

Talent Culture's Role in Talent Development among Academics: Insights from Malaysian Government Linked Universities

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ABSTRACT

Purpose – The purpose of this paper is to investigate the talent development antecedents in Malaysian Government Linked Companies (GLCs) Universities. Four key constructs were identified and analysed from the literature including talent identification, talent culture, competencies and talent development.

Design/methodology/approach – The data required for this research were collected using a survey and online surveys sent to the three universities who participated in the study. A questionnaire was developed with 26 items adapted from previously validated scales. A non-probabilistic sampling procedure, i.e. convenience sampling, was utilised owing to the unavailability of a satisfactory sampling frame. Questionnaires were distributed to academics from three GLCs— Universiti Tenaga Malaysia (UNITEN), Universiti Teknologi Petronas (UTP) and Multimedia University of Malaysia (MMU). A total of 300 questionnaires were submitted to the GLC universities, of which 168 surveys were completed and deemed useable for data processing.

Findings – The research findings revealed that talent culture plays a significant mediating role in talent identification and competencies towards

talent development in retaining competent academics in Malaysian GLCs universities. The findings also suggest that in order to attract and retain competent academics, GLC universities should institute formal career development opportunities and career orientated strategic plans. Finally, public policy makers should utilise key indicators of talent identification and talent culture such as equitable performance rating systems and rewarding of exemplary contributions in order to stimulate overall talent development.

Research limitations/implications – GLC universities should cultivate a Talent Management culture to enhance their talent culture and thereby increase the skills of academics and retain quality academic staff. This research highlights the potential benefits of cultivating a Talent Management culture. The results of this study will benefit the GLC universities specifically, and other educational institutions in general by assisting them to identify, develop and retain competent academics.

Originality/value – This is one of the few studies that uses partial least squares to address a multifaceted problem associated with the talent management competency in Malaysian Government Linked Companies universities.

Keywords

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

Paper type: Research paper

Introduction

The 1980s and 1990s witnessed the beginning of an intense competition between nations for high economic growth that demanded a talented workforce to gain and sustain a global competitive advantage (Porter, 1990; Ashton & Morton, 2005; Bryan, 2010). This created a number of challenges relating to the development and retention of a talented workforce (Schuler, Jackson & Tarique, 2011; Chambers, Foulon, Handfield-Jones, Hanklin, & Michaels, 1998; Michaels, Handfield-Jones, & Axelrod, 2001). Employers generally tasked Human Resource Management with the acquisition and retention of global talent, mainly through a talent management perspective. A number of significant contributions have been made to the literature on talent management by a plethora of researchers, who stress its current relevance and importance (Guthridge, Komm, & Lawson, 2008; Beechler & Woodward, 2009; Scullion, Collings, & Caliguri, 2010; Scullion & Collings 2010). There also has been a resurgence in research on the competitive advantage of talented manpower management and the challenges in mobilising talented and competent manpower globally (Ready, Hill & Conger, 2008; Jorek, Gott, & Battat, 2009; Guthridge, 2008; Lohr, 2010; Schuler, Jackson, & Tarique, 2011). The findings of this study will, therefore, benefit several stakeholders, particularly Malaysian Government Linked Companies universities (GLCs universities), and also has broader implications for academics in other universities who wish to gain a greater understanding of talent development in general. In addition, the findings will make a valuable contribution to talent management development not only in Malaysian GLC universities, but other academic institutions in emerging and developing countries. Research indicates that the contemporary literature in this area is more relevant to industry, and there are existing gaps that should be explored in future studies, especially in the area of higher education. However, few studies have investigated the importance of talent culture (TC) and its role in talent development (TD) (Guthridge, Komm, & Lawson, 2008; Beechler & Woodward, 2009; Scullion, Collings, & Caliguri, 2010; Scullion & Collings 2010). Therefore, the primary objective of this study is to analyse the role of TC and its relationship with TD. Finally, it is hoped that this study will add rigour to the TM research by providing recommendations for future experimental research to further augment the TM definition and provide additional boundary conditions for HRM at large.

Talent Management amongst Malaysian Academics

The Malaysian Government is aware of the need to retain the services of academics and the growing attrition rate of quality academics in the education industry (Malaysian Ministry of Education, 2013). The attrition rate of academics in private universities is a particular concern. A study conducted by the National Higher Education Research Institute, Universiti Sains Malaysia (USM) Penang showed that the attrition rate was as high as 30 % in the education sector between July 2010 and June 2011 (Chong, 2014). It also found that both public and private universities had an attrition rate of 12% for PhD academics and 4.1% for non-PhD academics. En. Muhammad

Razif, Vice President (Human Resource) TNB (2009) confirmed the urgent need for talent management strategies to build a competent workforce in Malaysia.

Problem Statement

To determine the tenets of talent development and the role of talent culture in talent management from a Malaysian academic perspective.

