaire in obtaining single source of information, this study proceeds to carrying out a Harman's single-factor test whereby all the measurement items are subject to exploratory factor analysis (EFA). Such a test is necessary to check whether a single latent factor has been accounted for the majority (i.e. more than 50%) of the total variance explained (Podsakoff, MacKenzie & Lee, 2003) and if the variables studied are factorizable.

It follows that PLS-SEM technique is employed to further analyse the data set within the measurement and structural models with the use of SmartPLS 2.0 M3 software

(Ringle, Wende & Will, 2005) in this study, where SmartPLS 2 application provides a graphical user interface to create a research model and implement the basic PLS algorithm for model parameter estimation. PLS-SEM method is considered as a major approach to applied statistical technique used in examining direct and indirect relationships between one or more independent latent (or unobservable) variables and one or more dependent latent variables (Hair et al., 2014). By using the variance-based structural equation modelling (VB-SEM) approach to PLS, it does not only evaluate the hypothesized structural linkages among constructs but also the linkages that exist between a construct and its respective measures or indicators. PLS-SEM technique has therefore been evolved as a statistical modelling technique for conducting many multivariate data analyses, including regression analysis, cluster analysis, exploratory factor analysis and multidimensional scaling (Hair et al., 2014).

In this study therefore, PLS-SEM is chosen as the technique of multivariate data analysis because it offers better advantages over the first-generation of analysis techniques (such as exploratory factor analysis or multiple regression analysis) in which it allows flexibility for researchers to interplay between theory and data (Chin, 1998a). In deploying PLS-SEM, researchers are allowed to (i) estimate relationships among multiple predictors and criterion variables; (ii) construct unobservable latent variables; (iii) model measurement errors for observed variables and (iv) statistically test a priori theoretical and measurement assumptions against empirical data.

According to Hair, Hult, Ringle and Sarstedt (2014), there are two approaches to estimate the relationships in a structural equation model (SEM) – Covariance-based SEM (CB-SEM) and PLS-SEM (VB-SEM). One approach is not considered superior to the other. In fact, it can be argued that the use of variance-based PLS-SEM is often

complementary to CB-SEM rather than being competitive by outdoing each other. As to which approach used in a study is more appropriate nonetheless depends on the specific empirical context and the research objectives.

In particular, PLS-SEM approach is primarily used when theory is less developed in a situation of exploratory research rather than theory testing and confirmation which is more appropriate using CB-SEM. This is true if the main objective of applying PLS-SEM is theory development and prediction of key target constructs in PLS path modelling. In other words, PLS-SEM focuses on maximizing the amount of variance explained ( $R^2$  values) in the dependent construct. That means parameter estimates are obtained to minimize the residual variances of the endogenous constructs. It is for this reason that PLS-SEM is regarded as a variance-based approach to SEM, thereby placing an emphasis on prediction of the empirical findings and contrasting them with the theory (Bagozzi & Yi, 2012).

Although PLS-SEM and CB-SEM are not substitution to each other in conducting multivariate data analysis, PLS-SEM is nonetheless the preferred approach to this present study over CB-SEM as the research objective is to explain the key target construct of organizational performance of private colleges. PLS-SEM approach is more appropriate when the study is to test and predict the relationships between variables according to prior theoretical knowledge and therefore, the use of latent variables' scores is important for predictive relevance in investigating the underlying relationship between the latent constructs within a theoretical model.

PLS-SEM is also found to be useful for this study that explores the sources of competitive advantage by managing human talent and intellectual assets that drive organizational success (Hair, Ringle & Sarstedt, 2011). According to Hair, Ringle and

Sarstedt (2013), PLS-SEM has been established as a particularly useful method for multivariate statistical analysis and its application is gaining popularity in strategic management research. In addition, the phenomena under study are relatively new in Malaysia in which it needs to be empirically investigated and supported by data.

Moreover, the theoretical model underlying the study in demonstrating conceptual associations between the practices of managing talent and organizational performance of private colleges and the role of knowledge management in mediating the relationship between managing talent practices and organizational performance of private colleges are still not well-developed and for a given limited amount of empirical evidence to support the conceptual framework, thereby further justifying the use of variance-based PLS-SEM technique as the more appropriate approach in this present study.

When applying PLS-SEM, the researcher benefits from high efficiency in parameter estimation, which is manifested in the method's greater statistical power than that of CB-SEM (Hair et al., 2014). This implies that PLS-SEM is more likely to render a specific relationship significant when it is in fact significant in the population. PLS-SEM is also less restrictive (or flexible) in the sense that it makes no assumption about the multivariate normal distribution of data. In fact, PLS-SEM is a non-parametric method that can be used to analyse data when the normality assumption is violated. Further still, PLS-SEM works efficiently with small sample sizes and complex models, with many latent variables and a large number of indicators (Chin, 2010). It can easily handle reflective and formative measurement models without identification problems.

PLS-SEM model with latent constructs is usually defined using two sets of linear equations known as the measurement model and structural model (Hair, Ringle & Sarstedt, 2011). Conceptually and practically, PLS-SEM is similar to using multiple

regression analysis (Hair et al., 2014). For this present study that deploys PLS-SEM technique, the validity and reliability of the measurement models are assessed according to certain critical criteria with respect to reflective measurement model specification. After establishing adequate convergent validity and discriminant validity of all the constructs as well as internal consistency reliability and indicator reliability to the measurement model, the study then proceeds to examine the structural model by assessing the endogenous latent variable's variance determined by  $R^2$  value for prediction in addition to estimating the constructs coefficients (or path-model coefficients) and their significance through testing the hypothesized relationships within a structural model.

Given the goal of PLS-SEM approach is prediction-oriented, this study also conducts an assessment on the structural model's capability to predict (i.e. predictive relevance). The main measure of predictive relevance is Stone-Geisser's  $Q^2$  (Geisser 1974; Stone, 1974) which postulates that the model must be able to predict regarding each endogenous latent construct. The  $Q^2$  values are determined by using a blindfolding procedure to obtain the cross-validated redundancy measures for each endogenous latent construct with a reflective measurement model specification. A  $Q^2$  value larger than zero for a certain endogenous latent construct exhibits the path model's predictive relevance for that particular construct. However, a value of zero and below indicates a lack of predictive relevance. By using the SmartPLS 2 software, our study is therefore required to run the blindfolding routine for one reflective endogenous construct after the other to obtain the  $Q^2$  value.

The evaluations on measurement model (also known as outer model) and structural model (also known as inner model) in PLS path modelling are performed by running the

PLS algorithm and bootstrapping procedure respectively. A run on PLS algorithm is performed to evaluate the quality of the measurement model based on such criteria as internal consistency reliability, indicator reliability, convergent validity and discriminant validity of the measures. Internal consistency reliability of the measures is assessed using composite reliability (CR), which its value exceeds 0.8 whereas indicator reliability is measured through indicator loadings of the items which are above the threshold value of 0.708 at a significant level of 0.05. Meanwhile, convergent validity of the constructs is demonstrated using average variance extracted (AVE) which exceeds the critical value of 0.5 and discriminant validity of the measures is evaluated using two indicators, which are cross-factor loadings and Fornell-Larcker criterion.

As PLS-SEM approach does not assume normal distribution of data requirement, as a result, it applies non-parametric bootstrapping which assumes the shape of the sampling distribution of the statistics is a reasonable representation of the target population distribution. Bootstrapping is therefore a process that requires repeated random sampling with replacement from the original sample to create a bootstrap sample (Hair, Ringle & Sarstedt, 2011). The number of bootstrap samples created must be larger and it should be at least equal to the same number of valid observations from the original sample used. As recommended by Hair et al. (2014), 5000 bootstrap samples are created. The bootstrap sample is then used to estimate the path-model coefficients in PLS-SEM as well as to provide the bootstrap standard error (SE) for each path-model coefficient in determining the empirical *t*-values to be tested for their significance levels (Chin, 2010; Hair et al., 2011).

Since this study also involves testing the mediating role of knowledge management in the relationship between managing talent and organizational performance of private

colleges, a mediational analysis is performed to evaluate this indirect effect. Indirect effect is a special form of intervening effect whereby the predictor and criterion variables are not directly related, but they are indirectly related through significant relationships with a linking mechanism (Mathieu & Taylor, 2006). In evaluating a mediation relationship, the traditional Baron and Kenny's (1986) approach, notably the causal-step approach is commonly followed by most previous researchers. By examining the mediating variable allows researchers to better understand the relationships between the independent and dependent variables and their cause-effect relations. The mediating effect is theoretically postulated a priori and the analysis then focuses on testing such hypothesized relationships empirically.

The following four guidelines are used in this study to determine a mediating relationship that exists between a predictor (i.e. independent variables) and an outcome variable (i.e. a dependent variable), as was outlined by Baron and Kenny's (1986).

- i. To show that there is a significant relationship between the independent variables and the dependent variable when a mediator variable is not included;
- ii. To show that the independent variables are significantly related to the mediator variable;
- iii. To show that the mediator variable is significantly related to the dependent variable;
- iv. To show that the strength of the relations between the independent variables and the dependent variable is reduced significantly upon the presence of the mediator variable into the model.

One common method used by past researchers for testing mediation effects is the Sobel (1982) test, from which the relationship between the independent variable and the



dependent variable is investigated and is then compared with the relationship between the independent variable and the dependent variable by including the mediating variable. The Sobel test however, is dependent on normal distribution assumptions which usually do not hold true for the indirect effect, particularly when the multiplication of two normally distributed path coefficients results in a non-normal distribution of their product (Preacher & Hayes, 2008; Hair et al., 2014). Besides that, the Sobel test suffers from a lower statistical power and it requires unstandardized coefficients as input for the test statistics (Hair et al., 2014). In this regard, when testing the mediation effects for this present study, it would instead follow Preacher and Hayes (2008) by bootstrapping the sampling distribution of the indirect effect with the reasons that this approach better suits PLS-SEM method and exhibits a higher level of statistical power (Preacher & Hayes, 2008; Hair et al., 2014).

The approach begins with assessing the significance of the direct effect in the absence of the mediator variable in the PLS path model. There is no mediating effect when the direct effect is not significant, although this is not a necessary condition (Zhao, Lynch & Chen, 2010). But if the direct effect between the exogenous and endogenous latent variables is significant, we then proceed to mediation analysis by including the mediator variable in the PLS path model to evaluate the significance of the indirect effect (i.e. to be represented by the product of two path coefficients). The significance test of the indirect effect is then conducted by running the bootstrapping procedure. When the indirect effect is significant, the mediator variable absorbs fully or partially some of the direct effect and thereby, supporting a mediation relationship between the exogenous and endogenous latent variables. However, no mediation is concluded if the indirect effect is not significant.

After mediation effects are confirmed, the final step is to determine the strength of this mediation. Following Hair et al. (2014), this assessment is done by using the Variance Accounted For (VAF). The VAF determines the size of the indirect effect to the total effect (i.e. direct effect + indirect effect), where VAF is equal to the indirect effect divided by the total effect. When VAF is less than 20%, one can conclude that no mediation takes place. On the contrary, one can assume full mediation if the VAF has very large outcomes of above 80%. When VAF is larger than 20% and less than 80%, it is characterized as partial mediation. Overall, higher results from the assessment of VAF indicate a stronger mediation.

### **3.8 Pilot Study**

This section reports on the preliminary results of the pilot survey conducted on the 3<sup>rd</sup> and 4<sup>th</sup> December, 2015 to ascertain the reliability and validity of the measurement constructs. By having 5 target respondents surveyed to each private college, a total of 50 questionnaire survey forms were distributed to 10 private colleges operating in the business of higher education located at Penang which were identified from the sampling frame (i.e. the Malaysian Qualifications Register, MQR) had participated in this pilot study. Out of the 10 private colleges, 3 colleges were eventually rejected because of disapproval from the management concerning the disclosure of information pertaining to their business operation that was thought to be sensitive after having the questionnaires reviewed by the organization's HR or senior management team.

A total of 23 completed questionnaires survey forms representing 7 private colleges were returned. However, only 20 questionnaires survey forms were deemed to be usable and acceptable to this pilot test as there were 3 responses in which the respondents indicated that they had working experiences below three years in their academic

institutions respectively and as a result, their responses to the items were discarded. Therefore, a response rate of 40% was achieved in this pilot study.

The IBM Statistical Package for Social Science (SPSS) software and the Partial Least Squares (PLS) procedure in SmartPLS software are applied to the data. All the 20 valid responses from this pilot survey were initially coded and then loaded into the statistical software IBM SPSS version 22.0 before the data was being transferred to SmartPLS software to determine reliability and validity of the measurement constructs. PLS-SEM approach was chosen to check on reliability and validity of the constructs because of its suitability in handling small sample sizes, as in the case of our pilot study with many latent variables and a large number of indicators (Chin, 2010).

The pilot test began with the assessment on goodness of measures based mainly on two criteria, which are validity and reliability. To run the test, the measurement model was evaluated in order to establish the latent variables by certain indicator variables. Since latent variables (LVs) in this study are modeled using reflective indicators, the validation of a reflective measurement model can be established by testing its internal consistency reliability, indicator reliability, convergent validity and discriminant validity of the constructs (Gefen, Straub & Boudreau, 2000).

Table 3.81 below highlighted the results of the measurement model evaluation followed by Table 3.82 that showed a summary on the reliability of all the measurement constructs used for this pilot study.

