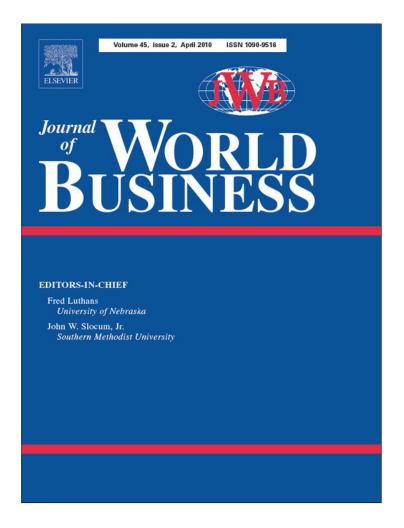
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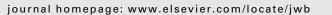
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Review

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Global talent management: Literature review, integrative framework, and suggestions for further research

Ibraiz Tarique^{a,*}, Randall S. Schuler^{b,1}

^a Pace University, Lubin School Business, One Pace Plaza, New York, NY 10038, USA
^b Rutgers University and GSBA Zurich, HRM Department, 202 Levin Bldg., 94 Rockafeller Road, Piscataway, NJ 08854, USA

ARTICLE INFO	A B S T R A C T
<i>Keywords:</i> Talent management War for talent High potentials Globalization	The environment for most organizations today is global, complex, dynamic, highly competitive, and extremely volatile, and is likely to remain so for years to come. In addition to these external conditions, most organizations are also facing several global challenges including those related to: talent flow; the managing of two generations of employees, viz., older or mature workers and younger workers; and a shortage of needed competencies. One major result of these challenges for organizations is that they have to be global and that they have to be systematic in managing their human capital if they wish to have any hope of gaining and sustaining a competitive advantage in the years ahead. Many human resource practitioners and consultants (HR professionals) are now recognizing this, especially those that operate globally, the multinational enterprises. Academics are also showing a strong interest as evidenced by their work in the new area referred to as "global talent management". In this article we review that academic work and attempt to organize that literature by creating an integrative framework for understanding and advancing further research in global talent management. To guide this research our framework highlights several selected challenges in global talent management, and several drivers of those challenges. It also highlights the potential role of IHRM activities in addressing those selected challenges. A discussion of possible criteria of global talent management effectiveness completes the

framework. Hopefully this integrative framework may guide further academic research on global talent management and might also inform the work of HR professionals. © 2009 Elsevier Inc. All rights reserved.

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^{*} Corresponding author. Tel.: +1 212 618 6583.

E-mail addresses: itarique@pace.edu (I. Tarique), schuler@rci.rutgers.edu (R.S. Schuler).

¹ Tel.: +1 732 445 5827.

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1. Introduction

Today's global economy has created a more complex and dynamic environment in which most firms must learn to compete effectively to achieve sustainable growth. Workforces around the world have become larger, increasingly diverse, more educated, and more mobile (Briscoe, Schuler, & Claus, 2009; Friedman, 2005). This global environment has not only changed the way business is conducted, it has also created the need for organizations to manage their workforces in a global context. As a consequence, the notion of a "global workforce" has received extensive discussion recently (Briscoe et al., 2009; Collings, Scullion, & Dowling, 2009; Scullion & Collings, 2006). One of the major topics of this discussion has been around talent management. Most of the research in the area of talent management so far has been premised on the idea of talent shortages, reflecting the robust economic conditions from 2000 to 2008 (Collings & Mellahi, 2009). In the past year or two, however, there have been numerous examples of organizations downsizing operations and reducing their workforces as a result of global economic and financial conditions. Thus for many organizations there now seems to be a talent surplus with unemployment increasing across many countries and too many qualified people chasing too few jobs. Regardless of economic and workforce conditions, however, organizations large and small, public and private, have come to the realization that in order to gain and sustain a global competitive advantage they must manage their workforces effectively. And to do so they must confront the reality of global talent management (GTM) and its many challenges and develop human resource management activities to meet those challenges (Beechler & Woodward, 2009; Collings & Mellahi, 2009).