Research Questions

The research questions employed to address the above problem statement are listed below:

- i) What are the major constructs of TM?
- ii) What is the relationship between the various TM constructs?
- iii) What is the role of talent culture in TM?
- iv) What is the role of competency in TM?

Research Rationale

This section provides an overview of the present issues in TM from a Malaysian perspective. Zaini, Siti and Kamaruzaman (2009) highlighted issues related to succession planning in Malaysian Higher Education, whilst Gopal (2011) emphasized quality practice in higher education; work life balance and intention to leave among academics was addressed by Khairunneesam (2011).

Table 1: Summary of TM studies in Malaysia

| Researchers | Research work |
|--|---|
| Zaini A., Siti A.,Kamaruzaman J., (2009) | Succession Planning in Malaysian Institutions of Higher Education |
| Scullion and Collings,(2011) | Global Talent Management, research on Multimedia University |
| Gopal, A., (2011) | Internationalization of higher education: Preparing faculty to teach cross-culturally. |
| Khairunneesam, M.N., (2011) | Work life balance and Intention to leave among Academics in Malaysian Public Higher Education Institutions. |
| Rosdi I. S., Harris H., (2011), | Human Resource Management practices and organisation commitment in Higher Ed. Malaysia. |

The table above provides an overall summary of the various TM studies carried out from a Malaysian perspective. It is evident from the table that there is a lack of in-depth research on the role of talent culture in TM from a higher education perspective.

The authors seek to develop a solution using the insights provided by the above Malaysian academic literature coupled with work of Davies and Davies (2010), Tripathi, Jayanthi and Pandeya (2010) and Tarique and Schular (2010). The proposed framework for this study on Malaysian GLCs universities will be termed the Talent Management framework (TM framework) and comprises four constructs, namely: talent identification, talent culture, competency and talent development. The next section will provide a detailed literature review to support the above theoretical framework.

Literature Review

Talent Management Overview

While Lewis and Heckman's (2006) study highlights the huge interest in Talent Management (TM), there is also anecdotal evidence of this as a cursory search request of the phrase "Talent Management" generating over 8 million hits on Google. However, there seems to be a lack of clarity regarding the definition, scope and goals of TM. There are three major conflicting perspectives on TM within the literature. The first perspective defines TM as a collection of human resource cycles and functions (Byham, 2001; Chowanec & Newstrom, 1991; Heinen & O'Neill, 2004; Hilton, 2000; Mercer, 2005; Olsen, 2000; Boudreau & Ramstad, 2005; Lewis & Heckman, 2006), the second focusses on the development of talent culture as a deliberation of succession planning (Jackson & Schuler, 1990; Rothwell, 1994; Kesler, 2002; Pascal, 2004; Ingham, 2006) and the third focusses on generic talent structured along the lines of competency (Buckingham & Vosburgh, 2001; Walker & Larocco, 2002). Competent performers and highly sought after talent (with competent skills and knowledge) are differentially rewarded. Advocates of this approach classify employees according to their performance levels to denote top, competent, and bottom performers, respectively (Axelrod, Handfield-Jones, & Michaels, 2002; Michaels, Handfield-Jones, & Axelrod, 2001).

The literature also provides three prerequisites for effective TM. These include recognising and identifying key talents required for the survival and success of the organisation, developing a talented workforce and, finally, motivating and retaining a competent and talented workforce to readily move into strategic and significant roles (Jantan, 2009; Baum & Kokkronikal, 2005; CIPD 2012; Davies & Davies 2010). Researchers have emphasised TM as a critical factor and a strategic priority for developing successful organisations (CIPD, 2012; Tarique & Schular, 2010; Davies & Davies, 2010). A systematic strategic plan is required to identify and attract the right talents and incorporate retention schemes for a highly valued workforce (Armstrong & Baron, 2007; CIPD, 2012; Davies & Davies, 2010). Key concepts drawn from Davies and Davies (2010); Tripathi, Jayanthi and Pandeya (2010); Tarique

& Schular, (2010), were used to develop the four constructs of talent identification, talent culture, competency, and talent development.

Talent Identification (TI)

Talent identification (TI) is defined as a process or activity associated with discovering sources of talent. Attracting talent involves enticing people who are enthusiastic, highly capable and loyal to the values, beliefs and mission of the organisation (Davies & Davies, 2010, p.420). In academia, for example, management searches for talented and competent academics who would enhance the university's future performance. Indeed, the Hay Group state that for organisations "to be truly successful, they need to stay ahead of the game and predict who will be the key drivers of their future success" (Hay Group, 2008, cited in Davies & Davies, 2010, p 420). Thus, eminent organisations are future focused and predict what skills, attitudes and behaviours they will need from talented individuals (Davies & Davies, 2010, p.421; Hay Group 2008). TI supports fundamentals of the institution to discover the source and also be aware of team members' performance. TI enables organisations to embrace performance management systems, address performance issues (makes connections), and make appropriate managerial decisions using assessment tools to identify talent. Indeed, TI is imperative to identifying key positions that make a significant contribution to the organisation's sustainable competitive advantage.