Table 3.81

*Results of the Measurement Model*

Construct	Items	Loadings	AVE	Composite Reliability	T-Statistics	Cronbachs Alpha				
Talent Attraction and Recruitment	TAR1	0.8828	0.8136	0.9290	3.857	0.8885				
	TAR2	0.8925			3.782					
	TAR4	0.9301			5.925					
Talent Development	TD2	0.9063	0.7042	0.9221	6.598	0.8996				
	TD3	0.8001			2.999					
	TD4	0.7400			2.693					
	TD5	0.8281			4.216					
	TD6	0.9087			8.023					
Talent Retention	TR2	0.8835	0.6715	0.8590	10.672	0.7560				
	TR3	0.8388			4.789					
	TR6	0.7283			4.750					
Knowledge Management	KM1	0.8632	0.6294	0.9442	7.313	0.9346				
	KM2	0.7352			6.126					
	KM3	0.7819			6.229					
	KM4	0.7343			4.630					
	KM5	0.8019			3.659					
	KM6	0.7180			2.164					
	KM7	0.8538			7.948					
	KM8	0.8299			8.997					
	KM9	0.8359			9.003					
	KM12	0.7634			4.011					
	Organizational Performance of Private Colleges	OP1			0.7206		0.6522	0.9290	7.054	0.9108
		OP2			0.8477				8.087	
OP5		0.7405	4.137							
OP6		0.8370	12.721							
OP7		0.8308	12.195							
OP9		0.8363	10.096							
OP10		0.8300	8.327							

To evaluate the quality of the measurement model, the results above showed that average variance extracted (AVE) values for all constructs ranged from 0.6294 to 0.8136 which exceeded the critical threshold of 0.5, thus demonstrating convergent validity. Convergent validity was adequate when constructs indicated an AVE value of at least 0.5 or higher. Indicator loadings were significant at least at the 0.05 level. In

addition, all items/indicators loaded more than 0.708 had demonstrated indicator reliability. Several items such as TAR3, TAR5, TD1, TR1, TR4, TR5, KM10, KM11, KM13, KM14, KM15, OP3, OP4 and OP8 were removed due to low standardized factor loadings, however the removal of these reflective measurement items would not affect their contributions to content validity. The use of internal reliability measures was required for a reflective construct to ensure the measures were reliable. Based on Table 3.81, the results further showed that the value of composite reliability (CR) for all constructs exceeded 0.8, hence supporting internal consistency reliability.

Table 3.82 below summarized reliability of the measures from our pilot test indicated by the values of Cronbach's Alpha and composite reliability (CR) respectively.

Table 3.82

*Measurement Constructs Reliability of Pilot Study*

Measurement Constructs	Cronbach's Alpha	Composite Reliability (CR)
Talent Attraction and Recruitment	0.8885	0.9290
Talent Development	0.8996	0.9221
Talent Retention	0.7560	0.8590
Knowledge Management	0.9346	0.9442
Organizational Performance of Private Colleges	0.9108	0.9290

Meanwhile, the following Table 3.83 showed discriminant validity of the constructs for this pilot survey. It was necessary to establish discriminant validity to determine two variables were supposed to be uncorrelated and the scores obtained by measuring them were empirically found to be so (Sekaran & Bougie, 2010).

Table 3.83

*Discriminant Validity of Constructs of Pilot Study*

Construct	College Performance	Knowledge Management	Talent Recruitment	Talent Development	Talent Retention
College Performance	<b>*0.8076</b>				
Knowledge Management	0.7258	<b>*0.7933</b>			
Talent Recruitment	0.4682	0.6672	<b>*0.9020</b>		
Talent Development	0.4719	0.6006	0.7597	<b>*0.8391</b>	
Talent Retention	0.7197	0.7411	0.5242	0.6408	<b>*0.8194</b>

\*Note: Square root of the AVE on the diagonal (in bold)

The measurement model's discriminant validity was assessed by using Fornell and Larcker's criterion (Fornell & Larcker, 1981). Using Fornell and Larcker's criterion, this required a latent variable to share more variance with its assigned indicators than with any other latent variables. Hence, the measurement model showed discriminant validity when the square root of the AVE of each reflective construct exceeded the correlations between the construct and all other constructs in the model.

Based on Table 3.83, all square roots of AVE exceeded the off-diagonal elements in their corresponding row and column. The bolded elements represented the square roots of the AVE and non-bolded values represented the intercorrelations value between constructs in the model. The results above had shown that all off-diagonal elements were lower than the square roots of AVE bolded on the diagonal and hence, confirming that the Fornell and Larcker's criterion was achieved. In total, the measurement model had demonstrated adequate convergent validity and discriminant validity, suggesting that the reflective measurement items were suitable to measure the constructs.

A diagram that illustrates the results of the measurement model evaluation under this pilot survey was shown in the following Figure 3.8.

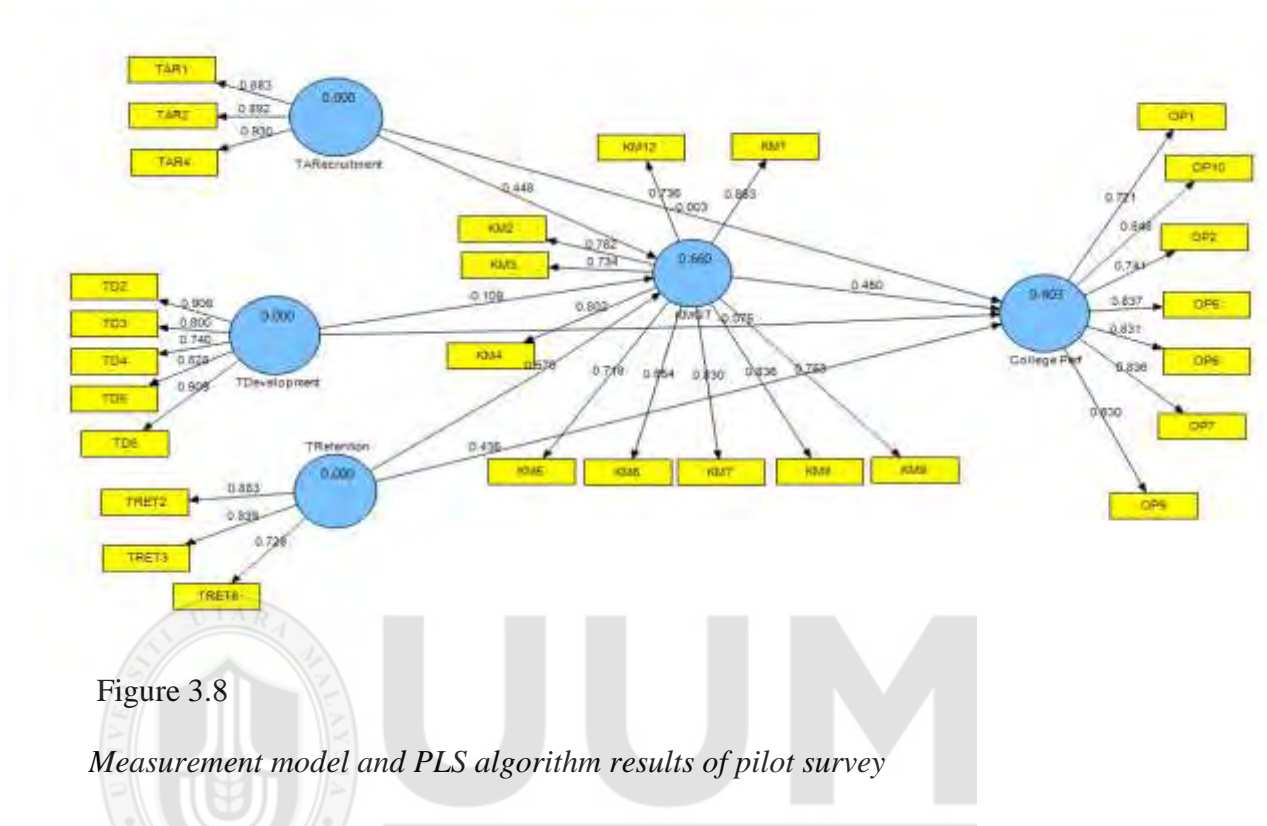


Figure 3.8  
Measurement model and PLS algorithm results of pilot survey

The data analysis conducted during this pilot test had indicated that reliability and validity of the constructs within the measurement model were satisfied. Through the measurement statistics of this pilot test, overall results shown were good enough to warrant actual data collection in order to validate the structural model.

### 3.9 Conclusion

This chapter elaborates the research framework by identifying all the latent independent variables and latent dependent variables that are used in this study. It also covers population and sampling, the sampling technique used and data collection procedure. The unit of analysis is at the level of individual. A survey method using predesigned questionnaires as a tool for this study appears to be the suitable method for data

collection as this not only enables a larger amount of information to be gathered in a short period of time but also to operationalize the constructs. The operation of variables, instrumentation and measurement are also highlighted. A multistage sampling plan is utilized in selecting the samples from a larger population. The use of a pre-test and a pilot test is to identify any problems with the content of the questionnaires and its associated measures before the actual data collection commences. Both SPSS and Partial Least Square Structural Equation Modelling (PLS-SEM) method are deployed as data analysis technique in this study. Finally, the results analyses to the pilot survey are reported. Reliability and validity of the measures are satisfactorily met. The following chapter describes the findings in terms of both the measurement and structural model.





## CHAPTER 4

### Results and Discussion

#### 4.0 Introduction

This chapter describes analyses of data and empirical findings of the research study. The Statistical Package for Social Science (SPSS) software and the Partial Least Squares Structural Equation Modeling (PLS-SEM) technique in SmartPLS software are applied to analyze the data in an attempt to investigate the hypothesis formulated in Chapter 3 and which is then followed by discussions of the main findings.

#### 4.1 Descriptive Statistics of the Data

A survey to this empirical study was carried out over a period of 3 months from April to July 2016 to collect data for all the variables used, namely the three components that made up managing talent practices as predictor variables comprising managing talent attraction and recruitment, talent development and talent retention respectively, knowledge management and organizational performance of private colleges.

The sampling frame to this study was compiled from the Malaysian Qualifications Register (MQR) that listed all private colleges, irrespective of their sizes with the accredited programs. A total of 1300 questionnaires survey forms were disseminated to 260 private colleges located across Malaysia. At the end of data collection, 262 survey forms were returned. The targeted respondents were mainly from senior management, departmental manager, dean/head of programs, senior executives and senior lecturers with at least three years of working experience in the institutions had responded to the survey request. Of the total 262 respondents from 52 private colleges responding to the

questionnaires, 15 responses were not usable as the respondents had indicated less than 3 years of working experience in their respective institutions. Also, a small number of responses had missing data. There were 4 responses from a mail survey found to contain missing data, in which the targeted respondents missed out answering all the 10 questions in Section 4 of the ‘Organizational Performance of Private Colleges’ and they had to be removed.

After screening through all the responses, this left with a total of 243 questionnaires survey forms which were considered valid and usable, representing 49 private colleges in Malaysia. The effective response rate to the survey of this study was 18.7% (243/1300), in which case exceeded the minimum acceptable response rate of 10%. With all the valid questionnaires used therefore, this had provided a sample size of 243 for this empirical study required to investigate the hypothesized relationships and their significance within the PLS path-model.

It followed that all the usable 243 valid responses were loaded into IBM SPSS version 22 software for generating the respondents’ demographic profile and a descriptive statistical report after which, additional analyses were conducted to check for normality of data distribution, the issue of multicollinearity as well as common method variance bias before proceeding to PLS-SEM path-model analysis.

Table 4.11 provided details to the demographic profile of the respondents who participated in the main survey.

Table 4.11

*Respondents' Demographic Profile of Main Survey*

Demographic	Frequency (N=243)	Percentage (%)
<b>Gender</b>		
Male	110	45.3%
Female	133	54.7%
<b>Age</b>		
31 - 40	154	63.4%
41 - 50	66	27.2%
51 - 60	15	6.2%
60 and above	8	3.3%
<b>Ethnicity</b>		
Malay	124	51%
Chinese	53	21.8%
Indian	58	23.9%
Others	8	3.3%
<b>Highest Education Level</b>		
Diploma	33	13.6%
Degree	102	42%
Master	80	32.9%
Ph.D/DBA	15	6.2%
Others	13	5.3%
<b>Number of years working in the College</b>		
3 - 5 years	108	44.4%
6 - 10 years	85	35%
over 10 years	50	20.6%
<b>Job Status</b>		
Senior Management	47	19.3%
Manager/Asst. Manager	46	18.9%
Senior Executive	63	25.9%
Professor	3	1.2%
Senior Lecturer	64	26.3%
Dean/Head of Program	20	8.2%
<b>Job Role</b>		
Academics	87	35.8%
Non-academics	99	40.7%
Academics and Non-academics	57	23.5%

Among the 243 respondents, 54.7% were female and 45.3% were male. Slightly more than half was Malays (51%) followed by Indians (23.9%) and Chinese (21.8%). A majority of them (63.4%) were in the age of 31 to 40 years old in addition to 27.2% aged between 41 and 50 years old. Nearly half of the respondents (44.4%) had 3 to 5 years of working experience in the private academic institution. However, slightly more than one-third of them (35%) had worked 6 to 10 years in the private college while 20.6% had been working for more than 10 years. Most of the respondents were educated and knowledgeable as 42% had Bachelor's degree with one-third of the targeted respondents (32.9%) had a Master's degree while staff having Diploma accounted for 13.6% and 6.2% were Ph.D/DBA. 26.3% of the respondents were senior lecturers who had worked at least 3 years in the college followed by senior executives amounting to 25.9%. Moreover, a total of 47 of the respondents were holding senior management position in the private colleges, which is equivalent to 19.3% whereas 18.9% of them were departmental managers. Of the 243 respondents, 40.7% involved only in non-academic operations whereas 35.8% were in the academic affairs but the remaining 23.5% of them were involved in both academic and non-academic tasks of the private colleges.

Descriptive statistics including mean and standard deviation were generated to summarize the data and made a conclusion about the characteristics of the distribution on the variables of interest used.

The following Table 4.12 outlined the descriptive statistics for all variables used in the study.

Table 4.12

*Descriptive Statistics of the Variables*

Variables	Mean	Standard Deviation
Managing Talent Attraction and Recruitment	3.7909	0.6061
Managing Talent Development	3.6262	0.7152
Managing Talent Retention	3.6365	0.6446
Managing Talent Practices	3.6783	0.5852
Knowledge Management	3.8186	0.5382
Organizational Performance of Private Colleges	4.9494	1.0031

Table 4.12 above showed the difference in mean and standard deviation for the 243 cases in the data set. There was a small difference between the mean values for all the variables shown and by comparing the standard deviation, its value indicated smaller spread in the data from the mean, implying that high proportion of the cases in the data set were quite close to the mean value.

