Competencies as the protagonist for Talent development in Academia: The case of Malaysian Government Linked Companies' (GLCs) Universities.

Siva Muthaly
University, Melbourne, Australia

Mohan Dass Mohan
Swinburne University of Technology,Melbourne, Australia

Aerni Isa
Universiti Tenaga Malaysia (UNITEN).

Abstract

The purpose of this paper is to investigate the talent development antecedents in Malaysian Government Linked Companies (GLCs) Universities. There were four constructs elicited from the literature which are namely, talent identification, talent culture, competencies and talent development. Design/methodology/approach – The paper takes the form of a literature review, from which the authors identified four constructs: talent identification, talent development, talent culture and competencies. The data required for this research were collected by means of a survey and as well as online surveys sent to the 3 Universities below. A questionnaire was developed with 26 items adapted from previously validated scales. A non-probabilistic sampling procedure, i.e. convenience sampling, was adopted owing to the unavailability of a satisfactory sampling frame. Academics from three GLCs namely Universiti Tenaga Malaysia (Uniten), Universiti Petronas Malaysia (UPM) and Multimedia University of Malaysia (MMU) were provided with the questionnaires. A total of 300 questionnaires were submitted to the three GLC universities, from which 168 survey questionnaires were completed and were useable for data processing.The research findings revealed that overall competencies play a significant mediating role for talent identification and talent culture that is crucial for talent development in retaining competent academics in Malaysian GLCs Universities. Among the competencies construct, the study found that leadership and motivational factors were relatively high contributors, denoted by indicators in the measurement model. The findings also suggest that for talent development to attract and retain competent academics; GLC Universities should institute formal career development opportunities and career orientated strategic plans. Finally, public policy makers should incorporate key indicators of talent identification and talent culture, which constitute equitable performance rating systems and the rewarding of exemplary contributions so as to stimulate overall talent development.GLC Universities could cultivate a Talent Management culture to enhance competencies and thereby upskill academics and retain quality academic staff. This research implies that there is need to highlight aspects of potential benefits in cultivating Talent Management Culture. The results of this study will certainly benefit the GLC Universities specifically and other

educational institutions in general to identify, develop and retain competent academics. This is one of the very few studies which uses partial least squares to address a complex situation associated with the talent management competencies in government linked companies Universities.

Keywords : Talent Management, Government Linked Companies Universities, Academics retention, Partial least squares, Talent Identification, Talent Culture, Competencies, Talent Development.

Introduction

The 1980s and 1990s witnessed intensive competitiveness of nations for high economic growth that demanded a talented workforce to gain and sustain the global competitive advantage (Bryan, 2010;Porter,1990). Confronted with this challenge to retain talented workforce is also the risk of global talent shortage (Randall, Jackson and Tarique, 2010;Chambers, Foulon, Handfield-Jones, Hank- lin, and Michaels, 1998; Michaels, Handfield-Jones, and Axelrod, 2001). Encountered with this magnitude issue of global talent acquisition and retention, Human Resource Management to sought solutions for the talent management. Contemporary researchers on talent management (Guthridge, Komm, and Lawson, 2008; Beechler and Woodward, 2009; Scullion, Collings, and Caliguri, 2010; Scullion and Collings (2010), have made significant contributions towards the strategic talent management. Increasingly, research works focussed on competitive advantage of talented manpower management and challenges of mobilising these talented and competency globally (Ready, Hill and Conger, 2008; Jorek, Gott, and Battat, 2009, Guthridge, 2008; Lohr, 2010; Schuler, Jackson, and Tarique, 2011). The findings of this study will therefore benefit several stakeholders, especially the Malaysian Government Linked Companies Universities in particular and other educational institutions in general in addressing their TD aspirations.

Literature review

Lewis (2006) reported that there was huge interest in Talent Management (internet yielded over 8 million hits) though there was a lack of clarity regarding the definition, scope and goals of TM, three perspectives were concluded. The first perspective was TM as a collection of human resource cycle of functions (Byham, 2001; Chowanec and Newstrom, 1991; Heinen and O'Neill, 2004; Hilton, 2000; Mercer, 2005; Olsen, 2000); the second perspective focusses on the development of talent centre (a reflection of succession planning (Jackson and Schuler,1990; Rothwell,1994; Kesler,2002; Pascal; 2004). The third perspective focusses on talent generic structured on competency (Buckingham and Vosburgh, 2001; Walker and Larocco, 2002). Competent performers and highly sought potential talent (with competent skills and knowledge) are differentially rewarded. Advocates of this approach classify employees by performance level to denote top, competent, and bottom performers, respectively (Axelrod, Handfield-Jones, and Michaels, 2002; Michaels, Handfield-Jones, and Axelrod, 2001) or "topgrading (Smart, 2005). Undoubtedly, TM is high value to organizations both from the demographic and business trends (Gandossy and

Kao, 2004; Romans and Lardner, 2005; Tucker, Kao, and Verma, 2005). Thus, the terms in the TM debate – which specifically focuses on the effective management of employee talent – are not clear and confuses further the outcomes with processes and with decision alternatives. Nevertheless, Ashton and Morton note, "good TM is of strategic importance" (p. 28).

The literature discussed also lays out evidently the three prerequisites for TM. Firstly, to recognising and identify key talents required for survival and success of the organisation. Next, developing the talented workforce and finally, motivate and retain the competent and talented workforce to readily move into strategic and significant roles and positions (Jantan et al. 2009; Baum,2005; CIPD 2012; Davies and Davies 2010). Researchers have placed emphasis on TM as a critical factor for developing successful organizations besides a strategic priority for businesses (CIPD, 2012; Tarique, 2010; Davies and Davies, 2010). A systematic strategic plan to identify and attract and next, to develop the right talents that incorporates retention schemes of these high value workforce (Armstrong and Baron, 2007, CIPD, 2012; Davies and Davies, 2010). Using the arguments set forth by TM researches and the literature, a TM model developed by Davies and Davies, 2010 would be examined.

The literature drawn from Davies and Davies,(2010); Tripathi et al. (2010); Tarique and Schular,(2010), were used to posit four constructs namely, talent identification, talent culture, competency, and talent development.

Davies's model

From the perspective of Davies and Davies, (2010), talent management is defined as a systematic and dynamic process of discovering, developing and sustaining talent. What works depends on the context and the way the organisation implements practices. Davies model is based on three elements of talent practice. These are namely, talent identification, talent development, and talent culture.

Talent identification (ti)

Talent identification (TI) is the process and activities to define and discover the sources of talent. Attracting talent is to attract the right people, who will be enthusiastic, highly capable and loyal to the values, beliefs and mission of the organisation (Davies and Davies, 2010, p.420). In talent identification, management for example will search for the talented and competent academicians who would best benefit for academia's future performance. Organisations to be "truly successful need to stay ahead of the game and predict who will be the key drivers of their future success" (Hay Group, 2005, cited in Davies and Davies, 2010, p 420). So the best organisations are future focused and predict what skills, attitudes and behaviours they will need from their talented individuals (Davies and Davies, 2010,p.421; Hay Group 2008). TI in the model is factored upon the key fundamentals of the institution to discover the source and be aware of team members performance, uses performance management systems, addresses performance issues (makes connections), and takes appropriate managerial decisions using assessment tools to identify talents who are future focussed. Indeed, talent identification is imperative to identifying key positions which contribute to the organization's sustainable competitive advantage.

Talent culture (tc)

Talent culture (TC) enables loyalty, commitment and retention cannot be guaranteed but in the process of developing people to "step up", organisation should consider whether it encourages people not to "stay on board" (Davies and Davies, 2010, p.424). Davies (et.al, 2010) argued that talented people need to feel valued and their contribution is making a difference - affirmative is powerful; feeling appreciated, recognised and valued is motivational. Recognition of their exemplary work as fair and equitable will encourage talent culture and motivates the employee to be aligned to the organisation (Davies and Davies, 2010; Cheese et. Al, 2008).