There is considerable evidence that organizations worldwide face formidable talent challenges. The ability to attract, develop, and retain a needed supply of critical talent is a challenge facing all organizations (e.g., Coy and Ewing, 2007). In a 2008 Deloitte Research Study, Athey (2008, p. 1) noted that

Despite millions of unemployed workers, there is an acute shortage of talent: science educators to teach the next generation of chemists, health care professionals of all stripes, design engineers with deep technical and interpersonal skills, and seasoned marketers who understand the Chinese market-place. Resumes abound, yet companies still feverishly search for the people who make the difference between 10 percent and 20 percent annual growth, or between profit and loss. Critical talent is scarce...

Similar trends and HR challenges are reported in survey based studies conducted by other consulting and professional research

groups, such as the Boston Consulting Group, World Federation of People Management Associations, Manpower Inc, Economist Intelligence Unit, and The Chartered Institute of Personnel and Development (CIPD). The academic literature (e.g., Boudreau & Ramstad, 2007, 2005; Cappelli, 2008a, 2008b; Collings & Mellahi, 2009; Lewis & Heckman, 2006) also suggests that organizations face greater competition for talent worldwide and face challenging times in attracting, retaining, and developing people they need. So even though there is currently a global economic slowdown, there are major structural conditions in place to ensure that competition for talent worldwide will continue to be a significant challenge. More specifically, organizations are and will continue to be searching for individuals who can effectively manage through the complex, challenging, changing, and often ambiguous global environment. In other words, most companies worldwide, regardless of size, are confronting and/or will soon confront many GTM challenges, if left unmet, will impact their global business strategies, both in the near term and longer term.

2. GTM challenges in the context of international human resource management

GTM and its many potential challenges can be examined in the context of international human resource management (IHRM), a field that has witnessed tremendous advancements in the research and practice during the last two decades (see Schuler & Tarique, 2007; Sparrow & Brewster, 2006). During this time, several challenges have emerged in IHRM with the introduction of increased world wide economic development, extensive global communication, rapid transfer of new technology, growing trade, and emigration of large numbers of people (see De Cieri, Wolfram Cox, & Fenwick, 2007; Schuler & Tarique, 2007 for a review of IHRM).

A major topic that has emerged in IHRM in recent years is the importance of maximizing the talent of individual employees as a unique source of competitive advantage (Scullion & Collings, 2006) – managing global talent effectively has become an important area for future research (cf., Budhwar, Schuler, & Sparrow, 2009; Stahl et al., 2007). For example, Roberts, Kossek, and Ozeki (1998) identified major GTM challenges in the context of IHRM as: (1) easily getting the right skills in the right numbers to where they are needed; (2) spreading up-to-date knowledge and practices throughout the MNE regardless of where they originate; and (3) identifying and developing talent on a global basis. Similarly, Scullion and Collings (2006) noted that multinational enterprises (MNEs) are facing severe challenges in attracting, retaining, and developing the necessary managerial talent for their global

operations. Several others (e.g., Stephenson & Pandit, 2008) have suggested that having the right number of people at the right place at the right time with the right skill sets and levels of motivation are fundamental to talent management.

This is just a sampling of challenges in GTM that have been identified thus far. In the context of IHRM, research is still needed to examine if the same patterns exist in the GTM literature: much has been written on GTM but, to date, no thorough review of the literature has been done. The goal of this paper is to remedy this deficiency by developing an integrative framework which categorizes the major body of GTM research published between 2000 and 2009 in a manner that identifies key drivers of selected GTM challenges, selected GTM challenges, and IHRM activities used by organizations to manage these challenges.

2.1. Defining GTM

Although there seems to be a growing consensus as to the meaning of "talent management" (e.g., Collings & Mellahi, 2009; Lewis & Heckman, 2006), there is no consensus regarding the exact meaning of the GTM - it varies depending on the context it appears in (e.g., Brewster, Sparrow, & Harris, 2005; Scullion & Collings, 2006; Stahl et al., 2007), and has even been used interchangeably with IHRM. This can provide contradictory advice and fragmented theories. The recent trend in domestic talent management literature may provide some clarity to defining global talent management. In their review of the domestic talent management literature, Lewis and Heckman (2006) found that the literature can best be described in terms of three research streams: (1) talent management is conceptualized in terms of typical human resource department practices and functions; (2) talent management is defined in terms of HR planning and projecting employee/staffing needs; and (3) talent management is treated as a generic entity and either focuses on high performing and high potential talent or on talent in general. Because this third stream, is the most encompassing, we build on Lewis and Heckman (2006) third stream and use the strategic human resource management literature (e.g., Schuler and Jackson, 2007; Becker & Huselid, 2006) to argue that "talent management" in the context of IHRM should emphasize the management of people-embodied² human capital (generally defined as the combination of knowledge, skills, abilities, and personality characteristics) as crucial to the attainment of strategic goals. Defined most broadly, global talent management is about systematically utilizing IHRM activities (complementary HRM policies and policies) to attract, develop, and retain individuals with high levels of human capital (e.g., competency, personality, motivation) consistent with the strategic directions of the multinational enterprise in a dynamic, highly competitive, and global environment.