#### 4.2 Preliminary Data Analysis

With the use of IBM SPSS version 22 further, the study proceeded to check the normality of data distribution, the problem of multicollinearity, common method variance bias together with exploratory factor analysis (EFA) to be carried out in predicting the number of underlying factors that might be available in the data set.

A test of normality for this study was then examined using two statistical analyses, which were Shapiro-Wilk normality test and skewness and kurtosis. To evaluate the normal distribution of data, Shapiro-Wilk test was highly recommended because it provided better power than the Kolmogorov-Smirnov test even after Lilliefors correction (Ghasemi & Zahediasl, 2012; Razali & Wah, 2011). The results from the Shapiro-Wilk normality test showed that the observed data on latent variables, notably talent attraction and recruitment, talent development, talent retention as well as

knowledge management had significant values of 0.000 while the variable of organizational performance of private colleges was significance at 0.003. The normality test suggested that the observed data were not normally distributed as their  $p$  (Sig.) values are smaller than the predetermined 0.05, thereby rejecting the null hypothesis which stated that the observed data is a sample from a normally distributed population. Further tests were also conducted to calculate the skewness and kurtosis values of the variables. The results confirmed that data is not normally distributed as the variables presented skewness and kurtosis whereby the  $z$ -values did not fall in the range of between -1.96 and +1.96. The study therefore concluded that the assumption of normal distribution of data was violated and as such, the non-normal distribution of data further warranted the use of PLS-SEM approach in this study.

Additionally, this study also checked for the presence of multicollinearity problem among the independent variables by assessing collinearity diagnostics using two indicators, which were tolerance and Variance Inflation Factor (i.e.  $1/\text{Tolerance}$ ). The collinearity statistics clearly showed that tolerance levels exceeded 0.2 (between 0.364 and 0.488) and a Variance Inflation Factor (VIF) was below the threshold value of 5 (between 2.047 and 2.747) for all the predictor constructs respectively. Therefore, we concluded that the phenomenon of multicollinearity among the predictor constructs did not arise in the study and as such, the independent variables used in our research model are not highly correlated.

As the data collected for this study was from a single source of information through a single questionnaire, common method variance bias might exist. Because of common method variance bias, the relationships between the variables might possibly be inflated. According to Podsakoff, MacKenzie and Lee (2003), common method biases become

problematic when a single latent factor accounted for the majority of the variance explained. To examine the possible common method bias, this study conducted Harman's single-factor test, in which all the items were subject to exploratory factor analysis (EFA). The results from the principal component analysis (PCA) suggested that 7 factors with eigenvalues greater than 1, which accounted for 66.78% of the cumulative variance. The un-rotated factor analysis further showed that the first factor only accounted for 14.48% of the total 66.78% variance. As a result of this study's factor analysis, the variables studied were clearly factorizable, as indicated by KMO Measures of Sampling Adequacy was 0.932 (larger than 0.6) and a significant Bartlett's Test of Sphericity result (Sig. = 0.000) with Approx. Chi-Square of 7194.673. Hence, the results suggested that common method variance bias was not a serious problem in our study.

In the process of undertaking exploratory factor analysis moreover, this study had produced a rotated component matrix for each of 7 factors which was extracted into the following Table 4.21. The factor loadings explained the interaction of these variables with each identified factor.

Table 4.21

*Rotated Component Matrix*

	Component						
	1	2	3	4	5	6	7
The organization actively creates developmental opportunities for potential employees.	.762						
The organization meets with staff for their career planning sessions.	.714						
We exploit external sources of knowledge effectively.	.669						
The organization carries out an objective assessment of individual's development needs.	.668						
The organization provides feedback for staff developmental purposes.	.632						
The organization encourages the coaching of staff one-on-one.	.608						
The organization has a genuine interest to foster the training and development of people.	.589						
Our knowledge management group is a recognized source of value creation within the organization.	.508						
We have effective internal procedures for transferring best practices throughout the organization.	.492						
The organization has a good reputation.		.741					
Satisfaction of clients from the organization is better in comparison to the competitors.		.703					
The organization has better quality higher educational courses in comparison to the competitors.		.696					
The organization provides better quality service in comparison to the competitors.		.689					
The organization is capable of solving new problems quickly.		.649					
The organization responds quickly to technological changes to meet its business needs.		.576					
Our organization encourages the use of knowledge for mutual benefits.		.487					
The organization builds a good working relationship with all employees.		.459					



We look for opportunities to learn more about educational services.			.814			
We look for opportunities to learn more about educational products.			.797			
We look for opportunities to learn more about technologies for organizational internal operations.			.692			
We look for opportunities to learn more about our clients.			.640			
Our organization encourages the sharing of knowledge among staff.			.581			
Our employees are valued for their knowledge.			.490			
We explicitly recognize knowledge as a key element in our strategic planning exercise.			.475			
We have developed a knowledge strategy that maps knowledge to organizational value creation.			.462			
The organization devotes time to attend to the filling of a vacancy.				.754		
The organization has a good overall knowledge of human resource recruitment process.				.692		
The organization prioritizes time to interview potential candidates.				.687		
The organization ensures that vacancies do not remain open for not more than 6 months.				.640		
The organization consistently appoints high calibre employees to key positions.				.533		
Income growth of the organization is better in comparison to the competitors.					.820	
Employees' productivity of the organization is better in comparison to the competitors.					.724	
The organization is characterized by the satisfactory profitability level.					.675	
The organization is capable of reducing costs of operation although its business is fast expanding.					.556	
The organization ensures that employees have adequate resources to complete their work.						.685
The organization allows flexibility of time for staff to attend to their family matters.						.554

We benchmark our organizational knowledge against that of our competitors.						.488	
We are able to identify sources of expertise within our organization.						.402	
The organization assures that workload is full but not excessive.							.827
The organization reduces employees from stress.							.708
The organization makes the effort to be aware of employees' personal circumstance that might affect their work.							.512

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 9 iterations.

This study next made an attempt to identify common themes by looking at the content of questions that loaded onto the same factor. From Table 4.21 shown above, the questions that loaded highly on factor 1 seemed to all related to the built-up of talents skills and knowledge competencies for improving organizational knowledge-base. Therefore, factor 1 could be labeled organizational training and learning. The questions that loaded highly on factor 2 appeared to be related to a sustainable development of the organization and hence, factor 2 could be named organizational growth. The questions that loaded highly on factor 3 were seemingly related to the sharing of knowledge among organizational employees. Therefore, factor 3 could be labeled organizational knowledge sharing. All five questions that loaded highly on factor 4 appeared to be in relation with internal and external sourcing of incumbents and as such, factor 4 could be named human capital acquisition. The next four questions that loaded highly on factor 5 seemed to all relate to the efficiency of business operation. Therefore, factor 5 could be labeled organizational operation efficiency. The questions that loaded highly on factor 6 appeared to be related to some components of preserving individual employee's knowledge through work-life balance. Therefore, factor 6 could be named work-life

balance for knowledge retention. The last three questions that loaded highly on factor 7 all seemed to relate with the organization's concern to job performance of its employees in the workplace. Therefore, factor 7 could be labeled managing of job performance.

To conclude, the factor analysis appeared to reveal that the initial questionnaires, in reality, was composed of 7 sub-scales, among others were organizational training and learning, organizational growth, organizational knowledge sharing, human capital acquisition, organizational operation efficiency, work-life balance for knowledge retention and managing of job performance.

In the next subsection that follows, this study proceeds to analyze the data further by deploying Partial Least Squares (PLS) method using SmartPLS 2 software. PLS-SEM approach is used to evaluate both the measurement and structural model. In this study therefore, the research model that explains the theoretical relationships between exogenous and endogenous latent variables are evaluated using a two-step process: i) the assessment of the measurement model and ii) the assessment of the structural model. The purpose of model validation is to determine whether the measurement and structural model meet the quality criteria for empirical work.

### **4.3 Measurement Model Evaluation**

A variance-based approach to Structural Equation Modeling or Partial Least Squares Structural Equation Modeling (PLS-SEM) technique is used to evaluate the research model described in Chapter 3. Compared to covariance-based SEM, the variance-based PLS-SEM is a robust technique characterized by distributional assumptions that are generally less restrictive. SmartPLS 2.0 M3 software (Ringle et al., 2004) is employed to perform all the PLS-SEM analyses. The software package standardizes both the raw

data of the indicators and the latent variables scores. As such, the PLS-SEM algorithm calculates standardized coefficients between -1 and +1 for every relationship in the measurement model and the structural model (Hair et al., 2014). In analyzing the data using PLS-SEM method, this present study assesses the measurement model before evaluating the structural model. As to report the results of PLS path-model, this study follows the guidelines of PLS-SEM suggested by Chin (2010) and Hair et al. (2014).

The PLS-SEM analysis begins with the evaluation on reliability and validity of the reflective measurement model using several important criteria, namely internal consistency reliability, indicator reliability, convergent validity and discriminant validity. When reliability and validity of the constructs are established, the study proceeds to investigate the hypothesized relationships and their significance in the structural model.

The following Table 4.31 presented the findings to evaluate the quality of the reflective measurement model for this study.

Table 4.31

*Measurement Model Evaluation*

Construct	Item	Loadings	AVE	Composite Reliability	T-Statistics	Cronbachs Alpha				
Talent Attraction and Recruitment	TAR1	0.8071	0.6376	0.8977	24.613	0.8574				
	TAR2	0.8451			43.009					
	TAR3	0.8030			23.557					
	TAR4	0.7995			23.405					
	TAR5	0.7338			20.256					
Talent Development	TD1	0.8198	0.6862	0.9291	31.633	0.9085				
	TD2	0.8394			40.595					
	TD3	0.7870			24.159					
	TD4	0.8515			39.251					
	TD5	0.8310			35.266					
	TD6	0.8400			32.072					
Talent Retention	TR1	0.8252	0.6050	0.8841	37.299	0.8366				
	TR2	0.7200			17.058					
	TR3	0.7293			16.626					
	TR4	0.7816			21.690					
	TR6	0.8262			30.099					
	Knowledge Management	KM5			0.7404		0.5663	0.9288	23.126	0.9151
KM6		0.7894	22.208							
KM7		0.7170	17.006							
KM8		0.7236	15.542							
KM9		0.7036	15.851							
KM10		0.7799	23.775							
KM11		0.7588	25.102							
KM12		0.7408	17.097							
KM13		0.7664	25.032							
KM14		0.7991	31.636							
Organizational Performance of Private Colleges		OP3	0.7144	0.6428	0.9347	14.675			0.9199	
		OP4	0.7093			13.844				
		OP5	0.8555			39.977				
		OP6	0.8683			41.810				
	OP7	0.8552	40.710							
	OP8	0.7983	23.963							
	OP9	0.8087	24.675							
	OP10	0.7888	24.497							

### 4.3.1 Internal Consistency Reliability

The first criterion evaluated is internal consistency reliability. Referring to Table 4.31, the results showed that the values of composite reliability (CR), a measure of internal consistency reliability for all constructs in this study ranged from 0.8841 to 0.9347, which were above the recommended threshold value of 0.8. Compared to Cronbach's alpha that represents a conservative measure of internal consistency reliability, such composite reliability (CR) value is more appropriate as it does not presume equal indicator loadings, however Cronbach's alpha assumes all indicators loadings are equal and this tends to underestimate the internal consistency reliability (Hair et al., 2014). With the values of CR exceeding 0.8, this indicated the measures used to represent the constructs have met internal consistency reliability.

The following Table 4.32 shows a summary on reliability of the measurement constructs from the main survey indicated by values of Cronbach's Alpha and composite reliability (CR) respectively.

Table 4.32

#### *Reliability of the Measures*

Measurement Constructs	Items Stated	Cronbach's Alpha	Composite Reliability
Talent Attraction and Recruitment	5 Items	0.8574	0.8977
Talent Development	6 Items	0.9085	0.9291
Talent Retention	5 Items	0.8366	0.8841
Knowledge Management	10 Items	0.9151	0.9288
Organizational Performance of Private Colleges	8 Items	0.9199	0.9347

### **4.3.2 Indicator Reliability**

Indicator reliability of the measurement model is measured by assessing the indicators loadings. It represents how much of the variation in an item is explained by the construct. A measurement model is known to have demonstrated indicator reliability when each indicator's outer loading should be at least 0.708 and is significant at least at the level of 0.05. Based on Table 4.31 above, the results implied that all latent constructs explained substantially at least 50% of each of their indicator's variance respectively given that each indicator's loading exceeded the threshold value of 0.708 required. The measurement item KM9 with loadings slightly less than 0.708 however was retained because deleting this item would not significantly increase the value of AVE and/or composite reliability (CR). Indicators such as TR5, KM1, KM2, KM3, KM4, OP1 and OP2 were deleted because of their low loadings, however the removal of these items would not affect their contributions to the content validity. All the indicators were significance at least at the level of 0.05. The results therefore suggested that all indicators used in this study had achieved indicator reliability.

### **4.3.3 Convergent Validity**

A common measure to evaluate convergent validity of the construct is its average variance extracted (AVE). Convergent validity of the measurement model is established when the reflectively measured constructs have AVE values of 0.5 or higher. A higher value of AVE more than 0.5 indicates that the latent construct explains more than half of the variance of its indicators. The results from Table 4.31 above showed that all the latent variables with AVE values ranging from 0.5663 to 0.6862, which were above the critical value of 0.5 required. This indicated that the measurement model in this study had demonstrated adequate convergent validity.

Table 4.33 below summarizes convergent validity for all the constructs measured by average variance extracted (AVE) values.