Competencies (c)

Increasingly, talent management has been competency focused, stretching employees to the fullest potential where they are likely to experience and retain their expertise and skills (Davis 2007; Davies, 2010, p.425). The key competencies would be skills, creative and knowledge, action oriented, leadership, interpersonal skills and functionality. These competencies can be demonstrated by employees profiled by the talent diagnostic tool namely, the employee's creativeness, and ability to provide novel solutions to problems; achieves above standards; use of management time and materials to produce the best outcomes; leadership and motivational qualities; possess interpersonal skills and takes ownership and responsibilities (Davies, 2010; Davis, 2007; Kaur et al, 2013). Cheese et al, (2008) express the view that motivation, commitment, trust, empathy and inspiration, are critical employee competence credentials to align their own interest with the organisation. Furthermore, it is even more crucial to develop employee competencies, and the availability of continuous learning that sustain excellent performance. Davies further argues that a sophisticated knowledge assessment using a talent diagnostic tool, the results of which a profile of employee competency of the best performers can be framed (Davis, 2007).

Securing a sustainable talented workforce is essential to the success and competitive advantage of organisations (Ingham, 2006). Organizations using core competencies enjoy greater profitability, customer satisfaction levels, and customer retention than other organizations (Aberdeen, 2013). The competency management consistently binds and integrates TM processes and competencies itself acts as a common denominator (Andy, 2011).Using the competency based TM strategies, TM gaps can be reduced while competency identification contributes to talent development. Further the identification and development of competencies forms critical 'planks' for all HR activities besides enhancing processes consistency and alignment between HR and the organization's broader strategic goals(Human Resource Systems Group, 2014). Moti (2012) argues that this best practices of competency management needs to be incorporate competencies into Training and Development programs. Undoubtedly the application of competency based TM strategy will contribute to the initiatives for organization transformation and change strategies.

Talent development (td)

In talent development (TD), learning and skills development is an associated factor for talent-focused organisation, effectively connected with processes such as a performance management (Davies and Davies, 2010). The variety of integrated learning practices should be purposeful and link with strategic intents and have an impact (Davies and Davies, 2010, p.422). Talent development involves developing leaders through the processes such as coaching, feedback, mentoring, and challenging

employees (Evans, Pucik, and Barsoux, 2002; Ibeh and Debrah, 2011). Developed in alignment with motivation and talent development (Dweck, 2006; Pink, 2009; Colvin, 2008; Ericsson, Charness, 1994), it provides what is simple (improvement in attitude; improvement in effort; improvement towards your designed goal) and memorable (defining the attitude and effort anchors in concrete, observable terms. This was re-emphasised by Davidson (et al, 2011). Other researchers have suggested TD must fit the organisation's stage of development (Baird and Meshoulam, 1988; Srivastava and Bhatnagar, 2008). While opportunities for training and development have significant (perceived) ability to retain talented people (Hiltrop, 1999) and in line with the new psychological contract, high performers often perceive development as a benefit to which they are entitled. Davies (2010, p. 422) suggests that the institution needs to foster the learning and development of employees, create development opportunities with a formal career plan for talent development; and the incumbent needs to bring to a position in order to perform its tasks and functions with competence.

It is important for the organization to take proactive role in identifying and cultivating their workforce (Jane et al.2006; Bhatnagar,J, 2008), who have capability and potential. One industry currently facing this dilemma is the education industry in Malaysia, in particular the private education providers, Government Linked Companies' Universities (GLCs Universities).

Government linked companies' universities (glcs universities)

Currently the global market share of Malaysian private education (internationally recognised), stands at approximately 3% of total internationally mobile students and by 2015, Malaysia aims to attract 150,000 international students. Its gross output of the private education alone has increased from $3 billion (2005) to $ 7 billion in 2008 (10th Malaysia Plan, p.130). Sustaining a huge education sector with 20 public universities, and 20 private universities (under large Government Linked Companies or GLC universities), and foreign universities has become a challenge (Malaysian Ministry of Education, 2013). One of the primary challenges is the attraction and retention of qualified and competent academic staff more so for GLCs. The Education Ministry's record in 2008 indicates only 1,070 PhD academics and 6,846 master's academics in service, and does not meet the growing demand for competent educators in the education industry (Ministry of Education, Malaysia, website, 2008). Several research have found that some universities in Malaysia were losing students because of service quality and a lack of competent academics (Firdausi, 2006; Latif et al. 2004; Hassan et al., 2008, Ismailand Abiddin, 2009). Competent academics are urgently required with the Malaysian Ministry of Higher Education (MOHE) identifying 3 leading GLC universities spearheaded for specialised and strategic targets set under the Malaysian Economic Master Plan 2020. They are Universiti Tenaga Malaysia (UTM), Universiti Petronas Malaysia (UPM) and Multimedia University of Malaysia (MMU). But the challenge remains to attract competent academic talent for the 3 institutions.

Educational excellence is about world class branding, marketable academic programmes, research activities and facilities, competent academics in the educational institution (Isahak, 2007) to produce highly skilled and employable graduates. Contrary to this ideals, several researchers have found that universities are lagging behind in meeting the needs of the industries (Hernaut, 2002), whereas the competency gap has grown wider between the knowledge, skills and qualities possessed by the universities' graduates (Kamil, Abdul Hamid, Hashim and Omar,

2010). Compounding this relatively small number of highly qualified academics discussed above and the quality service delivery, the attrition rate of academics in private universities such as the GLCs has become a significant concern. The National Higher Education Research Institute (USM), Penang reported that both the Public and Private Universities had a rate of 12% of PhD academics and 4.1% non-PhD academics left the higher education services for other non- educational sectors (27%); and 10 % to public agencies in 2004. High turnover was attributed to offer of better salaries, career development opportunities, job insecurity (were on contract or sessional appointments), and workload issues. A recent study indicated even an undesirable trend of the attrition rate as high as 30 % in the education sector between July 2010 and June 2011(Chong, et.al, 2013).This draws the research statement closer towards the challenges of retaining talented and competent academic staff and talent development.

While these 3 GLCs are rapidly growing in terms of broad discipline delivery and graduate satisfactory completion annually, the GLCs' academic talent up-skilling and retention of academic staff has become paramount. The GLCs itself need to accelerate development paths for the academicians. Indeed, talent management actually can provide the job security for academics as it has positive and significant influence on employee attitudinal outcomes and organizational effectiveness e.g. employee work engagement, turnover avoidance, and value addition.

The objective of GLC Universities to attract and retain academic staff possessing excellence and competency in research and delivery of programmes has met a 'stumbling block' with high attrition rates largely due to academic staff burnout from heavy workload, relatively lower salaries than counterparts in public universities, a lack of opportunities for professional development, unclear promotion perspectives, and inadequate resources for lifelong learning (Ariokiasamy, 2009). Undoubtedly, with the significantly increasing trend of the attrition rate reported in 2004, and 2013, it has become imperative to develop a talent management strategy for the academics.

Lepak and Snell (2002) suggest that knowledge workers, are those "people who use their heads more than their hands to produce value" (Horibe, 1999, p.11). In this context, Universities essentially needs to identify competent and talented academics under a strategic talent management program that examines life cycle of talent management from acquisition of talent to its retirement (Kamil, Hamid, Hashimand Omar, 2010). Jones suggests that individuals could be assessed on the basis of how they could contribute to the organization to achieve its vision, mission and strategic goals, and highlighting what skills and talents are required (2008). Tactically this methodology would work along with talent development and career development opportunities that might enhance academic engagement with their work to produce maximum returns. The Education Minister has called for the education sector to be important drivers to transform Malaysia into a Developed Nation (Economic Transformation Programme: A roadmap for Malaysia, 2010). GLCs Universities have been identified as key contributors for specialised high quality manpower training and development. But this has become a momentous task following the reported attrition rate, a lack of competent academic staff to deliver quality education and a talent management strategy. Hence a critical talent management strategy is required.

Problem statement

In summary, the problem statement requires an urgent initiative for academic staff identification, a promulgation of talent culture, competencies profiling and talent development. The authors propose to a possible solution using Davies and Davies Model on Talent Management (2010) together with competency concepts developed by Tripathi (2010) and Tarique and Schular (2010). The proposed model (Davies and Davies Model adapted) with 3 approaches namely, talent identification, talent culture, competency and talent development will be examined as the research framework for this study on GLCs Universities.