2.2. Differences between GTM and IHRM

While academics and practitioners may differ on the meaning of GTM, we suggest there are three significant differences between GTM and IHRM. First, IHRM includes more stakeholders. The field of IHRM is broad in its inclusion for the concerns of wide variety of stakeholders (Briscoe et al., 2009). The stakeholders can include customers, investors, suppliers, employees, society and the organization itself. While it might be argued that in so far as effective GTM can improve the effectiveness of the MNE, it can also impact the same variety of stakeholders, the most immediate and significant impact of GTM is on the employees and the organization itself. Second, IHRM addresses broader concerns and criteria. As a consequence of more stakeholders, IHRM has broader concerns

than those of attracting, developing, and retaining employees from the MNE. While these are certainly important, these concerns of GTM reflect concerns mainly of the employees and organization as stakeholders. Correspondingly, the criteria against which HR actions for GTM would be evaluated relate more specifically to the employees and the organization such as employee morale and engagement and organizational productivity and innovation. Third, IHRM encompasses more HR policies and practices. In the field of IHRM, there are several HR policies and practices including planning, staffing, compensating, training and developing, appraising, labor relations and safety and health (Briscoe et al., 2009; Dowling, Festing, & Engle, 2008). Within each of these policy and practice activities, there are many more topics and choices that researchers and professionals can select and utilize. This is in contrast to the situation with GTM that needs to focus only on a sub-set of topics in each activity. Indeed, GTM may find itself focusing primarily on the HR policy and practice activities of planning, staffing, appraising, compensating and training (Collings & Mellahi, 2009). In addition to these three major differences, GTM is a much more focused, topic, or issue, similar to diversity management or knowledge management (Briscoe et al., 2009; Lengnick-Hall & Andrade, 2008; Scullion & Collings, 2006). Additionally, GTM researchers can investigate the field without a significant concern for the multiple set of stakeholders and broader set of concerns traditionally associated with IHRM. In this manner, GTM can be examined in the context of IHRM. Viewing GTM in the IHRM context enables future researchers to build on work already undertaken in IHRM and apply some of those theories and models to GTM. Indeed, we use this perspective in this article.

3. Literature review – global talent management

The articles selected for inclusion in this review were initially restricted to those published in leading academic journals (between 2000 and 2009) specializing in general management, organization sciences, human resource management, international human resource management, international management, and international business. To identify top academic journals, we reviewed the journals selected by Budhwar et al. (2009) in their recent review, and identified earlier by Caligiuri (1999), which ranked top journals in terms of international human resource research. This list includes top journals in mainstream management (e.g., Academy of Management Review and Administrative Science Quarterly), in international management (e.g., Journal of International Business Studies and Journal of World Business), and in human resource management (International Journal of Human Resource Management and Human Resource Management). Because the number of articles identified by reviewing these above journals was relatively very small, we supplemented the list with academic and trade and popular articles from outside these journals that were identified through the ABI/INFORM article database by searching using the subject headings "global talent management", and "international global talent management". All the articles were examined for GTM content and an article was selected if its focus was on any aspect of GTM. In addition, we reviewed selected articles on each of the challenges and IHRM activities. The list, along with the number of GTM articles published in each journal from 2000 to 2009, is reported in Table 1. The articles were then grouped into four categories: (1) exogenous or coercive isomorphic drivers of GTM challenges; (2) endogenous or mimetic isomorphic drivers of GTM challenges; (3) IHRM activities (policies and practices) to meet those challenges; and (4) GTM effectiveness. These four categories were created post hoc, based on institutional theory and our integrative framework. Because no formal content coding method was used, these categories should be treated as an organizing tool rather than a definitive classification of the body of

² Our use of the term "talent" is based on Florida (2002).