Table 4.33

*Convergent Validity of Constructs*

Constructs	Average Variance Extracted (AVE)
Talent Attraction and Recruitment	0.6376
Talent Development	0.6862
Talent Retention	0.6050
Knowledge Management	0.5663
Organizational Performance of Private Colleges	0.6428

#### 4.3.4 Discriminant Validity

Discriminant validity is the extent to which a construct is distinct from other constructs, in terms of how much one construct correlates with other constructs of the model and also how much indicators represent a single construct only (Hair et al., 2014). In this study's measurement model, the reflective construct's discriminant validity is evaluated using two measures which are (i) cross-factor loadings and (ii) Fornell-Larcker's criterion. A measurement model exhibits discriminant validity when (i) the indicator's loadings on the respective construct are highest compared to all of its loadings on other constructs and (ii) the square root of each construct's AVE exceeds the correlations between the construct and all other constructs in the model.

Table 4.34 below showed the output of cross-factor loadings between the constructs and indicators used that was generated by the SmartPLS algorithm function.



Table 4.34

*Output of Cross-Factor Loadings*

	College Perf	KMGT	Talent Attraction and Recruitment	Talent Development	Talent Retention	T-Statistics
KM10	0.5143	<b>0.7799</b>	0.4624	0.5385	0.5017	23.775
KM11	0.5633	<b>0.7588</b>	0.4107	0.5311	0.4525	25.102
KM12	0.5673	<b>0.7408</b>	0.4996	0.5840	0.5043	17.097
KM13	0.5101	<b>0.7664</b>	0.4188	0.6222	0.4969	25.032
KM14	0.5962	<b>0.7991</b>	0.4803	0.6039	0.5517	31.636
KM5	0.4288	<b>0.7404</b>	0.5477	0.5830	0.5409	23.126
KM6	0.5538	<b>0.7894</b>	0.4725	0.5293	0.4846	22.208
KM7	0.4252	<b>0.7170</b>	0.4084	0.3742	0.3501	17.006
KM8	0.4387	<b>0.7236</b>	0.4593	0.3712	0.3927	15.542
KM9	0.4481	<b>0.7036</b>	0.4662	0.4015	0.4135	15.851
OP10	<b>0.7888</b>	0.5474	0.4260	0.5063	0.4660	24.497
OP3	<b>0.7144</b>	0.4440	0.2786	0.3136	0.2988	14.675
OP4	<b>0.7093</b>	0.4829	0.3780	0.4177	0.3355	13.844
OP5	<b>0.8555</b>	0.5889	0.4707	0.5399	0.4983	39.977
OP6	<b>0.8683</b>	0.5872	0.5065	0.5710	0.5384	41.810
OP7	<b>0.8552</b>	0.5699	0.4292	0.5172	0.5028	40.710
OP8	<b>0.7983</b>	0.5327	0.4076	0.5168	0.4478	23.963
OP9	<b>0.8078</b>	0.5653	0.4134	0.4700	0.4245	24.675
TAR1	0.4041	0.4820	<b>0.8071</b>	0.5529	0.5311	24.613
TAR2	0.4564	0.4978	<b>0.8451</b>	0.5927	0.5805	43.009
TAR3	0.4413	0.5459	<b>0.8030</b>	0.6069	0.5492	23.557
TAR4	0.4085	0.4581	<b>0.7995</b>	0.4598	0.4619	23.405
TAR5	0.3674	0.4640	<b>0.7338</b>	0.4692	0.4848	20.256
TD1	0.5327	0.5899	0.5920	<b>0.8198</b>	0.5995	31.633
TD2	0.4597	0.5874	0.6260	<b>0.8394</b>	0.6226	40.595
TD3	0.4628	0.5283	0.5204	<b>0.7870</b>	0.5543	24.159
TD4	0.5825	0.6098	0.5944	<b>0.8515</b>	0.6414	39.251
TD5	0.4544	0.5352	0.4796	<b>0.8310</b>	0.5674	35.266
TD6	0.5153	0.5888	0.5350	<b>0.8400</b>	0.6349	32.072
TR1	0.5286	0.5833	0.5639	0.6385	<b>0.8252</b>	37.299
TR2	0.3759	0.3705	0.5031	0.4081	<b>0.7200</b>	17.058
TR3	0.3827	0.4545	0.4553	0.5219	<b>0.7293</b>	16.626
TR4	0.3772	0.4881	0.5122	0.6161	<b>0.7816</b>	21.690
TR6	0.4680	0.5186	0.5108	0.6199	<b>0.8262</b>	30.099

Table 4.34 demonstrated that all measurement items loaded higher on their respective intended latent construct as compared to other constructs. It had also shown that the loadings factor of each block was higher than any other blocks in the same rows and columns. The loadings factor clearly separated each latent construct as theorized in the conceptual model. Therefore, the results of the cross-factor loadings confirmed the first assessment on discriminant validity of the measurement model.

The second assessment to our measurement model's discriminant validity was the Fornell-Larcker's criterion. It compared the square root of the AVE values with the latent construct correlations. A valid construct was confirmed if the square root of its AVE value was greater than its highest correlation with any other constructs. The following Table 4.35 illustrated a comparison of the square root of each reflective construct's AVE value and the intercorrelation values between constructs.

Table 4.35

*Fornell-Larcker's Criterion*

	College Perf	KMGT	Talent Attraction and Recruitment	Talent Development	Talent Retention
College Perf	<b>0.8018</b>				
KMGT	0.6766	<b>0.7525</b>			
Talent Attraction and Recruitment	0.5221	0.6149	<b>0.7985</b>		
Talent Development	0.6083	0.6938	0.6755	<b>0.8284</b>	
Talent Retention	0.5557	0.6297	0.6553	0.7300	<b>0.7778</b>

The elements in bold shown in Table 4.35 represented the square root of AVE values and the non-bolded elements reflected the intercorrelation values between constructs in the model. The results indicated that all square roots of the AVE values exceeded the off-diagonal elements in their corresponding row and column. Based on Table 4.35, it was inferred from the results that all off-diagonal (i.e. non-bolded) elements were lower

than all the square roots of the AVE values (i.e. bolded on the diagonal). The results confirmed that the Fornell-Larcker's criterion was satisfied and as such, all the reflective constructs in this study were valid by empirical standards. This study therefore concluded that the measurement model established its discriminant validity, which implied the construct was distinctive and captured phenomena not represented by other constructs in the model. The following Table 4.36 reports the outcomes to the measurement model evaluation of this study.

Table 4.36

*Summary of the Outcomes to Measurement Model*

	Assessment	Criterion	Outcomes
1	Indicator Reliability	Indicator Loadings	All items loadings exceeded 0.708, ranging from 0.7036 to 0.8683, thus demonstrating indicator reliability. All items were significant at the 0.05 level.  Items TR5, KM1, KM2, KM3, KM4, OP1 and OP2 were removed because their loadings were less than 0.708. The item KM9 loaded less than 0.708 was retained because removing this item did not change significantly the composite reliability (CR) value or AVE.
2	Internal Consistency	Composite Reliability	Composite reliability for all constructs exceeded 0.8, ranging from 0.8841 to 0.9347 and therefore demonstrating internal consistency reliability.
3	Convergent Validity	Average Variance Extracted (AVE)	Each construct has AVE exceeding 0.5, thus demonstrating convergent validity.
4	Discriminant Validity	Cross-Factor Loadings  Fornell-Larcker Criterion	Measurement items loaded higher on their respective intended latent construct as compared to other constructs.  The square-root of AVE exceeded the correlations between the construct and other constructs in the model.  The output of cross-factor loadings and Fornell-Larcker criterion demonstrated adequate discriminant validity.

Overall, Table 4.36 above on the outcomes for reliability and validity tests were satisfactory and supportive of the measurement model that it was valid and fit to be used to examine the structural model's predictive capability and the hypothesized relationships between the latent constructs in this study.

The following section investigates the validity of the structural model to decide whether the hypotheses associated with the structural model are empirically supported by the data. In this study, the structural model is evaluated using the coefficients of determination ( $R^2$ ), the level and significance of the path-model coefficients.

#### **4.4 Structural Model Evaluation**

When assessing the structural model of this study, PLS-SEM method is used to predict the endogenous latent constructs and to estimate path coefficients as well as to test the hypothesized relationships between latent constructs. In particular, a variance-based approach of PLS-SEM is suitable to this study as it focuses on the prediction to key target construct of organizational performance of private colleges. Therefore, PLS-SEM fits the model to the 243 sample data of this study to attain the best parameter estimates by maximizing the amount of the variance explained of the dependent latent construct. This is done by evaluating the most common measure which is the coefficients of determination (the  $R^2$  value) for each endogenous construct to predict the structural model. With the  $R^2$  value ranging from 0 to 1, a larger  $R^2$  value therefore increases the predictive accuracy of the structural model.

A run of SmartPLS algorithm function was to examine the  $R^2$  values of the endogenous latent variables. According to Chin (1998a), the  $R^2$  values of 0.67, 0.33 and 0.19 were considered as substantial, moderate and weak respectively. From the results of PLS

algorithm, the  $R^2$  values of KMGT (i.e. knowledge management) and College Perf (i.e. organizational performance of private colleges) were 0.536 and 0.502 respectively, which provided a moderately strong explanatory power. These findings implied 53.6% of the amount of variance of knowledge management (KMGT) was simultaneously influenced by the management of talent attraction and recruitment, talent development and talent retention, while the remaining 46.4% was affected by other factors in addition to 50.2% of the amount of variance in organizational performance of private colleges (College Perf) was explained by the model.

After running the SmartPLS algorithm, this study then proceeds to test the path-coefficient estimates and their  $t$ -statistics for the structural model relationships, which demonstrated the hypothesized causal relationships among the constructs. Each path that connects two latent variables represented a hypothesis within the structural model. The individual path coefficient of the PLS structural model indicates standardized values (or standardized beta coefficient,  $\beta$ ) between -1 (strong negative relationship) and +1 (strong positive relationship). The weaker would be the relationship when the estimated path-coefficient is closer to 0 and that the lower the value closer to 0 would have no impact to the model and is usually non-significant (Hair, et al., 2014). When the path-coefficient is significance at a certain error probability (usually at 5% significant level for business research), then such significance demonstrates the hypothesized direction that empirically supports the causal relationship proposed between two latent constructs. The significance of a hypothesized relationship occurs when its empirical  $t$ -value is larger than the critical value.

In examining the proposed hypotheses of this study, the SmartPLS bootstrapping function was used to generate the parameter estimates and its significance of the PLS

path model. As recommended by Hair et al. (2014), this study generated 5000 bootstrap samples from 243 observed cases originally used with a ‘no sign change option’ to estimate the path-model coefficients and their significance. The results from SmartPLS bootstrapping function were shown in Table 4.41.

Table 4.41

*Significance Testing Results of the Structural Model Path Coefficients*

Hypothesis	Relationship	Standardized Beta Coefficient, $\beta$	Standard Error (SE)	t-Value	Decision
H1	TARecruitment -> College Perf	0.0529	0.0819	0.645	Not Supported
H2	TDevelopment -> College Perf	0.1851	0.0902	2.051*	Supported
H3	TRetention -> College Perf	0.1014	0.0949	1.068	Not Supported
H4	KMGT -> College Perf	0.4518	0.0749	6.031**	Supported
H5	TARecruitment -> KMGT	0.2122	0.0810	2.621**	Supported
H6	TDevelopment -> KMGT	0.4115	0.0919	4.480**	Supported
H7	TRetention -> KMGT	0.1902	0.0885	2.151*	Supported

Note: Significant at \* $p < 0.05$  and \*\* $p < 0.01$

Referring to Table 4.41, the assessment of the structural model in this study overall showed that the proposed hypotheses H4, H5 and H6 were supported at the significance level 1% while the proposed hypotheses H2 and H7 were supported at the 5% significance level for a one-tailed test, all indicating the expected positive sign direction with path-coefficient estimates ( $\beta$ ) ranging from 0.1851 to 0.4518. The proposed hypotheses H1 and H3 however, were found not significance at the level of 5% and hence, the hypotheses were not supported.

Based on the analysis above, the practice of managing talent development (TDevelopment) had a significant positive relationship with organizational performance of private colleges ( $\beta = 0.1851$ ,  $t = 2.051$ ,  $p < 0.05$ ) and hence, hypothesis H2 was

supported. The practices of managing talent attraction and recruitment (TARecruitment) as well as talent retention (TRetention) however, were found not significantly associated with the organizational performance of private colleges (College Perf) and therefore, the study failed to support proposed hypotheses H1 and H3 respectively.

Meanwhile, knowledge management (KMGT) was reported to have a significant direct positive relationship with the organizational performance of private colleges ( $\beta = 0.4518$ ,  $t = 6.031$ ,  $P < 0.01$ ). As a result, the proposed hypothesis H4 was supported.

Similarly, managing talent attraction and recruitment was shown to have a significant direct positive influence on knowledge management among private colleges ( $\beta = 0.2122$ ,  $t = 2.621$ ,  $p < 0.01$ ) and as a result, the hypothesis H5 was established.

By the same token, the analysis of the results also showed that managing talent development significantly had a direct positive influence on knowledge management among private colleges ( $\beta = 0.4115$ ,  $t = 4.480$ ,  $p < 0.01$ ) and therefore, the hypothesis H6 was supported.

The results of this empirical study further highlighted a significant direct positive influence of managing talent retention on knowledge management among private colleges ( $\beta = 0.1902$ ,  $t = 2.151$ ,  $p < 0.05$ ) and thus, statistically supporting the proposed hypothesis H7.

The following Table 4.42 summarized the hypotheses testing and their outcomes to the results shown in the above.