Talent Development (TD)

In talent development (TD), learning and skills development are significant factors for talent-focused organisations that are fundamentally connected to key processes such as performance management (Davies & Davies, 2010). Talent development involves developing leaders through processes such as coaching, feedback, mentoring, and challenging employees (Evans, Pucik, & Barsoux, 2002; Ibeh & Debrah, 2011). The concept of TD was developed in alignment with motivation (Colvin, 2008; Ericsson & Charness, 1994; Davidson 2013) and it simply requires an improvement in attitude; improvement in effort; and the motivation to pursue your desired goal. Other researchers have suggested that TD should be dependent on an organisation's stage of development (Baird & Meshoulam, 1988; Srivastava & Bhatnagar, 2008). Hiltrop (1999) postulated that opportunities for training and development can assist organisations to retain talented people and high performers. Davies and Davies (2010, p. 422) suggest that institutions need to foster the learning and development of employees and create developmental opportunities in conjunction with a formal career plan for talent development.

In light of the above discussions, the following hypothesis is to be tested.

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

Talent Culture (TC)

Davies and Davies' (2010) research suggests that talented people need to feel that they are valued and that their contribution makes a difference. Recognition of exemplary work helps to facilitate the creation of a talent culture and encourages the employee to be loyal to the organisation (Davies & Davies, 2010; Cheese, Thomas & Craig, 2008). In their GLOBE study, Jackson and Parry (2011) examined leaders, i.e. global intellectual, psychological and social capital competence, which were also examined by Lewis and Heckman (2006) in relation to cultural factors as main streams of talent management. Furthermore, Sharkey and Eccher (2011) conducted research around Talent Optimization Framework and found that organisations with a stronger score in the supportive culture aspect of their talent framework achieved a 30% increase in achieving greater business outcomes. Undoubtedly, these findings highlighted the importance of corporate culture values that have been employed to retain talented workers and enhance business competitiveness.

H2: There is a relationship between Talent Identification (TI) and Talent Culture (TC).

Competencies (C)

Increasingly, talent management has been competency focused, that is, it has promoted stretching employees to their fullest potential where they are likely to experience and retain their expertise and skills (Davis 2007; Davies & Davies, 2010, p.425). Key competencies include creativity, knowledge, action orientation, leadership, interpersonal skills and functionality. These competencies are measures of an employee's creativeness, their ability to provide novel solutions to problems and to achieve high standards. However, other competencies include the effective use of time and management of materials to produce the best outcomes; leadership and motivational qualities; interpersonal skills that yield ownership and responsibility (Davies & Davies, 2010; Davis, 2007; Kaur & Kumar, 2013). Cheese, Thomas and Craig (2008) expressed the view that motivation, commitment, trust, empathy and inspiration are critical indicators of employee competence.

Securing a sustainable talented workforce is essential to the success and competitive advantage of organisations (Ingham, 2006). Organisations that use core competencies enjoy greater profitability, customer satisfaction levels, and customer retention than other organisations (Aberdeen, 2013). Competency management consistently integrates TM processes and competencies as a common denominator (Andrews, 2011). The development of competencies is critical for all HR activities in enhancing process consistency, and aligning HR with the organisation's broader strategic goals (Human Resource Systems Group, 2014). Moti (2012) argues that, in order to be effective, competency management must incorporate competencies into training and development programs. Undoubtedly, the application of a competency based TM strategy will contribute to the development of initiatives for organisation transformation and changing strategies. Based on the above detailed literature review, the following hypotheses are expounded:

H3: There is a relationship between Competencies (C) and Talent Development (TD).

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

H5: Mediated Talent Culture (TC) positively relates to Talent Development (TD).

It is important for organisations to take a proactive role in identifying and cultivating a workforce who have the capacity to meet the challenges associated with embryonic global uncertainties (Jane, Pajo, Ward & Mallon, 2006; Bhatnagar, 2008). One industry currently facing this dilemma is the education sector in Malaysia, particularly the private education providers and the 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. By 2015, Malaysia aims to attract 150,000 international students. The gross output of private education alone has increased from \$3 billion in 2005 to \$ 7 billion in 2008 (Malaysia 2010, p.130). Sustaining a huge education sector consisting of 20 public universities, 20 private universities (under large Government Linked Companies or GLC universities), and a number of foreign universities has become challenging (Malaysian Ministry of Education, 2013). One of the primary challenges for Malaysia's education sector is the attraction and retention of qualified and competent academic staff for GLCs. The Education Ministry's record in 2008 indicates that there are currently only 1,070 PhD academics and 6,846 master's academics in service, and this is not enough to meet the growing demand for competent educators for the education industry at large (Malaysian Ministry of Education, 2013). Several studies have found that some universities in Malaysia are losing students because of poor service quality and a lack of competent academics (Firdaus, 2006; Latif, Ramli, Zoraini & Nik Azlina, 2004; Hasan et al., 2008; Ismail & Abiddin, 2009). Competent academics are urgently required with the Malaysian Ministry of Higher Education (MOHE), which has identified three leading GLC universities that will spearhead the implementation of specialised and strategic targets set under the Malaysian Economic Master Plan 2020. These GLCs are Universiti Tenaga Malaysia (UNITEN), Universiti Teknologi Petronas (UTP) and Multimedia University of Malaysia (MMU).