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Table 1

1

Journal list ^a and the number of C	GTM articles (2000-2009).
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1. International Journal of Human Resource Management (9)
2. Journal of International Business Studies (6)
3. Academy of Management Journal (0)
4. Academy of Management Review (0)
5. Management International Review (5)
6. Human Resource Management (13)
7. Journal of Applied Psychology (1)
8. Asia Pacific Journal of Human Resources (5)
9. Journal of World Business (6)
10. Journal of International Management (1)
11. Human Resource Management Journal (4)
12. International Business Review (1)
13. Administrative Science Quarterly (0)
14. Journal of International Compensation (0)
15. Academy of Management Executive (7)
16. International Labor Review (1)
17. Journal of Management (0)
18. International Journal of Intercultural Relations (3)
19. European Management Journal (3)
20. International Journal of Selection and Assessment (0)
21. Journal of Cross-Cultural Psychology (3)
22. Others (50) ^a
^a Others include Applied Psychology Ap International Perspective Asian Su

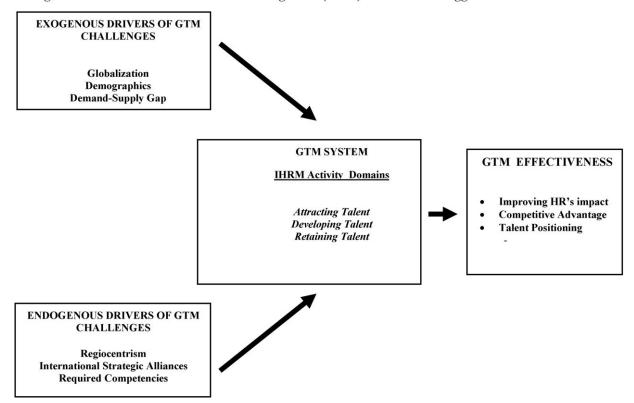
^a Others include Applied Psychology, An International Perspective, Asian Survey, Australian Journal of Management, Career Development International, Chinese Management Studies, Far Eastern Economic Review, Global Business & Organizational Excellence, Harvard Business Review, Human Resource Management Review, Human Resource Development International, International HRD, International Journal of Management Reviews, International Journal of Training and Development, Journal of Occupational and Organizational Psychology, Journal of Organizational Excellence, New Zealand Journal of Psychology, Personnel Review, S.A.M. Advanced Management Journal, SOJOURN, Strategic HR Review, The Leadership Quarterly, Total Quality Management, Training & Development. Reports and articles and reports from The McKinsey Quarterly, Towers Perrin, Deloitte Boston Consulting Group, A.T. Kearney, World Federation of People Management Associations, Manpower Inc., Economist Intelligence Unit, the ILO, The Chartered Institute of Personnel and Development (CIPD), MIT Sloan Management Review, Strategy + Business (complete list of articles is available from the first author). research. This approach to categorize, however, follows that applied broadly to the field of IHRM (Schuler, Dowling, & DeCieri, 1993).

To help provide researchers with a way of understanding and researching these categories and their relationships, we propose the use of institutional theory (see DiMaggio and Powell, 1991, 1983). This theory has been widely used to study the adoption and diffusion of organizational forms and HRM activities (e.g., Björkman, 2006). According to institutional theory, organizations are under social influence and pressure to adopt practices including HRM, and to adapt to and be consistent with their institutional environment. Organizations attempt to acquire legitimacy and recognition by adopting structures and practices viewed as appropriate in their environment. According to DiMaggio and Powell (1983) there are three types of 'isomorphisms' that can affect organizations: coercive isomorphism (e.g., a constituency such as the government imposes certain patterns, restrictions, or boundaries on the organization), mimetic isomorphism (e.g., organizations adopt the pattern and behaviors exhibited by successful organizations in their environment); and normative isomorphism (e.g., organizations act as the disseminators of appropriate organizational patterns, which are then adopted by other organizations).

The isomorphic processes explained by institutional theory can be used to identify and highlight the complex and dynamic relationship between factors both endogenous and exogenous to a MNE. In addition, the isomorphic processes enables us to establish the basis for linking GTM with IHRM and to efficiently organize the GTM literature into four categories described above and depicted in Fig. 1.