Table 4.42

*Summary of the Hypotheses Testing and Results*

Hypotheses Testing and Results	Decision Outcomes
<p>H1: There is a significant positive relationship between managing talent attraction and recruitment with organizational performance of private colleges.</p> <p>Result: No significant relationship was found between managing talent attraction and recruitment with organizational performance of private colleges.</p>	Not Supported
<p>H2: There is a significant positive relationship between managing talent development and organizational performance of private colleges.</p> <p>Result: A significant positive relationship was shown between managing talent development and organizational performance of private colleges, with the path-coefficient, <math>\beta = 0.1851</math>, t-value = 2.051 at a significant level of 0.05, <math>p &lt; 0.05</math>.</p>	Supported
<p>H3: There is a significant positive relationship between managing talent retention and organizational performance of private colleges.</p> <p>Result: No significant relationship was found between managing talent retention and organizational performance of private colleges.</p>	Not Supported
<p>H4: Knowledge management has a significant direct positive relationship with organizational performance of private colleges.</p> <p>Result: A significant direct positive relationship was found between knowledge management and organizational performance of private colleges, with the path-coefficient, <math>\beta = 0.4518</math>, t-value = 6.031 at a significant level of 0.01, <math>P &lt; 0.01</math>.</p>	Supported
<p>H5: Managing talent attraction and recruitment has a significant direct positive influence on knowledge management.</p> <p>Result: A significant direct positive influence was shown on managing talent attraction and recruitment towards knowledge management among private colleges, with the path-coefficient, <math>\beta = 0.2122</math>, t-value = 2.621 at a significant level of 0.01, <math>p &lt; 0.01</math>.</p>	Supported



<p>H6: Managing talent development has a significant direct positive influence on knowledge management.</p> <p>Result: A significant direct positive influence was shown on managing talent development towards knowledge management among private colleges, with the path-coefficient, <math>\beta = 0.4115</math>, t-value = 4.480 at a significant level of 0.01, <math>p &lt; 0.01</math>.</p>	Supported
<p>H7: Managing talent retention has a significant direct positive influence on knowledge management.</p> <p>Result: A significant direct positive influence was shown on managing talent retention towards knowledge management among private colleges, with the path-coefficient, <math>\beta = 0.1902</math>, t-value = 2.151 at a significant level of 0.05, <math>p &lt; 0.05</math>.</p>	Supported

Next, the study continues to run the blindfolding procedure to obtain the  $Q^2$  value for each endogenous latent construct in evaluating the predictive relevance of the path model. The blindfolding procedure is applied as this study has endogenous latent constructs with a reflective measurement model specification. Given that 243 cases used, an omission distance of  $D = 7$  was chosen such that the number of observed cases ( $N = 243$ ) used from the model estimation divided by  $D$  should not be an integer. By using the cross-validated redundancy as a recommended measure to the model's predictive relevance, the results from the last column of the default report (i.e.  $1 - SSE/SSO$ ) showed the value of the predictive relevance  $Q^2$ . In our study's path model therefore, the predictive relevance  $Q^2$  of KMGT (i.e. knowledge management) and College Perf (i.e. private colleges performance) equals to a value of 0.2908 and 0.3186 respectively. The results revealed that all  $Q^2$  values were above zero, indicating that the structural model exhibited predictive relevance for all the endogenous latent constructs.

In short, a diagram of this study's structural model that depicted all path coefficients estimated and the  $R^2$  measures of endogenous latent constructs (as appeared inside the circle) is exhibited in Figure 4.4 as follows:

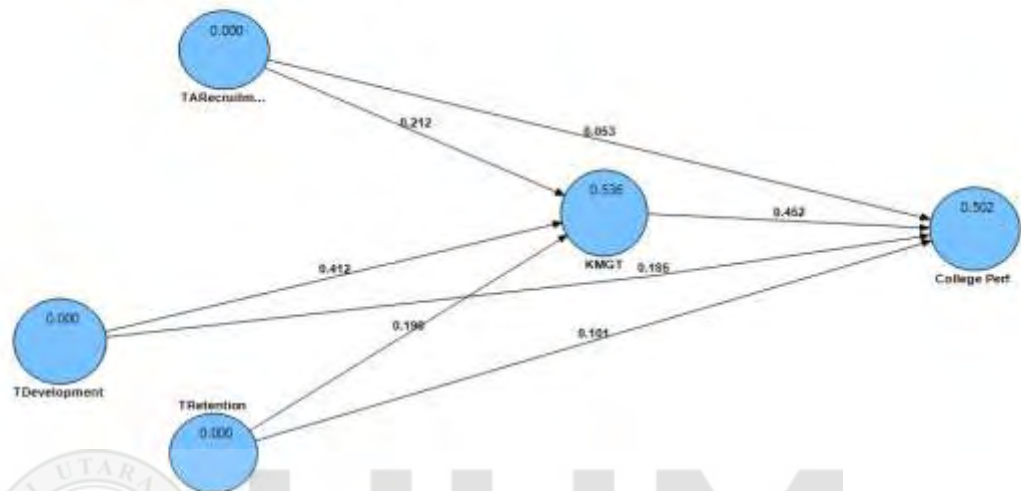


Figure 4.4

*$R^2$  measures and path coefficients of the structural model*

The next section of this study is dedicated to investigate the direct and indirect relationships between exogenous and endogenous latent variables which is another important evaluation of the structural model. Such direct and indirect relationships can therefore be examined by conducting mediation analysis.

#### 4.5 Mediation Analysis

Mediation arises when a predictor variable affects a criterion variable through at least one intervening variable or mediator and thereby, a mediating variable reveals the true relationship between a predictor variable and an outcome variable. In the PLS path-model, mediation is a situation in which a mediating variable to some extent absorbs the

effect of an exogenous on an endogenous latent variable. For this present study in conducting mediation analysis, it follows Preacher and Hayes (2008) to bootstrap the sampling distribution of the indirect effect using the guidelines proposed by Baron and Kenny's (1986). Bootstrapping is a non-parametric resampling procedure for testing mediation effects that makes no assumptions of normality of the sampling distribution and is applicable to small sample sizes with more confidence (Hair et al., 2014).

#### 4.5.1 Assessment of the Direct Effects without the Mediator

At the beginning of the analysis, the PLS path model in our study was estimated in the absence of the mediator variable KMGT. Table 4.51 showed the path coefficients significance which was resulted from running the bootstrapping routine (i.e. with 243 cases, 5000 bootstrap samples and no sign change option).

Table 4.51

*Significance Testing Results of Path Coefficients without the Mediator*

Relationship	Path-Coefficient, $\beta$	Standard Error (SE)	T-Statistics	p-value
TARecruitment -> College Perf	0.1460	0.0867	1.6827	0.046
TDevelopment -> College Perf	0.3755	0.0905	4.1511	0.000
TRetention -> College Perf	0.1905	0.1047	1.819	0.034

Note: Coefficients of Determination of College Perf,  $R^2 = 0.413$

Without the mediator variable of KMGT in the PLS path model, the results showed a significant positive relationship between TARecruitment and College Perf, TDevelopment and College Perf as well as between TRetention and College Perf for a given  $p$ -value of 0.046 and below. The coefficients of determination,  $R^2$  value of College Perf was reported as 0.413, which indicated 41.3% of the variance of organizational performance of private colleges was explained by the management of

talent attraction and recruitment, talent development and talent retention when the mediator variable was excluded. With a significant relationship between the independent variables and the dependent variable shown, this allowed the study to focus on mediation analysis by including the mediator variable into the PLS path model to evaluate the significance of the indirect effect.

#### **4.5.2 Assessment of the Indirect Effects and Bootstrapped Confidence Interval**

At the beginning of mediation analysis, the study was to investigate whether the indirect effects of TAREcruitment, TDevelopment and TRetention, via the KMGT mediator variable on College Perf was significant. The significance of the indirect effect was again tested using a bootstrapping procedure with 243 cases, 5000 subsamples and a 'no sign change option' in SmartPLS 2.

The indirect effect was the product of the direct effects between TAREcruitment and KMGT, TDevelopment and KMGT, TRetention and KMGT as well as between KMGT with College Perf respectively. In such a case, the indirect effect was found by multiplying the path coefficients of two endogenous latent variables. On the one hand, the product of these direct effects had to be calculated for each of the 5000 subsamples while on the other hand, the standard errors of each path coefficient could be computed from the bootstrapping results for the indirect effect. Such computations could be carried out using the function STDEV available in Microsoft Excel. The bootstrap standard errors were then used to approximate the empirical *t*-values of the indirect effect which was the product of two path coefficients divided by the bootstrapping standard errors.

The following Table 4.52 summarized the bootstrapping results of the indirect effect with the product of two path coefficients, bootstrap standard errors and their empirical *t*-values respectively.

Table 4.52

*Bootstrapping Results of the Indirect Effects*

Relationship	Indirect Effect	Standard Error (SE)	t-Value
TARecruitment -> KMGT -> College Perf	0.0959	0.0403	2.379*
TDevelopment -> KMGT -> College Perf	0.1859	0.0497	3.740**
TRetention -> KMGT -> College Perf	0.0859	0.0438	1.961*

Note: Significant at \**p* < 0.05 and \*\**p* < 0.01

Based on the bootstrapping results shown in Table 4.52, all the 3 indirect effects with path coefficients,  $\beta = 0.0959$ ,  $\beta = 0.1859$  and  $\beta = 0.0859$  were significant at the empirical *t*-values of 2.379, 3.740 and 1.961 respectively. A significant indirect effect therefore, was shown in the relationships between TARecruitment, TDevelopment and TRetention with College Perf via the KMGT mediator. The significant indirect effect was necessary to conclude that knowledge management (KMGT) mediated the relationships between the management of talent attraction and recruitment (TARecruitment), talent development (TDevelopment) and talent retention (TRetention) with organizational performance of private colleges (College Perf).

To further ascertain the significance of mediation effects of knowledge management in the PLS path model, this study also needs to compute the 95% bootstrapped confidence interval. The results of the bootstrapped indirect effect with its 95% confidence interval were presented in the following Table 4.53.

Table 4.53

*Bootstrapped Confidence Interval*

Relationship	Indirect Effect	Standard Error (SE)	Lower Limit (LL)	Upper Limit (UL)	95% Bootstrapped Confidence Interval
TARecruitment -> KMGT -> College Perf	0.0959	0.0403	0.0169	0.1749	[LL = 0.0169, UL = 0.1749]
TDevelopment -> KMGT -> College Perf	0.1859	0.0497	0.0885	0.2833	[LL = 0.0885, UL = 0.2833]
TRetention -> KMGT -> College Perf	0.0859	0.0438	0.0001	0.1717	[LL = 0.0001, UL = 0.1717]

Referring to Table 4.53, for a significance level of 5%, the resulting confidence interval reported a lower limit of 0.0169 and an upper limit of 0.1749 for the indirect effect between TARecruitment and College Perf through KMGT. Similarly, the resulting confidence interval highlighted a lower limit of 0.0885 and an upper limit of 0.2833 for the indirect effect between TDevelopment and College Perf via KMGT. As to the indirect effect between TRetention to KMGT and KMGT to College Perf, the resulting confidence interval showed a lower limit of 0.0001 and an upper limit of 0.1717 respectively. As suggested by Preacher and Hayes (2008), the indirect effects 95% Boot CI: [LL = 0.0169, UL = 0.1749], [LL = 0.0885, UL = 0.2833] as well as [LL = 0.0001, UL = 0.1717] did not fall in between a zero within the confidence interval at the given significance level of 5% and thus, supporting the mediation effects of knowledge management.

Overall, this study concluded that the mediation effects were statistically significance, indicating that knowledge management, KMGT as a mediator variable absorbs some of the direct effects of managing talent practices on organizational performance of private colleges in Malaysia.

### 4.5.3 Evaluation of the Mediation Relationship in PLS Path Model

Having identified knowledge management as a potential mediator variable in this study, the results of the significance effects of knowledge management mediating the relationships between managing talent attraction and recruitment, talent development and talent retention with respect to organizational performance of private colleges were outlined in the following Table 4.54.

Table 4.54

#### *Significance Testing Results of the Mediation Effects*

Hypothesis	Relationship	Path Coefficient $\beta$	Standard Error (SE)	t-Value	Decision
H8	TARecruitment -> KMGT -> College Perf	0.0959	0.0403	2.379*	Supported
H9	TDevelopment -> KMGT -> College Perf	0.1859	0.0497	3.740**	Supported
H10	TRetention -> KMGT -> College Perf	0.0859	0.0438	1.961*	Supported

Note: Significant at \* $p < 0.05$  and \*\* $p < 0.01$

In light of our analysis above, the empirical results revealed that knowledge management significantly mediated the relationship between managing talent attraction and recruitment and organizational performance of private colleges ( $\beta = 0.0959$ ,  $t = 2.379$ ,  $p < 0.05$ ). As a result, the proposed hypothesis H8 was established. Similarly, knowledge management was identified to significantly mediate the relationship between managing talent development and organizational performance of private colleges ( $\beta = 0.1859$ ,  $t = 3.740$ ,  $p < 0.01$ ) and therefore, the proposed hypothesis H9 was statistically supported. And lastly, the relationship between managing talent retention and organizational performance of private colleges was significantly mediated by knowledge management ( $\beta = 0.0859$ ,  $t = 1.961$ ,  $p < 0.05$ ) and this resulted in supporting the proposed hypothesis H10.

Table 4.55 below provided a summary of the hypotheses testing and their decision outcomes to the results on the mediation relationship of knowledge management.

Table 4.55

*Summary of Hypotheses Testing and Results on the Mediation Relationship*

Hypotheses Testing and Results	Decision Outcomes
<p>H8: Knowledge management significantly mediates the relationship between managing talent attraction and recruitment and organizational performance of private colleges.</p> <p>Result: Knowledge management is found to have significantly mediated the relationship between managing talent attraction and recruitment and organizational performance of private colleges, shown by the path-coefficient, <math>\beta = 0.0959</math>, t-value = 2.379 at a significant level of 0.05, <math>p &lt; 0.05</math>.</p>	Supported
<p>H9: Knowledge management significantly mediates the relationship between managing talent development and organizational performance of private colleges.</p> <p>Result: Knowledge management is found to have significantly mediated the relationship between managing talent development and organizational performance of private colleges, shown by the path-coefficient, <math>\beta = 0.1859</math>, t-value = 3.740 at a significant level of 0.01, <math>p &lt; 0.01</math>.</p>	Supported
<p>H10: Knowledge management significantly mediates the relationship between managing talent retention and organizational performance of private colleges.</p> <p>Result: Knowledge management is found to have significantly mediated the relationship between managing talent retention and organizational performance of private colleges, shown by the path-coefficient, <math>\beta = 0.0859</math>, t-value = 1.961 at a significant level of 0.05, <math>p &lt; 0.05</math>.</p>	Supported



By not rejecting the last three proposed hypotheses as shown above (that are H8, H9 and H10), this empirical study overall concluded that knowledge management significantly mediated the relationships between TARecruitment and College Perf, TDevelopment and College Perf as well as between TRetention and College Perf.