Educational excellence requires the utilisation of world class branding, marketable academic programs, high-level research activities and facilities, and competent academics in educational institutions (Isahak, 2007) to produce highly skilled and employable graduates. Contrary to these ideals, several researchers have found that Malaysian universities are currently not meeting the needs of industry (Hernaut, 2002), and the competency gap has grown wider between the knowledge, skills, and qualities possessed by the universities' graduates (Kamil, Abdul Hamid, Hashim & Omar, 2010). Compounding the relatively small number of highly qualified academics discussed above and the quality of 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 12%

of PhD academics and 4.1% of non-PhD academics from both public and private universities left the higher education sector for other non-educational sectors (27%); and 10 % of them took up employment in public agencies in 2004. This high turnover rate was attributed to better salaries, career development opportunities, job insecurity (were on contract or sessional appointments), and workload issues. Chong (2014) also identified an attrition rate as high as 30% in the education sector between July 2010 and June 2011.

While UNITEN, UTP and MMU are experiencing rapid growth in the areas of broad discipline delivery and graduate satisfactory completion annually, talent up-skilling and retention of academic staff has become paramount. The GLCs in general need to accelerate development paths for academics. Indeed, talent management can actually provide job security for academics as it has a positive and significant influence on employees' attitudinal outcomes and organisational effectiveness e.g. employee work engagement, turnover avoidance, and value addition.

The GLC universities' objective of attracting and retaining academic staff who exhibit excellence and competency in research and the delivery of educational programs has met a 'stumbling block' in high attrition rates. This has been largely due to academic staff burnout as a result of a heavy workload, relatively lower salaries than their counterparts in public universities, a lack of opportunities for professional development, uncertainty about the chances of getting a promotion, and inadequate resources for lifelong learning (Ariokiasamy, Ismail, Ahmad & Othman, 2009). The significant increase in the attrition rate reported in 2004, and 2013, means that it is now imperative to develop a talent management strategy for 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 need 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, Hashim & Omar, 2010). Jones (2008) suggests that individuals could be assessed on the basis of how they would contribute to the organisation and assist it in achieving its vision, mission and strategic goals, and highlighting their skills and talents. If this approach was utilised in conjunction with talent development and career development opportunities, it would enhance academic engagement in their work and produce maximum returns. The Malaysian Education Minister argued that strengthening Malaysia's education sector will be central to its push to become a Developed Nation (Malaysia 2010). GLCs universities have been identified as key contributors to specialised high quality manpower training and development. However, this will prove to be a difficult task given the reported attrition rate and the lack of competent academic staff to deliver quality education. Therefore, it is critical that GLCs universities develop and implement an appropriate talent management strategy.

Research Framework and Hypothesis

Firstly, the research framework formulated by the researchers using Talent Management studies proposes that Talent Identification (TI) of academics could be initiated by searching for talent among academics with appropriate qualifications for the educational sector (GLCs). Peters (2005) asserts that academics need to pursue academic “mastery”, and the idea of mastery is interesting as a form of internal motivation, that is, as process of trying to be better “than no-one other than yourself” (Davies & Davies, 2010, p. 420).

Secondly, Cheese (2008) further expressed the value of motivation and commitment, which inadvertently strengthen employee retention because they are built upon the strength of a relationship. This could create pillars of corporate culture values to retain the talented workforce. Indeed, by creating an excellent working culture, the university can provide academics with an environment that motivates them. In order to promulgate a talent culture in the university, commitment is required from all leaders, such as Heads of Department, Deans and Human Resources Managers, who must advocate a TC environment.

Thirdly, Tripathi et al. (2010) propounded a PAKS (personality, ability, knowledge, skills) based competency approach for academic institutions using four main perspectives— knowledge, behavioural, administrative and research. Tripathi’s et al. (2010) behavioural parameters included attendance, reflection, and overall planning ability. Competencies are also essential in professionally executing research knowledge creation and the services rendered for teaching and learning processes.