3.1. Broad findings

Based on our narrative review of articles, there are several broad observations regarding the state of the field at that time: (a)



Integrative Framework of Global Talent Management (GTM) in MNEs and Suggestions for Further Research

Fig. 1. Integrative framework of global talent management (GTM) in MNEs and suggestions for further research.

most of the research examined specific aspects of managing talent, but the research usually did not focus on "human resource management issues" (e.g., Koh, 2003); (b) a few studies conceptualized "talent" in very broad or generic terms (e.g., Faust, 2008); (c) most of the existing research was limited to descriptive essays, based on the author's consulting experience (e.g., Chaisson & Schweyer, 2004); (d) the majority of the empirical studies used descriptive statistics (frequencies and means) to analyze data and evaluate talent issues in several countries (e.g., Dietz, Orr, & Xing, 2008); and (e) a small number of studies used qualitative methodology; a handful of studies surveyed managers of organizations, a few studies analyzed case studies, and others used scenarios to describe issues related to talent management (e.g., Stahl et al., 2007).

Overall, the evidence would suggest that the GTM field is in its infancy compared to IHRM but it is an important component of IHRM (Collings & Mellahi, 2009). We used relevant concepts and ideas from the IHRM literature to discuss selected GTM challenges in detail so as to provide a framework for further research and practice in each "challenge" area. For space reasons, not all challenges identified in the literature and reviewed above are discussed here, rather only those discussed most frequently. It is important to point out that our approach in examining the GTM literature depicts just one of many ways the field can be organized. Others may focus on different drivers and/or identify different selected challenges.

4. Framework of global talent management (GTM) in MNEs

4.1. Exogenous drivers of GTM challenges

In the context of institutional theory, exogenous drivers are based on coercive isomorphism. These refer to forces or drivers external to the firm that are largely beyond management's control but can create challenges that can affect an organization's IHRM system (cf., Schuler et al., 1993). These exogenous drivers can include national culture, economic conditions, political system, legal environment, and workforce characteristics (Schuler et al., 1993). In reviewing and analyzing the recent research in GTM, three major drivers emerged in this category: Globalization, Demographics, and the Demand–Supply Gap.

4.1.1. Globalization

Majority of studies in this area discussed the challenges associated with talent flow which refers to the migration of talented individuals between countries for a variety of reasons such as to undertake advanced studies abroad and/or acquire foreign work experience, and then subsequently return to their country of origin to take advantage of economic opportunities and development (Carra, Inkson, & Thorn, 2005; Tung, 2008). A few studies have compared talent flow to the notion of 'brain drain' and suggested that the later is too restrictive and does not focus on the psychology of migration as well as the economic, political, cultural, family, and career forces motivating it (e.g., Carra et al., 2005). Studies have considered the effects of government type and as well as the effects of government regulations on talent flow (e.g., Koh, 2003). A few studies have examined talent flow issues in Singapore (Koh, 2003), New Zealand (e.g., Jackson et al., 2005), China (Zweig, 2006) and Tawian (Leng, 2002).

4.1.2. Demographics

Research in this category has examined the challenges associated with the changing workforce demographics. Current trends show that while the size of populations of much of the developed economies is projected to remain relatively stable (but get older), and in some cases even shrink, the populations of the developing economies and those just emerging economies are expanding and getting younger (Strack, Baier, & Fahlander, 2008). Research along these lines has attempted to examine how organizations attract, select, develop, and retain two generations of employees: older or mature workers and younger workers (also referred to as "Generation Y" born between 1980 and 1995) both of which have many high talent individuals (cf., Faust, 2008). The research on older workers has focused on the stereotypical beliefs toward older workers and found that the relationship between employers' policies, practices and attitudes towards workers over 50 is complex with both positive and negative biases towards older workers (e.g., Loretto & White, 2006). In addition to examining the negative biases, several studies have identified important differences between the aging and younger workers (e.g., Broadbridge, Maxwell, & Ogden, 2007; Faust, 2008; Marjorie, 2008; Terjesen, Vinnicombe, & Freeman, 2007).

4.1.3. Demand–Supply Gap

Studies in this category have found that a majority of employers worldwide are having difficulty filling positions due to the lack of suitable talent available in their markets (Strack et al., 2008). Several studies have attempted to describe the shortages in emerging economies (Stahl et al., 2007; Wooldridge, 2007; Dietz et al., 2008) such as China and India. Others have identified shortages in developed economies such as the United States (Adult Literacy, 2008). Other studies have focused on the causes of the shortages such as the changes in the employment relationship (e.g., Cappelli, 2005), and a misfit or mismatch between the training adequacy and employment structure (McGuinness & Bennett, 2006). A few studies have provided strategies to manage staff shortages (e.g., Henkens, Remery, & Schippers, 2008) such as increasing the labor supply of existing workers (through overtime, encouraging part-timers to work extra hours, etc., outsourcing work, and substituting technology/capital for labor).