Through the mediation analysis in this study, it was also found that the introduction of knowledge management as a mediator variable, KMGT had increased the reported  $R^2$  measure of organizational performance of private colleges from 0.413 (or 41.3%) to 0.502 (or 50.2%) in the PLS path-model.

A further observation to our PLS path model found that without a potential mediator variable (refer to Table 4.51) however, the positive direct effect between the exogenous and endogenous latent variables had been reduced after the inclusion of the mediator variable KMGT (refer to Table 4.41). In all instances therefore, the inclusion of knowledge management (KMGT) as a mediator variable had reduced the positive direct effect between TARecruitment and College Perf when the coefficient value declined from 0.1460 to 0.0529. The positive direct effect between TDevelopment and College Perf also became much smaller from 0.3755 to 0.1851 after knowledge management as a mediator of talent development's influence on organizational performance of private colleges was included. On a similar note, the positive direct effect between TRetention and College Perf shrank from 0.1905 to 0.1014 upon the presence of knowledge management as a mediating variable in the PLS path model.

The study finally in determining the strength of mediation is to find out how much the mediator variable KMGT has absorbed the direct effect, it needs to perform the Variance Accounted For (VAF) assessment whereby VAF is equal to the indirect effect

divided by the total effect (that is, direct effect + indirect effect). The value obtained is ranged between 0 and 1 or from 0% to 100% (Hair et al., 2014).

Referring to the path-model in Figure 4.4, the direct effect of TARecruitment on College Perf had a value of 0.053, while the indirect effect via KMGT had a value of 0.096. As such, the total effect had a value of 0.149 and the VAF amounted to 0.644 ( $0.096/0.149$ ). This result implied 64.4% of TARecruitment's effect on College Perf was explained via the KMGT mediator. Similarly, the direct effect of TDevelopment on College Perf showed a value of 0.185, whereas for the indirect effect via KMGT showed a value of 0.186. Consequently, the total effect attained a value of 0.371 and the VAF equaled to 0.501 ( $0.186/0.371$ ). Therefore, 50.1% of the effect of TDevelopment on College Perf was explained via KMGT mediator. Moreover, the direct effect of TRetention on College Perf indicated a value of 0.101, and the indirect effect via KMGT indicated a value of 0.086. This resulted in total effect of 0.187 with the VAF had a value of 0.46 ( $0.086/0.187$ ), which implied 46% of TRetention's effect on College Perf was explained via KMGT mediator.

The Variance Accounted For (VAF) in all three situations abovementioned was larger than 20% but less than 80% and therefore, the study concluded that knowledge management as the mediator variable partially mediated the relationships between the practices of managing talent attraction and recruitment, talent development and talent retention with respect to organizational performance of Malaysian private colleges.

In the next section that follows, the findings of this study are discussed in accordance with the underlying research objectives described in Chapter 1. It highlights the findings of this study in relation to previous research, and also discusses whether the findings support and extend the field of study.

## 4.6 Discussion of Findings

Empirical findings of this study are discussed in relation to the hypotheses testing results shown from the previous subsection aligned with the four research objectives outlined in Chapter 1. The following Table 4.61 highlights a summary on the outcomes of hypotheses tested in accordance with the underlying research objectives of this study.

Table 4.61

### *Summary of Research Objectives and Hypotheses Testing*

Research Objectives and Hypotheses Statements	Testing Outcomes
<p><b>Research Objective 1 (RO1):</b> To examine the relationships between practices of managing talent attraction and recruitment, talent development and talent retention with organizational performance of private colleges in Malaysia.</p>	
H1: There is a significant positive relationship between managing talent attraction and recruitment with organizational performance of private colleges.	Not Supported
H2: There is a significant positive relationship between managing talent development and organizational performance of private colleges.	Supported
H3: There is a significant positive relationship between managing talent retention and organizational performance of private colleges.	Not Supported
<p><b>Research Objective 2 (RO2):</b> To determine the relationship between knowledge management and organizational performance of private colleges in Malaysia.</p>	
H4: Knowledge management has a significant direct positive relationship with organizational performance of private colleges.	Supported
<p><b>Research Objective 3 (RO3):</b> To identify the prediction level of managing talent practices on knowledge management among private colleges in Malaysia.</p>	

H5: Managing talent attraction and recruitment has a significant direct positive influence on knowledge management.	Supported
H6: Managing talent development has a significant direct positive influence on knowledge management.	Supported
H7: Managing talent retention has a significant direct positive influence on knowledge management.	Supported
<b>Research Objective 4 (RO4):</b> To evaluate whether knowledge management mediates the relationship between practices of managing talent attraction and recruitment, talent development and talent retention on organizational performance of private colleges in Malaysia.	
H8: Knowledge management mediates the relationship between managing talent attraction and recruitment and organizational performance of private colleges.	Supported
H9: Knowledge management mediates the relationship between managing talent development and organizational performance of private colleges.	Supported
H10: Knowledge management mediates the relationship between managing talent retention and organizational performance of private colleges.	Supported

In investigating the relationship between the management of talent practices and organizational performance of private colleges aligned with research objective one (RO1), a number of past literatures (Lockwood, 2006; Scullion, Collings & Caliguri, 2010; Schuler, Jackson & Tarique, 2011; Sheehan, 2012; Liu & Pearson, 2014, Ulrich, 2015) have concluded that management of talent drives business performance of private-sector corporations. In contrast to the earlier past studies however, this present study by segregating talent management into the practices of managing talent attraction and recruitment, talent development and talent retention finds that managing talent development has a significant positive relationship with organizational performance of

private colleges. As such, the practice of managing talent development is a significant predictor contributing to organizational performance of private colleges in Malaysia. The study has nevertheless shown that the practices of managing talent attraction and recruitment in addition to managing talent retention are not significantly associated to the organizational performance of private colleges.

In relation to organizational performance of private colleges, managing talent development represents an important factor to manage organizational talented employees in meeting the current and future dynamics requirements of the private higher education business in an increasingly competitive business environment. This result corroborates with some studies by Davies and Davies (2010) and Mohan, Muthaly and Annakis (2015) that talent development is fundamentally related to key processes such as performance management in private higher academic institutions. With a pool of talent workforce available in an organization, it is considered a valuable strategic resource to competitive success in businesses (CIPD, 2011; Scullions & Collings, 2011) and by managing the development of talent workforce results in the up-scaling of their skills and knowledge which in turn contributes to better business outcomes and thereby, benefiting the organizational performance of private colleges.

Empirical findings in this study are moreover consistent with a cross-sectional study by Poorhosseinzader and Subramaniam (2012) on Malaysian multinational corporations that have found a significant positive relationship between talent development and the business success of the organizations. The findings of this study are also aligned with Debowski (2006), Gandz (2006), Abel (2008) and Festing and Eidems (2011) in which talent development and its processes such as succession planning and mentoring have to be understood in an organizational context so that it could contribute to achieving

competitive advantage. It further provides a strong support to the study by Quddus (2015) that has contended strategic human resource management practices of developing talent in the areas of technical and managerial competencies to make a difference to modern organizations in realizing a competitive advantage to organizational success.

The practice of managing talent attraction and recruitment on the other hand, has not shown a significant contribution to the organizational performance of private colleges. The current finding appears to support the study by Armstrong (2012) that talent management strategies do not have a direct relationship with organizational performance. It is possibly because the attracted and newly-hired talents have to spend much time and effort to learn, explore and understand about the business operations of the institutions within a highly competitive environment before they are able to make a significant contribution to the organizational performance of private colleges in Malaysia. However, the findings of this present study are in contrast to those previous studies by Syed and Jama (2012), Nizar et al. (2014), Ekwoaba, Ikeije and Ufoma (2015) as well as Auranzeb and Bhutto (2016) that have found a significantly positive influence of talent attraction and recruitment on organizational performance.

Furthermore, this present study has also found that managing talent retention is not significantly associated with organizational performance of private colleges and as a result, it provides no evidence to support the findings of Chikumbi (2011), Nizar et al. (2014), Maliku (2014), Lyria (2015) and Auranzeb and Bhutto (2016) for a successful business performance. The results of this study further suggest that high performers who have stayed long within the academic institutions are planning to leave their current job positions for better job employment opportunities elsewhere and as such,

they have ceased to make meaningful contributions to the business performance of private colleges over time. It thus becomes difficult to retain talented employees in the private colleges as talented employees are constantly looking for challenging tasks and better prospects in advancing their personal growth and achievements. As such, private colleges that do not meet the needs and aspirations of talents who are constantly demanding nowadays will result to the departure of these high-performing employees to other industrial sectors and consequently, talents with the intention to leave their job positions do not make a critical impact to the organizational performance of private colleges over time.

While managing talent development is significantly related to organizational performance of private colleges, the practices of managing talent that involve managing talent attraction and recruitment, talent development and talent retention are each predicted to have a direct and significant positive influence on knowledge management among private colleges. Empirical results of this study therefore affirm the explanations offered by other past researchers (Crisp & Reid, 2007; Vance & Vaiman, 2008; Whelan, Collings & Donnellan, 2010; Whelan and Carcary, 2011; Urbancova & Vnouckova, 2015) that have summed up talent management positively influences the management of organizational knowledge. From our research objective three (RO3) outlined, this study recognizes the knowledge-based perspective that by managing talent practices from all three aspects of attraction and recruitment, development and retention of intellectual asset would effectively result in the transferring of individual's knowledge and skills through their network learning and social contacts established with other employees which in turn contributes to the activities of managing knowledge within the educational organization.

It follows that the study's empirical results have further shown managing talent development exerts the most significant influence on knowledge management among private colleges, after which is by managing talent attraction and recruitment and lastly is managing talent retention in influencing knowledge management among the Malaysian private colleges.

In order to meet research objective two (RO2) that outlines the relationship between knowledge management and organizational performance of private colleges, the findings of this present study have revealed a direct positive relationship of knowledge management towards the organizational performance of private colleges. Such result provides a strong support to the findings of previous research studies (Zack, McKeen & Singh, 2009; Turner & Minnone, 2010; Liao, 2011, Jelena, Vesna & Mojca, 2012; Inkinen, Kianto & Vanhala, 2015) that the initiatives of knowledge management positively influence the organization performance. Within the context of higher education in Malaysia, the results of our study appears to corroborate with the research done earlier by Tasmin et al. (2010), Lim (2012) and Nasiruzzaman, Qudaih and Dahlan (2013) that have suggested the higher the level of knowledge management activities involved, the better outcome will be to the organizational performance of higher academic institutions.

As to evaluate whether knowledge management mediates the relationships between managing talent attraction and recruitment, talent development and talent retention with respect to organizational performance of private colleges described in research objective four (RO4), empirical findings of this study conclude that knowledge management acts as the mediator that potentially transmits the effects of managing talent attraction and recruitment, talent development and talent retention to the organizational performance



of Malaysian private colleges. In other words, knowledge management is identified as the linking mechanism that explains the mediation relationship in this study, with which knowledge management mediated the positive influence of managing talent attraction and recruitment, talent development and talent retention on the organizational performance of private colleges.

Since the study has demonstrated the mediation effects of knowledge management, this provides empirical support to the past studies by Kianto, Ritala, Spender and Vanhala (2014) as well as Inkinen, Kianto and Vanhala (2015) that have regarded knowledge management to be the key in understanding how the management of intellectual assets exerts influence over organizational performance. The practices of managing talent employees who are deemed as intellectual asset within these local private colleges have enabled the knowledge and skills of individual talents to be accumulated, transformed and managed as organizational knowledge through their social networking among other staff which not only benefits all the employees but also helps realize an organizational competitive advantage to influence the organizational performance of private colleges over the longer term.

In short, managing talent development and knowledge management are identified as important determinants in this study driving the business performance of private colleges in a way that by managing the development of organizational talent, this practice not only contributes to the growth and survival of local private colleges but it also allows the knowledge of individual talents to be converted and managed as organizational knowledge to eventually provide a competitive edge that is predicted to have a positive influence over organizational performance of these private academic institutions. Moreover, knowledge management is also considered a potential link to the

gap in understanding the influence of the practices of managing talent attraction and recruitment, talent development and talent retention in relation to the organizational performance of private colleges.

#### **4.7 Conclusion**

This chapter illustrates the analysis of data and interprets the results obtained in order to empirically support the theoretical model of this present study. The SPSS software package is utilized to generate the demographic profile of the respondents and a descriptive statistical report in addition to performing further analyses on normality distribution of data, collinearity diagnostics and common method variance bias. The variance-based of PLS-SEM approach is then used to predict the key target construct of organizational performance of private colleges. With SmartPLS 2.0 M3 software package in place, the study deploys PLS-SEM technique to evaluate its measurement model with reflective indicators as well as structural model. The evaluation of a reflective measurement model in this study is based on several important criteria, notably internal consistency reliability, indicators reliability, convergent validity and discriminant validity to ensure reliability and validity of the measures are met. The study further proceeds to test the proposed hypotheses and their significance by assessing the structural model using the coefficients of determination ( $R^2$ ) and the estimates of path-model coefficients. After having the results analyzed, this is followed by a discussion of main findings in this study. All four research objectives are accomplished and the ten proposed hypotheses are discussed in accordance to past research studies.