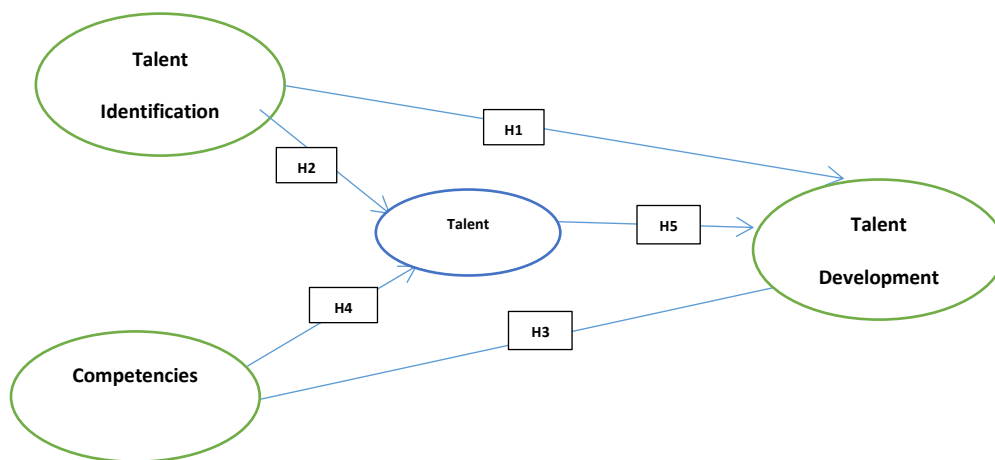
Finally, high performers have naturally high expectations such as career advancement and continuous improvement. In addition to the efforts of other academics, the academic himself needs to strive towards self-improvement and improved performance so that the values developed will help to enhance the academy’s performance and productivity. As employees’ knowledge, skills and competencies are an important competitive tool, talent needs to be maximized and recognized as one of the discrete sources of organisational competitive advantage (Collings & Mellahi, 2009).

A firm’s competitive advantage is underpinned by the capabilities of talented individuals who make up its human capital pool (Cheese, Thomas & Craig, 2008; Wright, McMahan, McCormick, & Sherman, 1997). Hence, competency development is imperative and this refers to those activities carried out by the organisation and the employee to maintain or enhance the employee’s functional, learning and career competencies (Forrre & Sels, 2003). In this context, competency development can be understood as how individual employees develop their competencies by actively engaging in different types of developmental activities offered by the organisation, i.e., 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 TM research framework has been developed. The TM framework will focus on the relationship between talent management and the competencies of

academics. The independent variables are the predictors of talent development towards the GLC universities' academics, consisting of talent identification, talent culture and dependent variables are competency and talent development towards academics.

As mentioned, the researchers used previous literature to identify the key factors associated with each of the four constructs. Twenty-six items operationalised the factors or attributes, which were adapted from validated scales used by previous studies. Figure 1 shows the four constructs, i.e. talent identification, talent development, talent culture and competencies.

Figure 1: Research Framework using Davies & Davies, Tripathi et al., and Tarique & Schular (adapted)



Methodology

This research employed a series of sample designs incorporating a mix of sampling methods. 1) Judgmental cluster selection for the participating universities, 2) The stratification method in terms of discipline, 3) A random selection of academics from more than one department/discipline from the three Malaysian GLC universities. 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 and would therefore have limited the number of respondents who could be included in the project (Aaker, Kumar & Day, 2001).

The data required for this research was collected using a consumer-type survey. A questionnaire was developed with 26 items adapted from previously validated scales. Respondents were required to rate the importance of each of the 26 items using a five point Likert-type scale, anchored at 1 (strongly disagree) and 5 (strongly agree). A non-probability sampling procedure (convenience sampling) was adopted owing to the unavailability of a satisfactory sampling frame. Academics from UNITEN, UTP and MMU were provided with the questionnaires. An on-line survey containing the same questionnaires was also sent out to obtain additional respondents. A total of 300

questionnaires were submitted to the three GLC universities of which 168 survey questionnaires were completed and were deemed useable for data analysis purposes.

A pretest was performed to identify any problems with the content of the questionnaire and that its wording was easy for participants to understand. A selected group of academics participated in the pretest (professors, associate professors and senior academics). Overall, survey data was collected from 168 academics employed by the GLC universities and there was equal representation of both males (49.4%) and females (50.6) in the sample. About 64% of the sample was aged between 20 and 40 years, while the rest were over 41 years of age. In addition, 63 percent of the academics had been employed for 5 to 15 years by 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 by researchers to test hypothesized relationships (Muthaly, Lobo and Jen-Yuan, 2013). PLS was deemed to be the most suitable tool for analyses of exploratory models given that an explanation of the construct interrelationship was desired (Ranganathan, Dhaliwal & Teo, 2004).