Research framework and hypothesis

The research framework formulated with Davies and Davies Talent Management, firstly, proposes Talent Identification (TI) of academics could be initiated by searching for talents among academician of appropriate competencies that the educational sector (GLCs). Peters (2005), considers that we need to pursue "mastery" where we previously aimed to develop competence. The idea of mastery is interesting as a form of internal motivation, as the process of trying to be better "than no-one other than yourself" (Davies and Davies, 2010, p. 420).

Secondly, the Davies Model emphasises the importance of talent culture that is recognition of value contribution and in terms of affirmative is powerful; feeling appreciated, recognised and valued is motivational. Opportunities will help the talented person feel motivated and aligned to the organisation but future opportunities and roles will also need to be available to make this happen (Davies and Davies, 2010, p 419). Cheese (2008) further expressed the value of motivation and commitment which inadvertedly strengthens the retention because it is built upon strength of relationship. This undoubtedly could create pillars of corporate culture values to retain talented workforce. Indeed creating an excellent working culture in the university, the academicians will be motivated. Towards promulgating talent culture in the university, commitment from all leaders, such is Heads of Department, Deans and Human Resources Managers must demonstrate their support for implementing a talent cultural environment. Furthermore, university leaders need to avail themselves of wide range of leadership characteristics drawing on dimensions of both transformational and transactional leadership.

Thirdly, competencies Tripathi (2010) propounded a PAKS (personality, ability, knowledge, skills) based competency approach for the academic institutions using four main perspectives namely, knowledge, behavioural, administrative and research. Within these the academic output, different parameters and with different thresholds such as handling of different subjects in the semester or involvement in Interdisciplinary teachings, time of appraisal and assessment are assessed. Tripathi design of the behavioural parameters included attendance, reflection, and overall planning ability. Competencies also is required in professionally executing research and administrative perspectives as they are critical to the knowledge creation and the services rendered for teaching and learning processes.

Finally, the talent development encompasses all the three approaches. High performers have naturally high expectations such as career advancement and continuous improvement. Apart from the view of academics, the academician himself

needs to put an effort to self-improvement and improvise performance so that, the values develop toward academician will help to enhance academy performance and productivity. Various training and workshop will increase the supply of highly skilled academicians, enhance the knowledge of academicians and equip them with up-to-date skills and upgrade the quality and productivity of academicians. As employees' knowledge, skills and competencies are an important competitive weapon, hence talent needs to be maximized and recognized as one of the discrete source of organizational competitive advantage (Collings and Mellahi, 2009).

In knowledge oriented society human capital is the well-nigh strategic resource in attainment of competitive advantage. Furthermore, capabilities that underpin firms' competitive advantage are directly tied to the capabilities of talented individuals who make up the firm's human capital pool (Cheese, Thomas and Craig, 2008; Wright, McMahan, McCormick, and Sherman 1997). Hence, competency development is imperative and this refers to those activities carried out by the organization and the employee to maintain or enhance the employee's functional, learning and career competencies (Forrire and Sels, 2003). In this context, competency development refers to how individual employees develop their competencies by actively engaging in different types of development activities offered by the organization, i.e., more traditional forms of formal learning activities, such as training, as well as informal learning and on-the-job learning. Based on the literature review and research problem, the following research framework has been developed. The Davies Model will focus on the relationship between talent management and competencies towards academician. The independent variables are the predictors of talent development towards academicians, consists of talent identification, talent culture and dependent variables are competency and talent development towards academicians.

Consistent with the relevant literature and the objective of this paper, this paper proposes to test the following hypotheses:

H1:   There is a relationship between Talent Identification (TI) and Talent Development (TD).

H2:   There is a relationship between Talent Culture (TC) and Talent Development (TD).

 H3:   There is a relationship between Talent Identification (TI) and Competencies (C).

H4:   There is a relationship between Talent Culture (TC) and Competencies (C).

H5:   Mediated Competencies (C) positively relates to Talent Development (TD).

Again, from relevant literature we identified the factors associated with each of the four constructs. Twenty-six items operationalized the factors or attributes, which were adapted from validated scales used by previous studies. Figures 1 show the four constructs, i.e. talent identification, talent development, talent culture and competencies. These constructs and factors directly and indirectly influence perceptions of academics and their competencies.

The background for the hypotheses developed as part of this study is discussed below, and these are embodied in Figure 1.
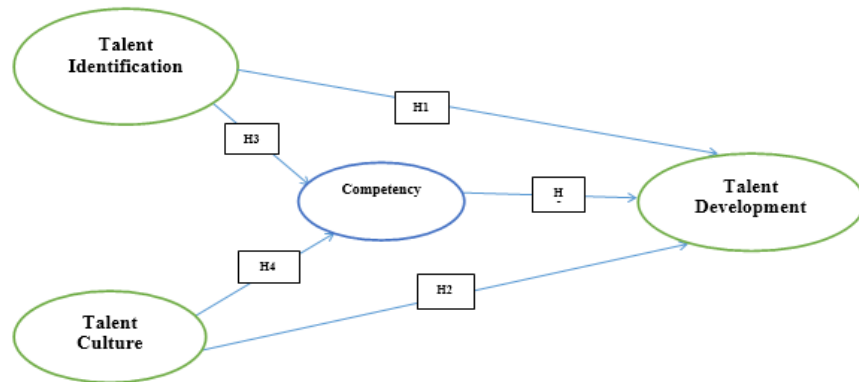
Figure 1: Research Framework using Davies Model (adapted)

The data required for this research was collected by means of a consumer-type survey. A questionnaire was developed with 26 items adapted from previously validated scales. Respondents were required to indicate the importance rating for each of the 26 items using a five point Likert-type scale, anchored at 1 (strongly disagree) and 5 (strongly agree). A non-probabilistic sampling procedure, i.e. convenience sampling was adopted owing to the unavailability of a satisfactory sampling frame. Academics from three GLCs namely Universiti Tenaga Malaysia (Uniten), Universiti Petronas Malaysia (UPM) and Multimedia University of Malaysia (MMU) were provided with the questionnaires. An on line survey using the questionnaries was also sent out to obtain additional respondents. A total of 300 questionnaires were submitted to the three GLC universities from which 168 survey questionnaires were completed and were useable for data analysis purposes.

Methodology

Survey data was collected from 168 academics in Malaysian GLC universities. There was equal representation of both males (49.4%) and females (50.6) in the sample. About 64% of the sample ranged between 20 and 40 years, while the rest were over 41 years to retirement age. About 63 percent of the academics were employed for between 5 years to 15 years in their respective universities.

A broad range of variables related to talent development was studied and the main tool employed for data analysis was partial least squares which is increasingly being used to test hypothesized relationships (Muthaly, 2013). Therefore, PLS is deemed effective for analyses of exploratory models such as ours, where an explanation of the construct interrelationship is desired (Ranganathan, et al., 2004).

After respondents were selected they were contacted by one of the authors who personally administered the questionnaire. While other approaches, such as personal interviews, were considered, such techniques can be time consuming and costly in comparison to a printed questionnaire (Aaker, Kumar, and Day, 2001) and would therefore have limited the number of academics who could be included in the project.

The survey instrument was developed after conducting a broad review of the relevant literature. The independent variable factors namely talent identification, and talent culture were measured with six survey items each, adapted from Davies and Davies (2010); Tarique and Schular (2010); and Cheese (2008), while competencies factors were measured using eight survey items adapted from Tripathi (2010); Davies and Davies, (2010); and Thomas and Craig, (2008); Wright, McMahan, McCormick, and Sherman (1997); Forrire and Sels, (2003). Talent development contruct was measured with six survey items adapted from Davies and Davies, 2010; Collings and Mellahi, 2009).

Questionnaire respondents were assured of anonymity and survey questions were close-ended Likert scales ("0" being not applicable, "1" strongly disagree, and "5" being strongly agree) were employed. A pretest was performed to identify any problems with the questionnaire contents in regard to respondent understanding of wordings and procedures.