4.2. Endogenous drivers of GTM challenges

In the context of institutional theory, endogenous drivers are based on mimetic isomorphism and refer to forces or drivers that are internal to the firm including competitive or strategic position, headquarter's international orientation, organizational structure, and workforce capability (cf., Schuler et al., 1993). In reviewing and analyzing the recent research in GTM, three major drivers emerged in this category: Regiocentroism, International Strategic Alliances, and Required Competencies.

4.2.1. Regiocentrism

Research in this area suggests that many of GTM challenges are region and industry specific (e.g., Rugman, 2003). Organizations are seeing the importance of strategically focusing on specific geographic regions, such as the European Union (EU), North American Free Trade Agreement (NAFTA) and the Association of Southeast Asian Nations (ASEAN), as one market and customize IHRM activities to best serve the needs of a particular region (e.g., Tarique, Schuler, & Gong, 2006). An important challenge for MNEs is to consider a regional workforce with an appropriate regional talent strategy. Studies have examined specific countries such as China (Tung, 2007). Other studies have examined challenges can be industry specific (Weng, 2008), that is certain industries provide more favorable environments to retain talent than others. It is important to note that the current global economic conditions may have any impact on how MNEs struggle with availability of talent in specific regions.

4.2.2. International Strategic Alliances

Retention of top level talent (e.g., CEOs, executives, vice presidents) during the merger or acquisition process is an

important challenge for MNEs. A few studies have examined the notion of 'talent raiding' (Gardner, 2002), which refers to an aggressive attempt by an organization that is, to attract or hire employees from a competing organizations. A few studies have examined antecedents of talent retention such as executives' perceptions of the merger announcement, interactions with the acquiring firm's top managers, and long-term effects of the merger (Krug & Hegarty, 2001). Several studies have examined how retention affects post-acquisition performance. Current evidence shows that there is a positive relationship between postacquisition performance of the acquired firm and degree of retention of the top management team of the acquired firm (Kiessling & Harvey, 2006). Other studies in this category have examined challenges in international joint ventures (IJVs) such as the selection and development of managers in complex IJVs (3 or more parent firms) (see Adobor, 2004 for more details), and managing at least six groups of employees each having somewhat different cross-cultural competency requirements. The different IJV employee groups highlight the complexity of developing staffing systems that can effectively select the right mix of talent for the various stakeholders in an IJV system.

4.2.3. Required Competencies

This area includes studies on general business competencies, cross-cultural competencies, and knowledge workers. Studies looking at general business competencies have focused on competencies needed in most managerial jobs. These competencies include basic education, communication skills, ability to use sophisticated technology, to interact with demanding customers, to perform under changing conditions, and motivation to adapt to new conditions as needed (see Adult Literacy, 2008). It appears that these increased requirements (competencies) are being associated with almost all jobs traditionally performed in multinational firms around the world today (Price & Turnbull, 2007). Studies on cross-cultural competencies (e.g., Johnson, Lenartowicz, & Apud, 2006) have attempted to conceptualize cross-cultural competencies into stable and dynamic competencies (e.g., Johnson et al., 2006; Shaffer, Harrison, Gregersen, Black, & Ferzandi, 2006). Stable competencies (e.g., personality) are characteristics and abilities that are consistent over time, relatively fixed, enduring patterns of how individuals feel, think, and behave. In contrast, dynamic competencies (e.g., knowledge and skills about cultural differences) tend to be malleable over time and can be acquired through learning experiences, e.g., training and international travel (cf., Peters et al., 1997). Several other studies in this category have examined antecedents and outcomes of cross-cultural competencies. Finally, studies in this category have proposed the creation of knowledge workers. While all workers today could be regarded as requiring more knowledge than ever before to do their jobs well, "knowledge workers" appear to be defined by having special skills developed through extensive education and training and capable of having a significant impact on the success of the company (Jackson, Hitt, & DeNisi, 2003).