The survey instrument was developed after conducting a broad review of the relevant literature. The independent variable identified in the literature such as talent identification and talent culture were measured through six survey items each, adapted from research conducted by Davies and Davies (2010), Tarique and Schular (2010) and Cheese (2008). Competency factors were measured using eight survey items adapted from Tripathi, Jayanthi and Pandeya (2010); Davies and Davies, (2010); Cheese, Thomas and Craig (2008); Wright, McMahan, McCormick, and Sherman (1997); Forrier and Sels, (2003). Talent development constructs were also measured with six survey items adapted from Davies and Davies (2010) Collings and Mellahi (2009).

The minimum sample size required for analysing 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 & Sarstedt 2011; Ringle, Sarstedt & Straub 2012). The largest number of indicators in this study 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 the 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 modeling (SEM) using the partial least squares (PLS) procedure (Hulland, 1999; Ranganathan, Dhaliwal & Teo, 2004). PLS enables researchers to explain the relationships within a model (Fornell & Bookstein, 1982) and thereby enables a simultaneous examination of whether the hypothesized relationships at the theoretical level are empirically supported (Sarstedt, Wilczynski & Melewar, 2013; Khalifa & Liu, 2003). PLS is seen as an effective method of analysis for analyses of exploratory models where an explanation of the intra and inter construct interrelationship is desired (Ranganathan, Dhaliwal & Teo; Sarstedt, Ringle, Henseler & Hair, 2014).

Item Reliability

The loading of the first-order factors ranged from 0.6160 to 0.8430 ($p < 0.01$), indicating acceptable correlations among the first-order factors, because items with a loading of less than 0.50 are not statistically significant (Bagozzi & Yi, 1994; Hulland, 1999). Individual item reliability is highlighted in Table 1 below.

Convergent Validity

The traditional reliability measure of Cronbach's alpha assumes that all items measuring a construct are of equal weight and is influenced by the number of items in the construct (Ranganathan, Dhaliwal and Teo, 2004). In PLS, however, composite reliability depends on the actual reading of factor scores, which has proven to be a better indicator of internal consistency. Fornell and Larcker (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 0.869.

Prior to testing the statistical significance of the paths of the measurement and structural models, we examined its validity and reliability. Table 1 provides loadings for the respective constructs along with composite reliability scores (CR) and the average variance extracted (AVE). All items are significant at the 0.05 level with high loadings (all above 0.60), which demonstrates 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 0.6160 to as high as 0.8390. The AVE measures the variance captured by the indicators relative to measurement error (Fornell & 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 Reliability | AVE |
|------------------------------|---|-----------------|------------------------------|--------------|
| Talent Identification | Use of assessment tools | 0.666 | 0.807 | 0.513 |
| | Addresses performance problems | 0.625 | | |
| | Rate performance levels | 0.815 | | |
| | Adjust managerial decisions and actions | 0.744 | | |
| | | | | |
| Talent culture | Nomination for excellence awards | 0.616 | 0.869 | 0.527 |
| | Rewards for exemplary works | 0.783 | | |
| | Recognition for individual contribution | 0.796 | | |
| | Commensurate fairly for performance | 0.792 | | |
| | Market rated salaries | 0.698 | | |
| | Celebrates exceptional performance | 0.651 | | |
| | | | | |
| Competencies | Uses time and materials to best advantage | 0.843 | 0.881 | 0.651 |
| | Ability to lead people | 0.827 | | |
| | Motivate others to work | 0.741 | | |
| | Ownership / responsibility for the job | 0.811 | | |
| | | | | |
| Talent Development | Feedback for development purposes | 0.762 | 0.840 | 0.637 |
| | Create developmental opportunities | 0.792 | | |
| | Formal career planning sessions | 0.839 | | |

Table 2 presents the discriminant validity statistics. Diagonal elements in the correlation of constructs' matrix are the square root of the average variance extracted. Diagonal elements should be greater than corresponding off-diagonal elements in order to be considered of adequate discriminant validity. As can be seen in the table, our model demonstrates that there is 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 | 0.462 | 0.726 | 0 | 0 |
| Talent Development | 0.532 | 0.584 | 0.798 | 0 |
| Talent Identification | 0.433 | 0.632 | 0.711 | 0.717 |