The required minimum sample size for analyzing data using PLS is at least (1) ten times the largest number of indicators used to measure a construct or (2) ten times the largest number of structural paths directed at a particular construct in the structural model (Hair, Ringle and Sarstedt 2011; Ringle, Sarstedt and Straub 2012). The largest number of indicators is six, referring to the dimensions forming our "Talent Culture" construct. Therefore, based on the ten-times rule of thumb, the required minimum sample size for both criteria is 30 or 60 respectively. However, the sample size for this study is 168, which is far greater than the recommended minimum sample size required to use PLS for purposes of the overall structured equation model.

As stated above, basic descriptive data was used to obtain a general picture of the characteristics of the test variables. Partial least squares analysis was then conducted and the values of different variables were compared. The Statistical Package for Social Science (SPSS) software and the Partial Least Squares (PLS) procedure in SmartPLS software were applied to the data.

Analytical techniques and assessment of the measurement model

The conceptual model was tested with structural equation modelling (SEM) using the partial least squares (PLS) procedure (Hulland, 1999; Ranganathan et al., 2004). PLS enables researchers to explain the relationships within a model (Fornell and Bookstein, 1982) and thereby enables a simultaneous examination of whether the hypothesized relationships at the theoretical level are empirically confirmed (Sarstedt, Wilczynski and Melewar, 2013; Khalifa and Liu, 2003). PLS is deemed effective for analyses of exploratory models, where an explanation of the intra and inter construct interrelationship is desired (Ranganathan, et al., 2004; Sarstedt, Ringle and Henseler, 2014).

Item Reliability
For individual item reliability, as demonstrated in Table 1, the loading of the first-order factors ranged from 0.6230 to 0.8400 (p<0.01), indicating acceptable correlations among the first-order factors, because items with a loading of less than 0.50 were dropped (Bagozzi and Yi, 1994; Hulland, 1999).

Convergent Validity

The traditional reliability measure of Cronbach's alpha assumes an equal weight for the items measuring the construct and is influenced by the number of items in the construct (Ranganathan, et al., 2004). In PLS, however, composite reliability depends on actual reading to compute the factor scores, proving to be a better indicator of internal consistency. Similarly, Fornell and Larcher (1981) argue that composite reliability is superior to Cronbach's alpha because it uses the items' loadings obtained within the nomological network or casual model. As illustrated in Table 1, all composite reliability estimates ranged from 0.807 to 0.881

Prior to testing the statistical significance of the paths of the measurement and structural models, we examine its validity and reliability. Table 1 provides loadings for the respective constructs along with composite reliability scores (CR) and average variance extracted (AVE). All items are significant at 0.05 levels with high loadings (all above 0.60), attesting convergent validity. Composite reliability can also replace Cronbach's alpha as a measure of reliability, where 0.65 is an adequate measure for research (Nunnally, 1978). Table 1 indicates a high level of reliability for alpha values of each construct with levels ranging from as low as 0.8070 to as high as 0.8810. The AVE measures the variance captured by the indicators relative to measurement error (Fornell and Larcker, 1981). To use a construct, the AVE should be greater than 0.50 (Barclay, Higgins and Thompson, 1995).

Table 1: Measurement Indicators of reflective constructs, Composite reliability & Average Variance Extracted (AVE)

Construct	Indicator	Loadings	Composite	AVE
Talent Identification	Use of assessment tools	0.656	**0.807**	**0.513**
	Addresses performance problems	0.623		
	Rate performance levels	0.804		
	Adjust managerial decisions and	0.768		
Talent culture	Nomination for excellence awards	0.649	**0.87**	**0.529**
	Rewards for exemplary works	0.796		
	Recognition for individual	0.806		
	Allocates fairly for performance.	0.785		
	Market rated salaries	0.665		
	Celebrates exceptional	0.64		
				0.651
	Motivate others	0.826		
	Ability to delegate	0.746		
	Ownership / responsibility for the	0.811		
Talent Development	Feedback for development	0.761	**0.84**	**0.637**
	Create developmental	0.793		
	Formal career planning sessions.	0.839		

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Table 2 presents the discriminant validity statistics. Diagonal elements in the correlation of constructs matrix are the square root of the average variance extracted. For adequate discriminant validity, diagonal elements should be greater than corresponding off-diagonal elements. As it can be seen in the table, our model demonstrates discriminant validity among the constructs.

Table 2: Correlations and Average Variance Extracted (AVE) (Diagonal)

	Competency	Talent Culture	Talent Development	Talent Identification
Competency	0.807	0	0	0
Talent Culture	0.469	0.727	0	0
Talent Development	0.532	0.58	0.798	0
Talent Identification	0.436	0.614	0.712	0.717

Table 3 shows that all items load higher on their respective constructs than on others, providing further support for discriminant validity. Therefore, our model demonstrates discriminant and convergent validity (Anderson and Gerbing, 1988), showing that measures of the constructs are distinct and that the indicators load on the appropriate construct satisfactorily.

Table 3: Cross-Factor Loadings

	Talent Comp	Talent Cul	Talent Dev	Talent Ident
Comp5	**0.84**	0.425	0.496	0.359
Comp6	**0.826**	0.368	0.45	0.348
Comp7	**0.746**	0.375	0.342	0.407
Comp8	**0.811**	0.338	0.414	0.295
TalentCul1	0.35	**0.649**	0.277	0.218
TalentCul2	0.347	**0.796**	0.512	0.462
TalentCul3	0.411	**0.806**	0.384	0.434
TalentCul4	0.415	**0.785**	0.532	0.575
TalentCul5	0.222	**0.665**	0.38	0.535
TalentCul6	0.269	**0.64**	0.393	0.419
TalentDev4	0.432	0.425	**0.761**	0.55
TalentDev5	0.484	0.437	**0.793**	0.532
TalentDev6	0.362	0.525	**0.839**	0.62
TalentID2	0.246	0.421	0.483	**0.656**
TalentID4	0.313	0.437	0.462	**0.623**
TalentID5	0.32	0.543	0.541	**0.804**
TalentID6	0.363	0.364	0.547	**0.768**

From the above measures of validity and reliability, it is evident that the PLS model provides the rigidity and certainty of conformance for further extrapolation for discussion of the findings.
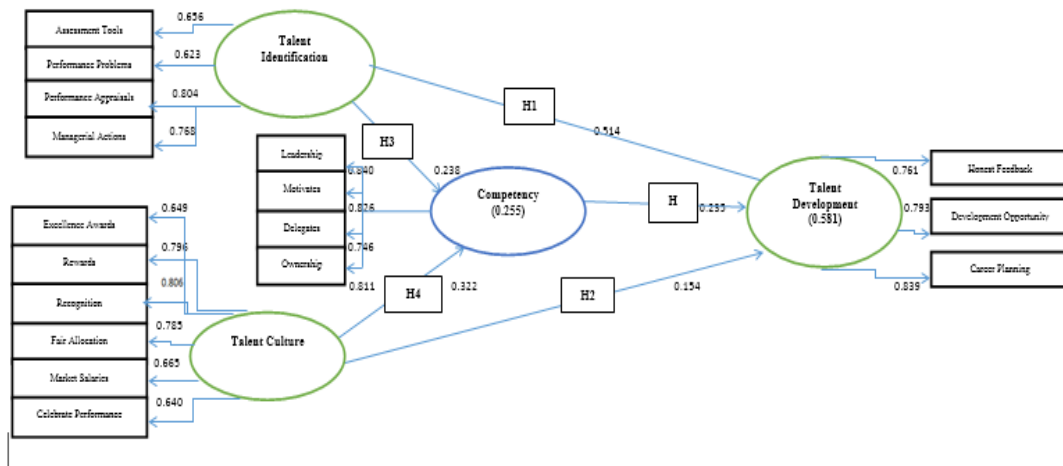

Figure 2: Direct and Indirect relationship between the Four Constructs of Talent Management

Findings

SmartPLS 2.0 was used to test the structural model and hypotheses. A bootstrapping procedure with 500 iterations was performed to examine the statistical significance of the loadings of sub-constructs and the path coefficients. As PLS does not generate overall goodness of fit indices, the R2 is the primary way to evaluate the explanatory power of the model.