## **Chapter 5**

### **Conclusion and Recommendation**

#### **5.0 Introduction**

This chapter provides an overview of the study to address the four research questions aligned with the proposed hypotheses. It also outlines some theoretical and practical implications with limitations to this study as well. This is then followed by a section that highlights the recommendations made from this present study in addition to recommendations for future research before it ends with concluding remarks.

#### **5.1 Overview of the Study**

Chapter 1 provides the underlying foundation to this study. It is aimed to understand organizational performance of private colleges in association with the practices of managing talent which made up of managing talent attraction and recruitment, talent development and talent retention and whether knowledge management plays a mediating role in influencing the practices of managing talent towards organizational performance of private colleges. What motivates this study is the underperformance of private colleges in Malaysia reflected by a declining number that requires the appropriate practices of managing talented employees in developing core competencies within the institutions for their organizational sustainability coupled with the aim for more empirical investigations to identify at what level of managing talent practices in predicting knowledge management that in turn will have an influence on organizational performance of private colleges. Within this chapter, it also outlines the scope and significance of this study.

Chapter 2 is to review past literatures that have examined the conceptualizations of management of talent, knowledge management and organizational performance. Based on the literatures reviewed, this present study has identified a knowledge gap that required further attention. As talents are high performers equipped with knowledge and skills and managing organizational talent practices leads to the activities of managing organizational knowledge, then knowledge management is perceived as the potential linking mechanism to explain how the effects of managing talented employees are being passed on to organizational performance. Moreover, two underpinning theories which are resource-based and knowledge-based theories of the organization are adopted by this study and its relation to the main focus on organizational performance. This chapter also discusses past works that revolved the interrelationships between managing talent attraction and recruitment, talent development and talent retention, knowledge management and organizational performance of private colleges within the higher education business context.

Chapter 3 highlights the research framework of this study. A survey using formal standardized questionnaires as the data collection tool to gather information pertaining to all the variables of interest used in this study. All the 41 measurement items contained in the questionnaires are adapted previously from validated scales. Unit of analysis is at the individual level with a total of 5 respondents per college institution used. The targeted respondents include senior management, departmental managers, senior executives and senior lecturers of at least three years working experience as well as heads of programs employed by the private colleges are to respond to the questionnaires. A total of 1300 questionnaires survey forms are distributed to 260 private colleges in Malaysia. Using a two-stage sampling plan, the non-probability sampling approach of convenience sampling is used since we are not able to attain a list

of all the elements of the population satisfactorily. This chapter further describes the technique of data analysis used in this study. The Structural Equation Modeling (SEM) technique is adopted to analyse the research model. In particular, the variance-based PLS-SEM is deployed to predict the key target construct of organizational performance of private colleges. PLS-SEM as such is used to evaluate the reliability and validity of this study's measurement model as well as to test the hypothesized relationships between exogenous and endogenous latent variables and their significance within the structural model. Towards the end of this chapter, the preliminary findings of the pilot study are reported.

Chapter 4 presents the empirical findings of this study. With a sample size of 243 representing 49 private colleges for this present study, the results for demographic profile of the respondents and its descriptive statistics are reported. The study has therefore achieved a response rate of 18.7%. Data on latent variables used in this study is not normally distributed which makes the use of PLS-SEM method more appropriate. There is no issue of multicollinearity and also the problem of common method variance bias does not arise in this study. Furthermore, both reliability and validity of the constructs together with the hypotheses formulated in this study are evaluated in accordance to the research methodology described in Chapter 3. Since internal consistency reliability, indicator reliability, convergent validity and discriminant validity of the measurement model are fulfilled, the study proceeds to test all the ten hypotheses within the structural model. As a result of the analysis, the following eight hypotheses are then supported, among others are H2, H4, H5, H6, H7, H8, H9 and H10 whereas the remaining two hypotheses of H1 and H3 are not supported by the empirical results. The results of the structural model also indicate predictive relevance for all the endogenous latent constructs in addition to the model is capable of predicting the key

targeted construct of organizational performance of private colleges. The summary of the hypothesized relationships and their empirical findings are highlighted in line with the four research questions associated with this study as follows:

**Research Question 1 (RQ1):** Does the organizational performance of private colleges relate to the practices of managing talent attraction and recruitment, talent development and talent retention in the Malaysian private colleges?

In addressing the abovementioned research question, this study hypothesizes that there is a significant positive relationship between managing talent attraction and recruitment, talent development and talent retention each with respect to organizational performance of private colleges. In relation to this is the first three hypotheses (i.e. H1, H2 and H3) are developed. The study's findings show that the practice of managing talent development has a significant positive relationship with organizational performance of private colleges in Malaysia. As a result, hypothesis H2 is supported. It has however found that the practices of managing talent attraction and recruitment and talent retention are not significantly related to organizational performance of private colleges. Therefore, the empirical results in this study have failed to support the proposed hypotheses H1 and H3 respectively.

**Research Question 2 (RQ2):** Does the organizational performance of private colleges relate to knowledge management in the Malaysian private colleges?

In order to address this research question, the study hypothesizes that knowledge management has a significant direct positive relationship with organizational performance of private colleges. Empirical findings of the study reveal that knowledge

management is significant and has a direct positive relationship towards organizational performance of private colleges. As such, the proposed hypothesis H4 is established.

**Research Question 3 (RQ3):** Do the practices of managing talent predict knowledge management of the Malaysian private colleges?

This present study in an effort to address the abovementioned research question formulates three hypotheses (i.e. H5, H6 and H7) in which the practices of managing talent attraction and recruitment, talent development and talent retention with each is hypothesized to have a significant direct positive influence on knowledge management among private colleges. It is shown that the practices of managing talent namely managing talent attraction and recruitment, talent development and talent retention are predicted to have a significant direct positive influence on knowledge management, out of which managing talent development is identified as the most significant predictor of knowledge management among private colleges. As a result, the three proposed hypotheses H5, H6 and H7 are established.

**Research Question 4 (RQ4):** Does knowledge management mediate the relationship between managing talent attraction and recruitment, talent development and talent retention on organizational performance of Malaysian private colleges?

The testing of mediation relationship in this study is to follow Preacher and Hayes (2008) as recommended by Hair et al. (2014) by bootstrapping the sampling distribution of the indirect effects. To address the research question, this study therefore hypothesizes the influence of managing talent attraction and recruitment, talent development and talent retention on organizational performance of private colleges with each is significantly mediated by knowledge management. This is in relation to the last

three proposed hypotheses, notably H8, H9 and H10 to be examined and as such, the empirical study has demonstrated that knowledge management is statistically significant in mediating the relationship between the practices of managing talent and organizational performance of private colleges. The findings also highlight that knowledge management partially mediates the relationship between managing talent attraction and recruitment, talent development and talent retention with respect to organizational performance of private colleges. Hence, this study conclusively supports the three hypotheses H8, H9 and H10 respectively.

Table 5.11 below outlines all the hypothesized relationships between managing talent practices, knowledge management and organizational performance of Malaysian private colleges in accordance to the four research questions stated in this present study.

Table 5.11

*Overview of Research Questions and Hypothesized Relationships between Managing Talent Practices, Knowledge Management and Organizational Performance of Malaysian Private Colleges*

Research Questions and Hypothesized Relationships	Supported / Not Supported
<b>Research Question 1 (RQ1):</b>	
Does the organizational performance of private colleges relate to the practices of managing talent attraction and recruitment, talent development and talent retention in the Malaysian private colleges?	
H1: There is a significant positive relationship between managing talent attraction and recruitment with organizational performance of private colleges.	Not Supported
H2: There is a significant positive relationship between managing talent development and organizational performance of private colleges.	Supported



H3: There is a significant positive relationship between managing talent retention and organizational performance of private colleges.	Not Supported
<b>Research Question 2 (RQ2):</b> Does the organizational performance of private colleges relate to knowledge management in the Malaysian private colleges?	
H4: Knowledge management has a significant direct positive relationship with organizational performance of private colleges.	Supported
<b>Research Question 3 (RQ3):</b> Do the practices of managing talent predict knowledge management of the Malaysian private colleges?	
H5: Managing talent attraction and recruitment has a significant direct positive influence on knowledge management among private colleges.	Supported
H6: Managing talent development has a significant direct positive influence on knowledge management among private colleges.	Supported
H7: Managing talent retention has a significant direct positive influence on knowledge management among private colleges.	Supported
<b>Research Question 4 (RQ4):</b> Does knowledge management mediate the relationship between practices of managing talent attraction and recruitment, talent development and talent retention on organizational performance of Malaysian private colleges?	
H8: Knowledge management mediates the relationship between managing talent attraction and recruitment and organizational performance of private colleges.	Supported
H9: Knowledge management mediates the relationship between managing talent development and organizational performance of private colleges.	Supported
H10: Knowledge management mediates the relationship between managing talent retention and organizational performance of private colleges.	Supported

As knowledge management is being considered a potential mediating variable in explaining the influence of managing talent attraction and recruitment, talent development and talent retention on organizational performance of private colleges, it has increased the  $R^2$  measure of organizational performance of private colleges from 0.413 (or 41.3%) to 0.502 (or 50.2%) in the PLS path-model. Furthermore, the inclusion of knowledge management as a mediation variable into the model reduces the positive direct effects of managing talent attraction and recruitment, talent development and talent retention each with respect to organizational performance of private colleges.

## **5.2 Theoretical Implications**

This study contributes to research by explaining the underlying determinants of organizational performance of private colleges in relation to management of talent and knowledge within the context of Malaysian higher education business sector. It integrates two theories of organizations, notably the resource-based and knowledge-based theories into one single research framework in order to explain what determines the organizational performance of Malaysian private colleges. The resource-based perspective is adopted to examine the management of talent practices on organizational performance of private colleges while combining with the knowledge-based theory, it further explains that knowledge and skills derived from talented employees can be managed as organizational knowledge by setting up network learning and interaction among key employees to realize a competitive edge in sustaining the long-term business performance of private colleges. By integrating these two theories are essential as it provides a comprehensive understanding of managing talent practices and knowledge management in influencing the organizational performance of private colleges. It also helps overcome the lack of previous studies in investigating separately the effects of

talent management and knowledge management towards organizational performance respectively.

In addition, this study has narrowed the theoretical gap in explaining the effects of talent management on organizational performance. In particular, it empirically confirms the mediation effects of knowledge management towards organizational performance that is associated with managing talent practices. Although the practices of managing talent attraction and recruitment and talent retention are not significantly associated with organizational performance of private colleges, the presence of knowledge management within the organization when talents are recruited, developed and retained helps pass on the effects of managing talent practices to influence the organizational performance of private colleges. Coupled with the use of prediction-oriented PLS-SEM approach, the study contributes to the development of theory which is supported by empirical data by predicting that the practice of managing talent development is significantly important contributing towards organizational performance of private colleges through which its positive effect is explained by the linking mechanism of knowledge management.

### **5.3 Practical Implications**

The findings of this study also provide some important practical implications to business corporations especially to private colleges of higher education. The management of private academic institutions concerned and HR practitioners will be interested in the findings of this present study as it gives them a better understanding on how to influence a sustainable organizational performance in the longer term. As the findings of this study show that managing talent development significantly results in organizational performance and in tandem with the practices of managing organizational talent, they can lead directly to knowledge management which then

contributes to the organizational performance of private colleges. The top management of private colleges in particular, should take a proactive role in developing talent workforce while keeping a close tap to the corporate practices of managing talent that are potentially supporting the initiative of knowledge management within the private colleges in order to sustain their business performance.

While the private colleges board of management is geared towards the policy of developing high-potential employees, HR practitioners are tasked with the design of specific development plans by emulating UNC Executive Development (2012), in which the talent development plans formulated are based on target jobs using the 70/20/10 approach with regards to job experience, role model and training respectively so as to effectively spearhead the development and growth of talents. Such development plans for individual talents provide stretch assignments, create forums for exposure as well as matching them with leaders of the organization to constantly involve these key employees for their development and deepening their engagement to the institutions in creating and sharing knowledge at the organizational level. Not only that, talent workforce is also made aware about their progressive development by providing transparency on their status in addition to seeking constructive feedbacks and the higher standards that will be required of them through these specific development plans.

In order to attain competitive success, private colleges should also undertake measures of developing talents by constantly implementing skill-building via learning and development, including basic skills that are necessary for key staff to perform essential tasks complemented with advanced skills needed to apply technology for managing organizational knowledge as a means to augment intellectual capital (Brinkerhoff & Apking, 2001). This is socially desirable to private colleges that are operating in an

increasingly competitive business environment because talent workforce would remain relevant and become efficiently productive to bring the organization to a greater height.

Based on the study by CIPD (2010) on talent development, e-learning is identified as a key component in learning and development and hence, the HR department of these private institutions are responsible with delivering courses to the intended high-potential employees besides carrying out the overall planning and learning process effectively. E-learning as a way forward to develop talents has been shown to have contributed positively to organizational performance (CIPD, 2010). As well as e-learning, the HR department in collaborations with other functional departments within the private institutions could also explore action learning experiences from which high performers are required to resolve sticky strategic issues of the organization. In this regard, the setting-up of a central committee within private colleges to monitor a policy pertaining to formulating and approving the training, learning and development programs is relevant in acquiring, utilizing and sharing necessary knowledge and skills crucial for future organizational success.

Undoubtedly, the HR management of private colleges should also invest organization's resources into the development of talent employees to further enhance their management and technical know-hows which creates a competitive edge to drive business results when the private higher education market is getting tougher. Instead of focusing more on market-oriented strategy to realize a short-term monetary gain, it becomes imperative for HR practitioners to lead by working closely with top management to incorporate the management practice of talent development into the business strategy of private colleges not only to better meet its business needs but also to achieve overall organizational goals and objectives.

The practical implications of private colleges to continuously invest in the development of organizational talents by means of a specific development plan, learning and development programs including e-learning, coaching and mentoring are a testimony of the commitment of private academic institutions to their employees in engaging them with the institutions. By having these high-performing employees engaged that results from the integrated measures of managing talent development has a positive outcome to both financial and non-financial performance of the organizations in terms of increasing market share and profitability, reducing conflicts and absenteeism, improving quality as well as productivity (Huselid, 1995; Thang, Quang & Buyens, 2010), all of which led to enhancing the competitiveness of private educational organizations. As such, investment in managing talent development by local private colleges is in fact, an investment to its organization's business needs.