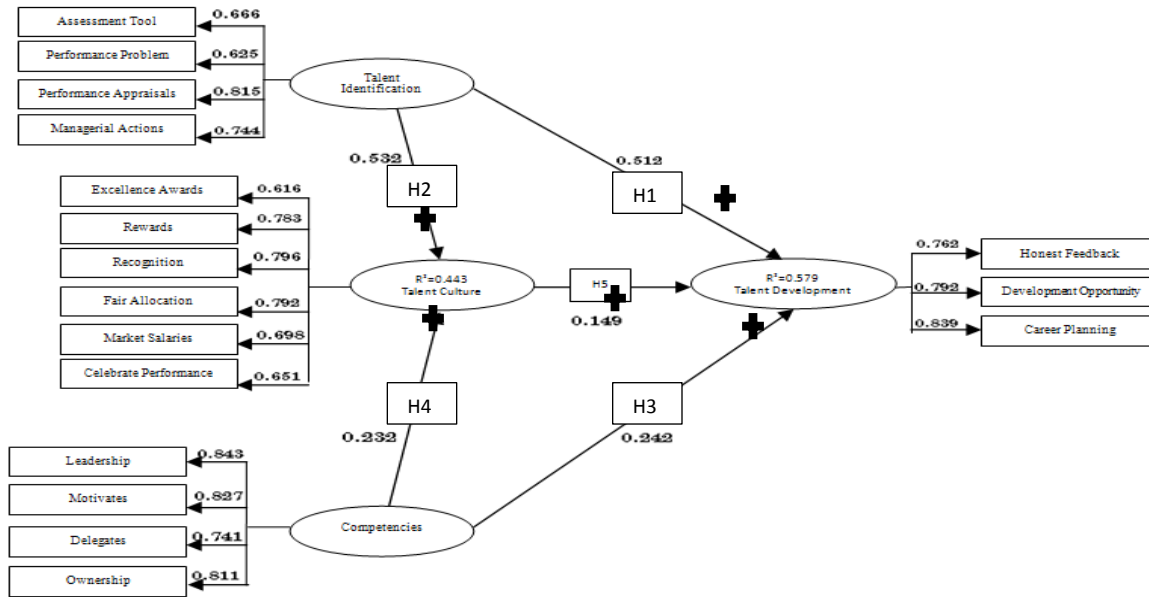
Table 3 shows that all items have higher scores on their respective constructs than on others, providing further evidence of discriminant validity. Therefore, our model has both discriminant and convergent validity (Anderson & Gerbing, 1988), showing that measures of the constructs are distinct and that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

Table 3: Cross-Factor Loadings

| | Competence | Talent Culture | Talent Development | Talent Identification |
|-------------------|-------------------|-----------------------|---------------------------|------------------------------|
| Comp5 | 0.843 | 0.417 | 0.496 | 0.358 |
| Comp6 | 0.827 | 0.361 | 0.450 | 0.347 |
| Comp7 | 0.741 | 0.378 | 0.342 | 0.404 |
| Comp8 | 0.811 | 0.331 | 0.414 | 0.292 |
| TalentCul1 | 0.351 | 0.616 | 0.277 | 0.230 |
| TalentCul2 | 0.347 | 0.783 | 0.512 | 0.470 |
| TalentCul3 | 0.410 | 0.796 | 0.384 | 0.442 |
| TalentCul4 | 0.416 | 0.792 | 0.531 | 0.572 |
| TalentCul5 | 0.220 | 0.698 | 0.380 | 0.534 |
| TalentCul6 | 0.268 | 0.651 | 0.393 | 0.421 |
| TalentDev4 | 0.432 | 0.428 | 0.762 | 0.553 |
| TalentDev5 | 0.484 | 0.438 | 0.792 | 0.527 |
| TalentDev6 | 0.363 | 0.528 | 0.839 | 0.619 |
| TalentID2 | 0.246 | 0.420 | 0.483 | 0.666 |
| TalentID4 | 0.312 | 0.442 | 0.462 | 0.625 |
| TalentID5 | 0.319 | 0.551 | 0.541 | 0.815 |
| TalentID6 | 0.362 | 0.384 | 0.547 | 0.744 |

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

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



Findings and Discussion

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 H₁ to H₅ (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 support hypotheses H₁ to H₅ (inclusive).

Talent identification was the strongest contributor to talent development with $\beta=0.512$. Talent competency ($\beta=0.242$) had a direct effect on talent development, while the presence of culture ($\beta=0.149$) assisted in mediating the overall relationship of talent development. The total effects of talent identification and talent culture on talent development were 0.591 (t-statistic 8.843) and 0.277 (t-statistic 3.511) respectively. Based on the examination of the structural model, this study supports the hypotheses proposed (H1-H5), and shows that culture has had a positive impact in mediating both talent identification and competencies in their positive association to talent development.

The positive path coefficient of 0.512 confirms the importance of 'talent culture' as a crucial mediating construct in achieving better 'talent development'. Additionally, the combined effect of the mediator 'competency' and the two constructs, ('talent identification' and 'talent culture') has resulted in a significantly positive R^2 of 0.579.

The use of R-squared (R^2) is important to determine the predictive capacity of the model. The bigger the R^2 , the higher the predictive power of the model. The proposed model shows that 57.9% of the variance in talent development was explained by talent identification and talent culture mediated by competency. All of the path coefficients in the inner model were positive and significant at the 0.05 level.