Figure 2 depicts the PLS findings in relation to hypotheses H_1 to H_5 (inclusive). The path coefficients of the conceptual model are one-tailed, and the critical ratios determined by the bootstrap method are as follows: 1.645 is significant at the .05 level, 2.326 is significant at the 0.01 level, and 3.090 is significant at the 0.001 level. The highly significant critical ratios provide full support for hypotheses H_1 to H_5 (inclusive).

Talent identification contributed the strongest to talent development with β=0.514. Talent culture (β=0.154) had a direct effect on talent development, while the presence of competency (β=0.235) assisted in mediating the overall relationship of talent development. The total effects of talent identification and talent culture on talent developments were 0.570 (t-statistic 7.641) and 0.230 (t-statistic 2.893) respectively. Based on the examination of structural model, this study supports the hypotheses proposed (H1-H5), and competence has positively assisted in mediating both talent identification and talent culture in their positive association to talent development.

The positive path coefficient of 0.514 confirms the importance of 'competency' as a crucial mediating construct in achieving better 'talent development'. Additionally, the combined effects of the mediator 'competency' and the two constructs, i.e. 'talent identification' and 'talent culture' has resulted in a significantly positive R^2 of 0.581.

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The use of R-squared (R^2) is important to determine the predictive ability of the model. The bigger the R^2, the more predictive power the model implies. The proposed model shows 58.1% of the variance in talent development was explained by talent identification and talent culture mediated by competency. All the path coefficients in the inner model were positive and significant at 0.05 levels.

Table 1 summarized the loadings of the indicators for each factor of the constructs in relation to 'talent development'. The significant loadings in order of importance for 'talent identification' are: rate performance levels; adjust managerial decisions and actions; use of assessment tools; and addresses performance problems. The significant loadings in order of magnitude for 'talent culture' are: recognition for individual contribution; rewards for exemplary works; allocates fairly for performance; market rated salaries; nomination for excellence awards; and celebrates exceptional performance. The significant loadings in order of magnitude for 'competencies' leadership; motivate others; ownership / responsibility for the job; and ability to delegate. Finally, significant loadings in order of importance for 'talent development' are: formal career planning sessions; create developmental opportunities and feedback for development purposes. The overall significant indicators demonstrate evidence that the variables adopted in the overall model are robust.

Discussion and conclusion

This study has highlighted the catalytic need for competencies to play a vital role in mediating talent identification and talent culture for essential talent development amongst Malaysian GLC academics. The most important contributor for 'competencies' is leadership and followed by motivation. It must be reiterated that the antecedents for this talent development model has been well exemplified by strong variation of close to 52% in its overall representation. The present competitive environment in the tertiary sector precipitates for continuous talent development amongst academics. Formal career planning sessions for academics is one of the key indicators for talent development, and as such it is crucial for Universities to incorporate such initiatives appropriately. For optimum leverage for talent development in tertiary sector, senior mangers in academia need to ensure that all academics incorporate leadership and motivational competencies. Universities will also need to provide academics with formal career planning and authentic feedback mechanisms as part of their talent developmental process.

Although 13% of the participants held leadership roles, and 87% ranged from being tutors to senior lecturers, the inferential statistics seems to suggest an over dependence of the participants for having rated highly on 'leadership' and "motivational" abilities as the most important elements of competencies towards talent development. This quality for aspiring leadership by junior academics towards talent development enriches the uniqueness of our findings (generally senior academics would aspire for such initiatives).

Public policy advocates with long-term talent developmental aspirations would need to exploit the tenets of talent identification with stringent measures for rating performance in their managerial decisions. The recognition of academic's individual contribution in the form rewarding exemplary work has shown to be a strong

antecedent for talent culture. As such academician's achievements in teaching, research and other accomplishments need to be closely monitored for achieving higher talent development goals. With unrelenting needs to have highly competent academics and also having to retain them in the tertiary sector, the intermediation role of competencies and their tenets in our study of talent development would contribute unequivocally to the existing literature and forge ahead new paradigms in the horizon of talent management.

References

Aaker, D., Kumar, V. and Day, G. (2001) *Marketing Research*, John Wiley & Son, New York

Anderson, J. C. and D. W. Gerbing (1988). "Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach". *Psychological Bulletin*, 103(3), 411-423.

Ariokiasamy, L., Ismail, M., Ahmad M., and Othman, J.(2009), Background to Malaysian Private Education Institutions of Higher Learning and the challenges of Academics, *Journal of International Social Research,* Vol 2. No. 8, Summer.

Ashton, C., & Morton, L., (2005), Managing talent for competitive advantage, *Strategic HR Review*, Vol.4 (5), 28−31.

Bagozzi, R. P./Yi, Y. (1994): Advanced topics in structural equation models, in:

Bagozzi, R.P. (Ed.), Advanced methods of marketing research, Cambridge, p. 1

Banai, M., & Harry, W. (2005), Transnational managers: A different expatriate experience, *International Studies of Management and Organization*, Vol.34: 96–120.

Barboza, D. (2010). Supply chain for iPhone highlights costs in China, *The New York Times,* July 5: B.1.

Baum, T. & Kokkronikal, J., (2005), Human resource management in tourism, in Pender, L. & Sharpley, R. (eds), *The Management of Tourism*, Sage Publications, London.

Beechler, S., & Woodward, I. C. (2009), Global talent management, *Journal of International Management*, Vol. 15: 273–285.

Bernthal, P. R., & Wellins, R. S. (2005), *Leadership forecast 2005-2006: A benchmarking study*, Development Dimensions International, Pittsburgh PA.

Bloom, N., & Reenen, J. V. (2010), Why do management practices differ across firms and countries*? Journal of Economic Perspectives*, Vol.24: 203–224.

Boyle, M. (2009), Cutting costs without cutting jobs, *Business Week*, March 9: 55.

Bradsher, K. (2008), Investors seek Asian options to costly China, *The New York Times*, June 18: A20.

Bradsher, K. (2010), China drawing high-tech research from U.S., *The New York Times,* March 17: B1.

Bradsher, K., & Barboza, D. (2010), Strike in China highlights gap in workers' pay, *The New York Times,* May 28 :B1

Brannen, M. (2008), Pressing concerns for Japanese talent management. Paper presented at the academy of management annual conference, August 9-13.

Bryan, L. (2010), Globalization's critical imbalances, *The McKinsey Quarterly*, June 7–15.

Buckingham, M., & Vosburgh, R. M., (2001), The 21st century human resources function: It's the talent, stupid!, *Human Resource Planning*, Vol.24(4), p.17−23.

Burke R.J., and Ng E., (2006), The changing nature of work and organizations: Implications for human resource management, *Human Resource Management Review*, Vol.16, 86-94.

Byham, W. C., (2001), Are leaders born or made? *Workspan*, Vol 44 (12), 56.

Cappelli, P. (2008), Talent on demand, Harvard Business School, Boston

Carins, G., & Sliwa, M. (2008), A very short, fairly interesting and reasonably cheap book about International Business. London: Sage.

Caye, J.-M., & Marten, I. (2008), Talent management, The Boston Consulting Group, Boston.

Chambers, E. G., Foulon, M., Handfield-Jones, H., Hanklin, S. M., & Michaels, E. G. (1998),

Charan, R. (2005), Ending the CEO succession Crisis, *Harvard Business Review,* 83(2), 72-81.

Cheese, P., (2008), Talent a prerequisite for high performing companies, *Management Today*, p.38–42.

Cheese P., Thormas R. J., & Craig, E. (2008). *The talent powered organization: strategies for globalization, talent management and high performance*, Kogan Page, London.

Cheloha, R., & Swain, J., (2005), Talent management system key to effective succession planning, *Canadian HR Reporter*,Vol.18 (17), 5−7.

Chen, W., & Hoskin, J. (2007), Multinational Corporations in China: Finding and keeping talent, SHRM, October: 1–4.