While investment in managing talent development benefits organizational performance, private local colleges that invest substantially in developing talent workforce are set to gain from maintaining an up-to-date organization's knowledge base and competitiveness. The management of talent development is an approach used to maintain the organization's updated knowledge base as well as to preserve its knowledge repository when private academic institutions in Malaysia were known to have encountered barriers in managing organizational knowledge in the past (Norulkamar & Hatamleh, 2014; Aziz, Lotfi & Dahlan, 2015). For the Malaysian private colleges in particular, an investment to managing talent development through effective competency-based training and learning helps promote managing knowledge-related competencies such as strategic planning and collaboration, information skills and relationship management that are relevant to advance employees' knowledge capabilities needed in performing their organizational roles.

Private colleges in the effort to undertake managing talent development practice consistently further enables these academic service providers to replace key knowledge talents should they leave the organization to ensure knowledge is retained within the institution and is not lost to its competitors. In such instances, knowledge-based organizations like private colleges that operate their businesses in a challenging, knowledge-based environment nowadays are better positioned to set up an appropriate knowledge management mechanism such as network multimedia to facilitate knowledge usage and sharing activities by leveraging on the development of talent workforce for better organizational performance outcomes.

In order for private colleges in Malaysia to sustain organizational performance, albeit economic uncertainties in the future, a business practice of investment in managing talent development through various measures such as learning and development courses, the launch of e-learning, mentoring and coaching, skill-building initiatives as well as the implementation of specific in-house development plans and programs are necessary and should be integrated to developing knowledge and skill competencies of talents in achieving competitive advantage. Reducing investment spending in the management of talent development however is expected to adversely affect the organizational performance of these private colleges. Private local colleges as a result, must strive to invest in developing their talent workforce at all levels in the drive to manage organizational knowledge to stay ahead of competition within the challenging Malaysian higher education business sector.

#### **5.4 Limitations of the Study**

As to all research studies, this present study is not without its limitations. One of the limitations is generalizability of the findings in this study is only restricted to private

colleges that are operating in a private higher education business within Malaysia. It is therefore not possible to generalize the results of this study across other populations. As this study is quantitative cross-sectional and explanatory in nature, it only provides a preliminary and static view of the phenomenon under investigation. Another limitation is related to the survey undertaken in gathering information to be used for the study. It is impossible to monitor all respondents from the private colleges identified who fill up the questionnaires on their own. Also, the low response rate from conventional mail survey and the subjective measure of talent are another cause of concern. Since all the information is gathered from a single source through a self-reported questionnaire which might inflate the relationship between variables, a Harman's one-factor test is conducted to control the possibility of common method variance bias in this study.

## **5.5 Recommendations**

On the basis of our findings, this present study recommends that private colleges in Malaysia should prioritise on managing development of talent for a better outcome to organizational performance. The management of private colleges is recommended to maintain learning and development practices like learning-need identification, e-learning, coaching and mentoring in addition to implementing in-house development plans and programs for a progressive growth of talented employees in order to deliver a competitive edge for business success. As a learning organization operating in knowledge-based environment, private colleges should initiate the efforts of managing organizational knowledge by encouraging key talents to set up a strong network of social interaction among other employees as the higher the level of knowledge management, the better it is for business performance of these private colleges. It is also learnt that managing practices of attraction and recruitment, development and retention



of talent workforce should be emphasized upon as in doing so brings about the activities and processes of managing organizational knowledge that is positively associated with the organizational performance of private colleges.

This study therefore further makes a recommendation to the implementation of a two-pronged strategy that can be integrated for competitive success, which are inside-out and outside-in organizational strategies. A private college that embarks on accelerating the management of talent employees is to prioritize by putting in place management development for high performers (an inside-out approach) which is then used to drive activities and practices of knowledge management within the institution through network sharing and learning among employees at all levels (an outside-in approach) in enhancing competitiveness while promoting its long term organizational growth. Eventually, these strategies lead to the development of a competency-based talent and knowledge management systems within which private colleges could leverage for their long-term business success.

Overall, private colleges that are striving hard to meet their business expectations need to strengthen the interaction between managing development of talent workforce and organizational knowledge management. It is certainly crucial for academic service providers such as private universities and colleges to concentrate on talent-based knowledge management practices to gain competitive advantage for organizational performance in today's liberalized higher education business environment.

## **5.6 Recommendations for Future Research**

This study has been able to offer some insights to the approaches of managing talent that contribute to organizational performance of private colleges. It nevertheless also

raises some issues of concern that could be explored further in future studies. Since this study does not make use of control variables in its theoretical model, therefore it provides avenue for other researchers to introduce these variables like the size of the private colleges and to establish whether the findings can be generalized. Another issue of concern is organizational performance of private colleges can be separated into financial performance and non-financial performance indicators in that an investigation of how the approaches of managing talent could influence the non-financial performance indicator which in turn has an impact to the financial performance indicator. It is also suggested that a latent variable of employee engagement can be introduced into the PLS path-model to expand our understanding on the effects of managing talent practices and organizational performance of private colleges. Future research could further explore the formative measurement model specification to the endogenous latent construct of organizational performance of private colleges.

## **5.7 Conclusion**

In the wake of competitive pressures due to liberalization of private higher education industry in Malaysia, organizational performance of private colleges appears to be not sustainable over time as a considerable number of private colleges has closed down in recent years. Such an adverse development has called for the organizational-specific approach to talent management to be practised within the private academic institutions. To manage knowledge and skilled employees deemed as organizational key talents, private colleges become a learning organization as knowledge of individual talents is transformed to be managed as organizational knowledge that delivers a competitive advantage for organizational success. With this, the study investigates the relationship between the practices of managing talent attraction and recruitment, talent development

and talent retention and organizational performance of private colleges and to evaluate the mediating role of knowledge management in the relationship between managing talent attraction and recruitment, talent development and talent retention with respect to organizational performance of private colleges in Malaysia.

The findings of this empirical study have highlighted that both managing talent development and knowledge management are significantly and positively associated with organizational performance of private colleges. In particular, knowledge management can both act as a direct and a mediating variable in affecting the organizational performance of private colleges. Further still, the study has identified that managing talent development as the most significant predictor contributing to knowledge management and this in turn influences the organizational performance of private colleges within the Malaysian higher education industry. In this regard, by managing talent development well means managing the organizational knowledge and its overall business performance of private colleges to be more competitive too.

Knowledge management in this study meanwhile, has shown a significantly direct positive relationship on the organizational performance of private colleges and as such, the more the activities of managing knowledge within private colleges as a learning organization, the better outcome would be the organizational performance of private colleges. Therefore, the results lend support to the resource-based and knowledge-based perspectives that contended knowledge and skills possessed by talent workforce is a valuable strategic asset to be leveraged by these local private academic institutions in realizing a competitive edge to sustain organizational success over time.

It follows that the mediation effects of knowledge management are tested by bootstrapping the sampling distribution of the indirect effects. Knowledge management

therefore has been identified as a mediator variable that is linked to the practices of managing talent attraction and recruitment, talent development and talent retention through with which each has a significantly positive influence over the organizational performance of private colleges. By managing talented employees within the educational organizations, the knowledge of these individual talents can be converted through social network and interaction among other employees at all levels and is then managed as organizational knowledge which in turn positively affects the organizational performance of private colleges. To be specific, empirical findings of this study have also shown that knowledge management has a significant partial mediation effect on the relationships between the practices of managing talent attraction and recruitment, talent development and talent retention with respect to organizational performance of private colleges within the Malaysian higher education business sector.

In a nutshell, this chapter concludes by addressing the four research questions related to the objectives and hypotheses formulated for this present study. Given the research model has shown a moderately strong explanatory power, this study is also able to make some theoretical and practical contributions that benefit private higher education business and HR practitioners as well as to other researchers in the field of strategic management.

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# UNIVERSITI UTARA MALAYSIA

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## SURVEY QUESTIONNAIRES

### **TOPIC: The Relationships between Managing Talent Practices, Knowledge Management and Organizational Performance of Malaysian Private Colleges**

Dear Participants,

Thank you for taking the time to participate in this study on '*The Relationships between Managing Talent Practices, Knowledge Management and Organizational Performance of Malaysian Private Colleges*'. We would appreciate it very much if you could answer all the questions/statements carefully. The information given by you will influence the accuracy and the success in this study.

All answers will be treated with strictly confidentiality and will be used for the purpose of this study only. If you want to receive the findings of the study, please give us your details (Name, Email and Contact Number). I am happy to give you a summary of the findings of this study.

Thank you for your cooperation.

Yours Sincerely,

Khor Kok Keat  
DBA student  
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## APPENDICES

This questionnaire is part of the research study on “**The Relationships Between Managing Talent Practices, Knowledge Management and Organizational Performance of Malaysian Private Colleges**”. We are selecting the respondents from all private colleges of Malaysia to make the research findings more conclusive. Your active participation and genuine response will be highly appreciated. All the information to this questionnaire is completely confidential and it will be only used for our research work.

### APPENDIX A: Demographic Information

Please tick ( / ) for the most appropriate responses in respect of the following items.

1. Gender:                      Male (        )                      Female (        )
  
2. Which age categories below you belong to?  
31 to 40 (        )                      41 to 50 (        )  
51 to 60 (        )                      60 and above (        )
  
3. Ethnicity:  
Malay (        ) Chinese (        ) Indian (        ) Others (        )
  
4. Number of years worked in the college?  
Below 3 years (        )                      3 – 5 years (        )  
6 – 10 years (        )                      Over 10 years (        )
  
5. Highest Educational Level:  
Diploma (        )                      Master (        )                      Others (        )  
Degree (        )                      Ph.D./DBA (        )
  
6. Job Status:  
Senior Management (        )                      Professor (        )  
Manager/Asst. Manager (        )                      Dean/Head of Program (        )  
Senior Executive (        )                      Senior Lecturer (        )
  
7. Describe your job role in the college?  
Academics (        )                      Non-Academics (        )  
Academics and Non-Academics (        )

**APPENDIX B: Managing Talent Practices**

Please indicate how strongly you agree or disagree on the statements given on the Likert scale. Indicate by placing a tick ( / ) in the relevant column that best describes your response. Please respond to all of the statements below.

TAR	Managing Talent Attraction and Recruitment	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
		1	2	3	4	5
1	The organization prioritizes time to interview potential candidates.					
2	The organization has a good overall knowledge of human resource (HR) recruitment processes.					
3	The organization consistently appoints high calibre employees to key positions.					
4	The organization devotes time to attend to the filling of a vacancy.					
5	The organization ensures that vacancies do not remain open for not more than 6 months.					
TD	Managing Talent Development	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
		1	2	3	4	5
1	The organization has a genuine interest to foster the training and development of people.					
2	The organization carries out an objective assessment of individual's development needs.					

TD	Managing Talent Development	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
		1	2	3	4	5
3	The organization encourages the coaching of staff one-on-one.					
4	The organization provides feedback for staff developmental purposes.					
5	The organization actively creates developmental opportunities for potential employees.					
6	The organization meets with staff for their career planning sessions.					
TR	Managing Talent Retention	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
		1	2	3	4	5
1	The organization builds a good working relationship with all employees.					
2	The organization allows flexibility of time for staff to attend to their family matters.					
3	The organization ensures that employees have adequate resources to complete their work.					
4	The organization reduces employees from job stress.					
5	The organization assures that workload is full but not excessive.					
6	The organization makes the effort to be aware of its employees' personal circumstance that might affect their work.					

**APPENDIX C: Knowledge Management**

Please indicate how strongly you agree or disagree on the statements given on the Likert scale. Indicate by placing a tick ( / ) in the relevant column that best describes your response. Please respond to all of the statements below.

KM	Knowledge Management	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
		1	2	3	4	5
1	We explicitly recognise knowledge as a key element in our strategic planning exercise.					
2	We benchmark our organizational knowledge against that our competitors.					
3	We have developed a knowledge strategy that maps knowledge to organizational value creation.					
4	We are able to identify sources of expertise within our organization.					
5	Our employees are valued for their knowledge.					
6	We look for opportunities to learn more about our clients.					
7	We look for opportunities to learn more about educational products.					
8	We look for opportunities to learn more about educational services.					
9	We look for opportunities to learn more about technologies for organizational internal operations.					



KM	Knowledge Management	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
		1	2	3	4	5
10	Our organization encourages the sharing of knowledge among staff.					
11	Our organization encourages the use of knowledge for mutual benefits.					
12	We have effective internal procedures for transferring best practices throughout the organization.					
13	We exploit external sources of knowledge effectively.					
14	Our knowledge management group is a recognised source of value creation within the organization.					

**APPENDIX D: Organizational Performance of Private Colleges**

Please indicate how strongly you agree or disagree on the statements given on the following Likert scale. Indicate by placing a tick ( / ) in the relevant column that best describes your response. Please respond to all of the statements below.

**(1 = Strongly Disagree; 2 = Disagree; 3 = Slightly Disagree; 4 = Neither Agree nor Disagree; 5 = Slightly Agree; 6 = Agree; 7 = Strongly Agree)**

OP	Perceived Performance of Private Colleges	1	2	3	4	5	6	7
1	The organization is capable of reducing costs of operation although its business is fast expanding.							
2	Income growth of the organization is better in comparison to the competitors.							
3	Employees' productivity of the organization is better in comparison to the competitors.							
4	The organization is characterized by the satisfactory profitability level.							
5	The organization has better quality higher educational courses in comparison to the competitors.							
6	The organization provides better quality service in comparison to the competitors.							
7	Satisfaction of clients from the organization is better in comparison to the competitors.							
8	The organization responds quickly to technological changes to meet its business needs.							
9	The organization is capable of solving new problems quickly.							
10	The organization has a good reputation.							