4.3. IHRM activities

Schuler et al. (1993) define IHRM activities as both formal policies of the organization and the actual daily practices that employees experience. Due in part to the existence of many drivers of the selected challenges for GTM, there are many possible IHRM activities that MNEs can consider as actions or tools to address the many challenges. Matching the possible action with an accurate diagnosis of an MNEs talent management situation is a first step in gaining and sustaining a global competitive advantage that may result from the successful implementation of the correct action. Our review of the recent GTM research suggests that three major sets of IHRM activities that have been studied and also used by multinational firms facing their talent management challenges: *Attracting* (includes reputation management, recruitment, and selection), *Retaining* (includes performance management and compensation activities), and *Developing* (includes training and career development activities). These three major IHRM activities are a hallmark of a GTM system. The strategic HRM literature (e.g., Schuler and Jackson, 2005) suggests that by adopting a systems perspective, a large number of IHRM activities that are considered as distinct activities in the IHRM literature can all be considered part of a GTM system (cf., Schuler and Jackson, 2005). Furthermore, a systems perspective allows us to examine how the three IHRM activities fit together.

4.3.1. Attracting talent

This area includes three major IHRM activities: developing HR reputation; attracting individuals with interest in international work; and, recruiting *vis-a-vis* positions. Studies on HR reputation, which refers to a shared evaluation by stakeholders of an organization's HR philosophies, policies, and practices (Hannon & Milkovich, 1996), have examined why an organization's HR reputation has become an increasingly significant aspect of building organizational capabilities (Holland, Sheenan, & De Cieri, 2007). A few studies have focused on how organizations develop a compelling recruitment brand or HR reputation necessary for attracting talent from diverse populations (e.g., Ferris et al., 2007; see also earlier studies including Hannon & Milkovich, 1996; Koys, 1997).

In addition to HR reputation, research in this category has looked at a similar concept of organizational attractiveness and how this concept has become an important action for most organizations with respect to attracting talent (e.g., Chapman, Uggerslev, Carroll, Piasentin, & Jones, 2005). Several studies have focused on identifying and examining factors at the organizational (e.g., size) and individual (e.g., personality) levels that influence potential applicants' attraction to multinational enterprises (MNEs) (Lievens, Decaesteker, Coetsier, & Geirnaert, 2001). Another possible IHRM policy for MNEs is to attract individuals interested in international work as well as those interested in permanent international careers (Tarique and Schuler, 2008). Scholars in the area of international careers (e.g., Tharenou, 2003, 2002; Wang & Bu, 2004) as well as in global staffing (e.g., Collings et al., 2009) have identified antecedents, covariates, and consequences of attractiveness to international work/careers such as self-efficacy, martial status, and family attachment (e.g., Konopaske & Werner, 2005; Konopaske, Robie, & Ivancevich, 2005).

Finally, research in this category has examined how organizations use a talent pool strategy: the company recruits the *best* people and then selects them for positions rather than trying to select *specific* people for *specific* positions. Following the talent pool strategy MNEs remain committed to being very selective in hiring (Seigel, 2008).

4.3.2. Developing talent

The majority of research in this category has examined IHRM activities related to developing executives for global leadership responsibilities. A few studies have described trends and cross-country differences in executive talent development (e.g., Dickson, Hartog, & Mitchelson, 2003). Others have identified competencies needed to work effectively in a global environment (e.g., Bartlett & Ghoshal, 2003), and competency models for developing competencies (e.g., Caligiuri & Di Santo, 2001Caligiuri et al., 2001; Stahl et al., 2007). A few studies have examined the processes involved in designing, delivering, and evaluating developmental experiences or activities, such as long term and short term global assignments, participation in global teams, and cross-cultural training (Morrison, 2000). Some studies have challenged the general assumption

that everyone benefits equally from developmental activities (e.g., Caligiuri and Tarique, 2009). These studies have argued that it is important to understand who will benefit the most from certain type of developmental activities (Caligiuri, 2006). Organizations should identify those individuals with the requisite individual characteristics (e.g., personality), and then offer developmental activities may only be effective when learners are predisposed to success in the first place (Caligiuri, 2000). Finally, there has been evidence that organizations that excel in talent management make leadership development an integral part of their culture and actively involve their senior leaders in the process (see Novicevic & Harvey, 2004; Seigel, 2008).