Chowanec, G. D., & Newstrom, C. N., (1991), The strategic management of International Human Resources, *Business Quarterly*, Vol 56 (2), 65.

CIPD (2012), Learning and talent development 2012, retrieved March 6, 2014, from. http://www.cipd.co.uk/hr-resources/survey-reports/learning-talentdevelopment.

Cohn, J. M., Khurana, R., & Reeves, L., (2005), Growing talent as if your business depended on it, *Harvard Business Review*, Vol.83 (10), 63.

Colvin, G. (2010). *Talent is overrated: What really separates world-class performers from everybody else*, New York: Penguin Group.

Collings, D.G., and Mellahi, K., (2009), Strategic Talent Management: A review and research agenda, Human Resource management Review, Vol 19, p. 304-313.

Conger, J. A., & Fulmer, R. M., (2003), Developing your leadership pipeline, *Harvard Business Review,* Vol. 81(12), 76−84.

Cope, F. (1998), Current issues in selecting high-potentials, *Human Resource Planning*, Vol. 21(3) September, 15.

Corporate Leadership Council, (2001), *GE's Session C: Leadership Talent Assessment retrieved February 5, 2006, from http://www.corporateleadershipcouncil.com.*

Corporate Leadership Council, (2003), *Hallmarks of leadership success*, retrieved January 12, 2006, from http://www.corporateleadershipcouncil.com

Corporate Leadership Council,(2005a),*Realizing the Full Potential of Rising Talent* (Volume I&II),retrieved February 1, 2006, from http://www.corporateleadershipcouncil.com.

Corporate Leadership Council. (2005b),*Communicating HIPO status*, retrieved February 5, 2006, from http://www.corporateleadershipcouncil.com

Courtney, H. (2008), A fresh look at strategy under uncertainty: an interview, *McKinsey Quarterly, December: 3–9.*

Creelman, D., (2004), Return on investment in talent management: Measures you can put to work right now, *Human Capital Institute*, Washington, DC 20037 USA.

Cummings, J., Manyika, J., Mendonca, L., Greenberg, E., Aronowitz, S., Chopra, R., (2010), Growth and competitiveness in the United States: The role of multinational companies. *McKinsey Global Institute Report .*

Daniels, J. D., Radebaugh, L. H., & Sullivan, D. P. (2007), *International Business: Environment and Operations*, Pearson/Prentice-Hall, Upper Saddle River, New Jersey. , T. (2007), Talent Assessment; a new strategy for Talent Management, Gower Publishing Limited, Aldershot.

Davies, B and Davies, J.B., (2010), Talent management in Academics, International journal of Educational Management, Vol 24, No. 5, p. 418-426.

Deloitte Research. (2004), It's 2008:do you know where your talent is?retrieved January 12, 2005, from http://www.deloitte.com.

Delery, J.E, and Shaw, J.D., (2001), The strategic management of people in work organisations: Review, synthesis and extension, G.R.(ed) *Research in Personnel and Human Resource Management*, Vol 20, p. 165-197, Greenwich, C.T.

De Pablos, P.O. and Lytras, M.D., (2008), Competencies and human resource management: implications for organizational competitive advantage, *Journal of Knowledge Management,* 12, (6), 48-55.

Dickmann, M. & Baruch, Y. (2011), *Global Career Management,* London: outledge.

Dietz, M. C., Orr, G., & Xing, J. (2008), How Chinese companies can succeed broad,diversity: Challenges for UK public sector managers. *Equality, Diversity and Inclusion: An International Journal, 29*(5), 422–435.

Dye, R., Sibony, O., & Viguerie, S. P. (2009), Strategic planning: Three tips for 2009, Theemployment regulations in countries at www.doingbusiness.org.retrieved in August 10, 2014.

Engardino, P., & Weubtraub, A. (2008), Outsourcing the drug industry, *Business Week,* September 15: 49–53.

Ericsson, K. A., & Charness, N., (1994), Expert performance: Its structure and acquisition. *American Psychologist*, 48, 725–747.

Ewing, E. (2008), Nokia's new home in Romania. *Business Week*, January 28: 40–42.

Ezell, S. (2009), America and the world: We're no. 40! *Democracy Journal*.org, Fall: 12–19.

Farndale, E., Scullion, H., & Sparrow, P. (2010), The role of the corporate HR function in global talent management, *Journal of World Business*, Vol.46: 161−168.

Fornell, C., & Bookstein, F. L. (1982). Two structural equation models: LISREL and PLS applied to consumer exit-voice theory. *Journal of Marketing Research*, 19(4), 440-452

Forrier, A., & Sels, L., (2003), The concept employability: a complex mosaic, International Journal Human Resources Development and Management, Vol. 3(2), p. 102-124.

Frank, F. D., & Taylor, C. R., (2004), Talent management: Trends that will shape the future. *Human Resource Planning,* Vol. 27(1),p. 33−41.

Frauenheim, E. (2006), January 16). Succession progression,85(1), 31-35. *Workforce Management,* January 16.

Friedman, T. L. (2005), *The world is flat*, Farrar, Straus and Giroux, New York.

Friedman, T. L. (2010), A word from the wise, *The New York Times*, March 3: A22.

Gakovic, A., & Yardley, K. (2007), Global talent management at HSBC, *Organizational Development Journal, Summer: 6–14.*

Galvin, J., Hexter, J., & Hirt, M. (2010), Building a second home in China, *McKinsey Quarterly, June: 1–16.*

Gandossy, R., & Kao, T., (2004), Talent wars: Out of mind, out of practice, *Human Resource Planning,* Vol. 27(4), 15.

Garger, E. M., (1999), Holding on to high performers: A strategic approach to retention, *Compensation and Benefits Management*, Vol. 15(4), 10−17.

Garrett, A. (2005), Crash course in...: Developing future leaders, *Management Today*, September, 22, retrieved February 22, 2006, from Business Source Premier.

Goedhart, M., Koller, T., & Wessels, D. (2010), The five types of successful acquisitions, *McKinsey on Finance, July: 13–19.*

Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: a review of four recent studies. *Strategic Management Journal*, 20, 195-204

Goldstone, J. A. (2010), The new population bomb, *Foreign Affairs*, Vol.89: 31–43.
Gomez-

Mejia, L., & Werner, S. (2008), *Global Compensation*, Routledge, London.

Grove, A. (2010), How to make an American job before it's too late, *Bloomberg Business Week*, July 1: 43-47.

Gupta, A., & Govindarajan, V. (2001), Converting global presence into global competitive advantage, *Academy of Management Executive*, Vol.15: 45–58.

Guthridge, M., & Komm, A. B. (2008), Why multinationals struggle to manage talent, *McKinsey Quarterly*, May: 1-5.

Guthridge, M., Komm, A. B., & Lawson, E. (2008), Making talent management a strategic priority, *The McKinsey Quarterly*, January: 49–59.

Hair, JF, Ringle, CM & Sarstedt, M (2011). 'Pls-Sem: Indeed a Silver Bullet'. *Journal of Marketing Theory and Practice*, 19 (2), 139-51

Hamm, S. (2008), International isn't just IBM's first name, *Business Week*, January 28: 40–41.

Hansen, F. (2009), HR in the downturn, *Workforce Management*, February 16: 16.

Harman, G. (2003), International PhD students in Australian universities: financial support,course experience and career plans, *International Journal of Educational Development*, Vol. 23, p.339-51.

Harriss, L. & Foster, C., (2010), Aligning talent management with approaches to equality and
Harvard Business School Press, Boston.

Hay Group, (2009), The Changing Face of Reward, www.haygroup.com. Retrieved on August 1, 2014.

Heinen, J. S., & O'Neill, C., (2004), Managing talent to maximize Performance, *Employment Relations Today*, Vol. 31,p.67.

Heinen, J. S., & O'Neill, C., (2004), Managing talent to maximize performance, *Employment Relations Today*, Vol.31, 67.

Henseler, J., Ringle, C.M. & Sinkovics, R.R. (2009). "The use of partial least squares path modeling in international marketing". *Advances in International Marketing*, 20, 277 - 320.

Herbst, M. (2009), A narrowing window for foreign workers? *Business Week*, March 16: 50.