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: rates performance levels; employs managerial decisions and actions; use of assessment tools; and addresses performance problems. The significant loadings in order of magnitude for 'competencies' are: uses time and materials to best advantage; ownership / responsibility for the job; leadership; motivates others; and ability to delegate. The significant loadings in order of magnitude for 'talent culture' are: recognition of individual contribution; compensates fairly for performance; reward exemplary work; market rated salaries; celebrates exceptional performance and nomination for excellence awards. Finally, significant loadings in order of importance for 'talent development' are: conducts formal career planning sessions; creates developmental opportunities and provides feedback for development purposes. Overall, the significant indicators demonstrate evidence that the variables adopted in the overall model are robust.

Davies and Davies (2010) associate motivation with talent culture, but the findings from this study appear to suggest that motivation is related to competency. It must also be stressed that Davies and Davies (2010), Tripathi, Jayanthi and Pandeya (2010) and Tarique and Schular (2010) have not shown the tenets of talent culture to the extent that this study has. The key tenets for culture outlined in this study are "nominations for excellence awards, rewards for exemplary work, recognition for individual contribution, compensating fairly for performance, market rated salaries and celebrating exceptional performance". The most important contributor to 'talent culture' is recognition of individuals' contribution, followed by compensating academics fairly for their performance. It should be noted that the antecedents for this talent development model are exemplified by a strong variation of close to 58% in its overall representation. The present competitive environment in the tertiary sector necessitates 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. In order to enhance talent development in the tertiary sector, senior managers in academic institutions need to ensure that all academics have an appreciation for individual contribution and ensure that academics receive adequate compensation for their performance. Universities will also need to provide academics with formal career planning and authentic feedback mechanisms as part of their talent development process.

Since 87% of the participants were from a range of positions from tutors to senior lecturers, the inferential statistics seem to suggest that participants see their own “individual contribution” and being “compensated fairly for performance” abilities as the most important elements of competencies towards talent development. Junior academics’ concern for recognition of individual contribution illustrates the uniqueness of our findings, which show that these academics are apprehensive about their individual performances being overshadowed by senior academics.

Implications of this Study

We contribute to the existing literature by highlighting the crucial role of TC and its tenets in TD for the tertiary sector. One of the major tenets of TC was “recognition of individual contribution”. Since TC plays an important mediating role for TM, it is imperative that other universities incorporate aspects of professional development to steer and enhance academics’ individual contribution. It is also necessary for heads of various departments to acknowledge and encourage subordinates by recognizing an individual’s commitment to their respective academic accomplishments and the fulfillment of departmental aspirational tasks.

Moreover, the study highlighted the importance of career planning and motivation for TD. The senior management team of the universities in general need to ensure that academics are provided with adequate opportunities in terms of well-articulated career planning programs. These programs would need to integrate effective pathways for career progression with high level leadership and motivational skills in order to achieve overall organisational sustainability.

Finally, academic institutions should utilise the various aspects of the four constructs TI, TC, C and TD. Each institution would need to incorporate the elements of the above constructs (e.g. rewards, inculcate ownership, appraisals, etc.) into their respective departmental operational benchmarks. For example, a research-focused department would not utilize similar elements as one focused on teaching. TC for a research focused department head would need to utilize rewards and awards, while a teaching-only one could utilize fair allocation with transparency.

Limitations

The findings from this study should be viewed with caution due to the limitations in the methodology and the relatively small sample. Although survey research is cross sectional it only captures perceptions and feelings at a single point in time. The authors recommend that future researchers consider conducting longitudinal studies that explore the major constructs of TM. The findings of such a study would have greater validity. The authors also acknowledge that the study is somewhat limited in size and scope in that we only test one type of tertiary institution. The respondents were drawn from only three GLC universities, while different types of universities may report different results if surveyed. Even though the researchers attempted to maximize the paper’s external

validity, a probability sample would have increased its generalisability. To add rigor to our findings, we suggest that future experimental research would further augment our TM definition and provide additional boundary conditions for it.

Future Research

Companies need to urgently acquire new methods of hiring, rewarding, monitoring performance, training and developing skills, and retaining these high value workforces in view of the dynamism in the global market place (Hay Group, 2014; Bersin & Associates, 2012, The Economist, 2015). As such, future research on talent management requires researchers to focus on identifying specific future-oriented skills that contribute to the development of a flexible and technology-driven workforce both in the academic and non-academic sectors. Researchers also need to explore the characteristics and elements of talent culture that can drive and sustain a competitive global market. Finally, research could further develop flexible strategies for continuous development of competencies that would deliver high impact and valued added talent.

Conclusion

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 of rewarding exemplary work has been shown to be a strong antecedent for talent culture. As such academic's achievements in teaching, research and other accomplishments need to be closely monitored for achieving higher talent development goals. The unrelenting demand for highly competent academics and the desire to retain them in the tertiary sector means that the central role of the tenets of talent culture to talent development could contribute significantly to the existing literature and signal the creation of new paradigms in talent management.

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