Hernaut, K. (2002), New ICT curricula for the 21ˢᵗ century- designing tomorrow's education, Brussels.

Hill, C. W. L. (2007), *International Business: Competing in the global marketplace (6e)*, McGraw-Hill/Irwin, New York.

Hilton, D. M., (2000), Hiring and retaining top talent, *Credit Union Executive Journal*, Vol.40 (5), 12.

Hilton, D. M., (2000), Hiring and retaining top talent, *Credit Union Executive Journal*, Vol.40 (5), 12.

Holland, K. (2008), Working all corners in a global talent hunt, *The New York Times*, February 24: 17.

Horibe, F., (1999), *Managing Knowledge Workers: New Skills and Attitudes to Unlock the Intellectual Capital in your Organization,* Toronto: Wiley.

Huselid, M. A., Beatty, R. W., & Becker, B. (2009), *The Differentiated Workforce*, Harvard Business School Press, Boston.

Ibeh, K., and Debrah, Y.A., (2011), Female talent development and African business schools, *Journal of World Business*, Vol 46, 42-49.

IBM. (2008), *The Enterprise of the Future*, IBM, New York.

Ingham, J., (2006), Closing the talent management gap, *Strategy HR Review*, p.20–23, Melcrum Publishing (www.melcrum.com).

Isahak, A. (2007), The philosophy of higher education of the 21st century,Bulletin of Higher Education Research, Vol.10, no.1, pp.15-16.

Jackson, S. E., & Schuler, R. S., (1990), Human resource planning: Challenges for industrial/organizational psychologists, *American Psychologist*, Vol.45(2), 223.

Jacobs, D.,(2005), In search of future leaders: Managing the global talent pipeline, *Ivey Business Journal*, March/April.

Jantan, H., (2010), Human Talent Prediction in HRM, *International Journal on Computer Science and Engineering,*Vol. 02, No. 08, 2010, 2526-2534.

Jorek, N., Gott, J., & Battat, M. (2009), *The Shifting Geography of Offshoring*, AT Kearney, Chicago.

Kaplan-Leiserson, E. (2005, Falling short, *T + D*, Vol.. 59(10), 10-11.

Kaur, J. and Kumar, V. (2013), Competency mapping: A gap Analysis, *International Journal of Education and Research,* Vol. 1 No. 1 January.

Kesler, G. C., (2002), Why the leadership bench never gets deeper: Ten insights about executive talent development, *Human Resource Planning*, Vol.25, p.32−44.

Kramer, R. J. (2005), Developing global leaders, *The Conference Board*, November 8.

Khalifa, M., & Liu, V. (2003). Determinants of satisfaction at different adoption stages of internet-based services. *Journal of the Association for Information Systems*, 4(5), 206-232

Kamil M., Abdul Hamid, Hashim, J., and Omar, A., (2010). A Study on the Implementationof

Talent Management Practices at Malaysian Companies, *Asian Journal of Business and Management Sciences,* Vol. 1 No. 4, pp 147-162.

Lane, K., & Pollner, F. (2008), How to address China's growing talent shortage, *The McKinsey Quarterly*, 3:p. 33–40.

Lepak, D. P., & Snell, S. A., (2002), Examining the human resource architecture: The relationships among human capital, employment, and human resource configurations, *Journal of Management*, 28(4), 517.

Lermusiaux, Y., (2005), Talent Management: A definition, retrieved August 1,2014 from http://www.taleo.com/blog/index.php?m=200505.

Lewis, R.E. and Heckman, R.J., (2006), Talent Management: A critical review, *Human Resource Management Review*, Vol. 16, 139-154.

Lohr, S. (2010), Global strategy stabilized I.B.M. during the downturn, *The New York Times, April 20: D1–4.*

Makinen, J. (2010a), Designer gains foothold in China with a local partner's help, *The New York Times, June 16: B4.*

Makinen, J. (2010b), A British fan manufacturer goes where its customers are, *The New York Times, June 16: B4.*

McDonnell, A., Collings, D. & Burgess, J. (in press). Special Issue of the Asia Pacific *Journal of Human Resource Management.*

McGregor, J., & Hamm, S. (2008), Managing the Global Workforce, *Business Week, McKinsey Quarterly,* April.

Mendenhall, M. E., Osland, J. S., Bird, A., Oddou, G. R., & Mazevski, M. L. (2008), *Global leadership: Research, Practice and Development*, Routledge, London.

Mercer, S. R., (2005), Best-in-class leadership, Leadership Excellence, Vol. 22 (3), 1.

Michaels, E., Handfield-Jones, H., & Axelrod, B. (2001), *The War for Talent*, Harvard Business School Press, Boston.

Miller, K. (2010). Coping with Chinese financial power, *Foreign Affairs*, July/August: 96–109.

Mirza, B. (2008), Look at alternatives to layoffs, *SHRM On-line,* December 29.

Morton, L. (2004), Integrated and integrative Talent Management, *The Conference Board*, January 22.

Morton, L. (2005), Talent management value imperatives: Strategies for execution, *The Conference Board.*

Muthaly, S. Lobo A.C., Jen-Yuan J. S. (2013), "Marketing of postgraduate education in Taiwan: issues for foreign universities", Asia Pacific Journal of Marketing and Logistics, Vol. 25 Iss: 1 pp. 118 – 130

National Higher Education Strategic Plan, Beyond 2020, Government Printers, Ministry of Higher Education,2010.

Olsen, R., (2000), Harnessing the internet with human capital management, Workspan, 43, (11), 24.

Palmisano, S. (2007), The globally integrated enterprise, *Foreign Affairs*, Vol.85: 127–136.

Pfeffer, J., & Sutton, R. (2006), *Hard facts, dangerous half-truths, and total nonsense: profiting from evidence-based management, Harvard Business School Press, Boston.*

Pascal, C., (2004), Talent management systems: Best practices in technology solutions for recruitment, retention, and workforce planning, (Foreword, in A. Schweyer (Ed.), Wiley Canada.

Pegels, C. C.,(1981), A Markov chain application to an engineering manpower policy problem, *IEEE Transactions on Engineering Management*, Vol.28 (2), 39−43.

Peters, S., (2005), Making links between learning in early childhood education and school using
the 'key competencies' framework, *Teaching and Curriculum*, Vol. 8, 9–15.

Pomeroy, A. (2006), January), Business leaders lack critical skills, *HR Magazine,* Vol. 51(1), 14-15.

Porter, M. (1990), The competitive advantage of Nations, Harvard Business School Press, Boston.

Porter, M. (1985), Competitive advantage: Creating and sustaining superior Performance, Free Press, New York.

Powell, B. (2009), China's hard landing, *Fortune*, March 16: 114–120.

Preston, J. (2008), Visa application period opens for highly skilled workers, *The New York Times, April 1: A:5.*

Price, C. & Turnbull, D. (2007), The organizational challenges of global trends, . December: 1–20.

Ranganathan, C., Dhaliwal, S. J., & Teo, S. H. T. (2004). Assimilation and diffusion of web technologies in supply chain management: an examination of key drivers and performance impacts. *International Journal of Electronic Commerce*, 9(1), 127-161

Rawlinson, R., McFarland, & Post, L. (2008), A talent for talent, *Strategy Business*, Autumn: 21–24.

Ready, A.D., Hill, L.A., and Conger, J.A. (2008), Winning the Race for Talent in Emerging Markets, *Harvard Business Review.*

Ready, D.A, Linda, A.H., & Conger, J.A., (2008), Winning the race for talent in Emerging Markets , *Harvard Business Review*, November, Vol 86 (11), 63-70.

Redford, K., (2005), Shedding light on talent tactics, Personnel Today, September, p.20−22.

Rich, M. (2010). Factory jobs return, but employers find skills shortage, *The New York Times July 1*

Ringle, C. M., Sarstedt, M., & Straub, D. W. (2012). 'Editor's Comments: A Critical Look at the Use of Pls-Sem in Mis Quarterly'. *MIS Quarterly*, 36(1), iii-xiv

Ringo, T., Schweyer, A (2008), Integrated talent management : Par three − Turning talent management into a competitive advantage –an industry view: *IBM Global Business Services*.

Rioux, S. M., Bernthal, P. R., & Wellins, R. S. (2009), The globalization of human resource practices, *Special Report for Development Dimensions International*, Bridgeville, PA: DDI.

Roach, S. (2009), Testimony before the Chinese American Committee on Economic and Security, February, Washington D.C.

Robb, D. (2006), Succeeding with Succession, *HR Magazine*, January,Vol. 51(1), 89-92.

Robbins, S.P, Coulter, M., (2005), *Management*, New Jersey: Pearson Education International.

Romans, J., & Lardner, L., (2005), Integrated talent management at BD Japan, *Strategic HR Review,* Vol.4(5), 16.

Rothwell, W. J., (1994), *Effective succession planning: Ensuring leadership continuity and building talent from within*, Amacom, New York.

Sarstedt, Marko, Wilczynski, Petra, Melewar, T.C., (2013). Measuring reputation in global markets – a comparison of reputation measures' convergent and criterion validities. *Journal of World Business,* 48 (3), 329–339.

Sarstedt, M., Ringle, C. M., Henseler, J., & Hair, J. F. (2014). On the Emancipation of PLS-SEM: A Commentary on Rigdon (2012). Long Range Planning, 47(3),

Schuler, R. S., & Tarique, I. (2007), International HRM: A North America perspective, a thematic update and suggestions for future research, International Journal of Human Resource Management, Vol 46 : p. 15-43.

Schuler, R. S., Jackson, S. E., & Tarique, I. (2011), Framework for global talent challenges: HR actions of Global Talent Management, Scullion, H. and Collings, D. ,(eds), *Global Talent Mangement,* Routledge, London.

Schweyer, A.,(2004a),*Talent management systems: Best practices in technology solutions for recruitment, retention, and workforce planning,* Wiley, Canada.

Scullion, H., & Collings, D. (2011), Global Talent Management. London: Routledge.

Scullion, H., Collings, D., & Caliguri, P. (2010), Special Issue Editors, *Journal of World Business, 45: 105–196.*

Siegel, J. (2008), *Global talent management at Novartis*, Harvard Business School, (Case #9: 708–486).

Silzer, R., & Dowell, B. E. (2010), *Strategy-Driven Talent Management*, Wiley, New York.

Smart, B.D., (2005) ,Topgrading : How Leading Companies Win by Hiring, Coaching and Keeping the Best People, Penguin Group Publishers, USA.

Spencer L.M.,Spencer.,(1993), *Competence at work: models for superior performance*, New York: John Wiley and Sons.

Stahl, G. K., Miller, E. L., & Tung, R. L., (2002), Toward the boundaryless career: A closer look at the expatriate career concept and the perceived implications of an international assignment, *Journal of World Business*, 37(3), 1−12.

Stahlman, E. J., & Lewis, R. E., (1994), Workforce transition model for US Department of Energy non-nuclear reconfiguration, *International Journal of Industrial Engineering*, Vol.1 (3), 1−12.

Stephenson, E., & Pandit, A. (2008), How Companies act on Global Trends: *A McKinsey Global Survey, McKinsey, Boston.*

Strack, R., Baier, J., & Fahlander, A. (2008), Managing demographic risk, *Harvard Business Review, February: 2–11.*

Strack, R., Dyer, A., Caye, J-M., Minto, A., Leicht, M., Francoeur, F., et al. (2009), Creating competitive advantage: How to address HR challenges worldwide through 2015, *BCG/World Federation of People Management Associations: Special Report,* Boston.

Stuart-Kotze, R. & Dunn, C. (2008), *Who are you best people? How to find, measure and manage your top talent*, Prentice Hall, Britain.

Sullivan, J., (2005), To build, buy or trade talent: That is the question behind talent management, retrieved from http://www.erexchange, com/Articles/default.asp?CID={B22548F2-AAD0-4551-83EC-561E0AE959EA.

Tenth Malaysia Plan, 2011-2015, *Malaysia Economic Planning Unit*, Putrajaya.

Tabuchi, H. (2010), Chinese Honda strike a wake-up call for Japan, *The New York Times*, June 1: B1.

Tarique, I., & Schuler, R. S. (2010), Framework and review of global talent management and suggestions for Future Research, *Journal of World Business*, 45: 122–133.

The Economist. (2006), The CEO's role in talent management: How top executives from ten countries are nurturing the leaders of tomorrow, *The Economist Intelligence Unit, London.*

The Economist, (2007), Accounting for Good people, *The Economist*, July 21: 68–70.

The Economist, (2008,), Reach higher America: Overcoming crisis in the U.S. workforce, Washington, D.C.June.

The Economist, (2008a), Globalization 3.0, AT Kearney, Boston.

The Economist, (2008b), The next decade's talent war, Adecco, Geneva.

The Economist, (2009),The Economic Impact of the Achievement Gap in America's Schools, Boston: McKinsey, Boston, April.

The Economist, (2009a), When jobs disappear, March 14: 71–73.

The Economist, (2009c), Managing in a fog, February 28: 67–68.

The Economist, (2009d), Swinging the axe, January 31: 69–70.

The Economist, (2009b), Turning their backs on the world, February 21:59–61.

The Economist, (2010a), The world turned upside down, *The Economist: Special Report*, April 17: 11–18.

The Economist, (2010b), Older and wiser, *The Economist: Special Report*, March 13: 1–17. Timmons, H. (2010), India expands role as drug producer, *The New York Times*, July 6: A1.

Tucker, E., Kao, T., & Verma, N., (2005), Next-generation talent management: Insights on how workforce trends are changing the face of Talent Management, *Business Credit*, July /August, Vol.107, 20−27.

U.S. Department of Labor, (2010), Chartbook:International comparisons of hourly compensation costs in manufacturing, *Bureau of Labor Statistics,* Washington, D.C..

UNCTAD, (2008), *World Investment Report*, United Nations, Geneva.

US Senate, (2007-2009), Schlumberger Annual Reports, Washington D.C.

Vaiman, V. (2010), Talent management of knowledge employees: Embracing non-traditional workforce, (ed),Palgrave MacMillan, London.

Vaiman, V., and Collings, D.G. (2013), Talent Management: advancing the field, The *International Journal of Human Resource Management*, Vol 24, No. 9, p 1737-1743, retrieved on April 23,2014 http://dx.doi.org/10.1080/0985192.2013.777544.

Vans, P., Pucik, V., Barsoux, J.L., (2002),*The global Challenge, Frameworks for International Human Resource Management*, New York, Irwin, 2002. ISBN 0-07-239730-6.

Varma, A., Budhwar, P., & DeNisi, A. (2008), *Performance Management Systems*, Routledge, London.

Vicere, A., (2005), On leadership: Want leaders? Look for talent management, Retrieved September 23, 2005, from www.post-gazette.com/pg/04321/412405.stm

Wadhwa, V. (2009), America's immigrant Brain Drain, *Business Week*, March 16: 68.

Werdigier, J. (2008), Retooling for a changing telecom landscape, *The New York Times*, March 8: C2.

Walker, J. W., & Larocco, J. M., (2002), Talent pools: The best and the rest, *Human Resource Planning,* Vol.25 (3), 12−14.

Wild, B., & Schneeweiss, C., (1993), Manpower capacity planning: A hierarchical approach, *International Journal of Production Economics*, Vol.30, 95−106..

Wong, E. (2009), China's export of labor faces growing scorn, *The New York Times*, December 21: A1–9.

Wooldridge, A. (2007), The battle for the best, *The Economist*: *The World in 2007*, 104.

World Bank (2008), See the six indicators the World Bank uses to describe the extent of employment regulations in countries at www.doingbusienss.org. retrieved on August 10, 2014.

Wright, P.M., McMahan, C.G, and McCormick, B., and Sherman, W.S., (1997), Strategy, Core Competence and HR Involvement as Determinants of HR Effectiveness and Refinery Performance, *Centre for Advanced HR Studies*, Cornell.

Zakaria, F. (2008), The Post-American World, Norton, New York.