4.3.3. Retaining talent

Articles in this category have focused on two major IHRM policies: reducing repatriate turnover, and increasing employee engagement. Several studies have examined how global assignments have become an integral part of individuals' careers and, for most companies, an indispensable tool for attracting, developing and retaining talent - the issue of repatriate turn-over continues to be an important concern for many MNEs (e.g., Lazarova & Caligiuri 2001; Lazarova & Cerdin, 2007; Yan, Zhu, & Hall, 2002). Other studies in this area have focused on identifying factors that can facilitate the retention of individuals when they return back. These factors can include satisfaction of repatriates with the repatriation process (Vidal et al., 2008), perception of justice (Siers, 2007), and availability of repatriation practices perceived important for successful repatriation (Lazarova & Caligiuri 2001). Finally, research on employee engagement has examined how and why increased levels of engagement in global firms promotes retention of talent, fosters customer loyalty and improves organizational performance and stakeholder value (Lockwood, 2007). Furthermore, studies have looked at universal practices to effectively promote engagement such as the need to be aware of country, regional and cultural differences when designing employee engagement and commitment initiatives (Lockwood, 2007).

4.4. GTM effectiveness

In framing the topic of effectiveness for international human resource management, Schuler et al. (1993) defined MNE effectiveness in terms of utilizing and integrating appropriate HRM practices and policies that enhance overall performance of the MNE on several criteria, both short term and long term oriented. This category had the least number of studies and because GTM is an important sub-set of IHRM, the focus on GTM effectiveness is also a sub-set of the effectiveness of IHRM. As shown in Fig. 1, there are three criteria that called for inclusion in our framework: improve HRs impact, competitive advantage, and talent positioning. While others could be included, these seem to be the most relevant and the most discussed in the literature.

4.4.1. Improve HRs impact

Studies in this category have examined three specific challenges: need for alignment, developing talent management matrices, and building talent management scorecards. Research on alignment has shown that although HR professionals spend a great deal of their time on formulating and managing the traditional HR activities such as recruiting, selecting, training, performance appraisal and compensation, systemically linking HRM activities with the firm's strategies and directions is lacking. "HR underperforms in companies where its capabilities, competencies, and focus are not tightly aligned with the critical business priorities" (Rawlinson, McFarland, & Post, 2008). Research on talent metrics (e.g., Boudreau & Ramstad, 2007) have identified common mistakes encountered by managers in identifying, monitoring and implementing important or right talent metrics for their organizations. Other studies have examined specific talent metrics including talent brand mapping, employee-recruit gap analysis, strategic readiness of individual talent, employee satisfaction, work motivation, employee commitment, and extra-role behaviors (see Becker et al., 2009; Collings & Mellahi, 2009; Lawler, Levenson, & Boudreau, 2004). The remaining studies have attempted to develop talent based scorecards that focus on becoming employer of choice (e.g., Branham, 2005), sustaining employee engagement and developing a high-performance culture (e.g., Rampersad, 2008).

4.4.2. Competitive advantage

Research in this category suggests that because the scope of this challenge for GTM for MNEs is so large and the major drivers of the challenges so significant and complex, MNEs have an opportunity to gain and sustain a global competitive advantage if they can create IHRM activities to meet the challenges (Gupta & Govindarajan, 2002; Stephenson & Pandit, 2008). And "those that get the solution "right" configuration HRM activities will create a real source of competitive advantage" (Lane & Pollner, 2008).

As shown in Fig. 1 there are several potential results from successfully developing actions to address the drivers of GTM challenges. One result is that it is difficult to do well and for others to copy. But for those organizations that are successful, it is possible to gain global competitive advantage, and develop IHRM activities to enable them to sustain this advantage. An important point here is to realize that sustainability of short and long-term competitive advantage is not ensured (Daniels, Radebaugh, & Sullivan, 2007). But the development of IHRM activities to initially develop the appropriate talent is likely to facilitate the development of more appropriate IHRM activities going forward. The development of these activities is in turn likely to also result in stronger management leadership and HR leadership. These strengths are likely to be further enhanced by programs and actions specifically designed to train and develop the firms' leaders and HR managers (Caye & Marten, 2008; Guthridge, Komm, & Lawson, 2008).

4.4.3. Talent positioning

Another result from successfully addressing the challenges of GTM is the firms having the right talent at the right place at the right time with the needed competencies and motivation at all levels and all locations of the firms (Guthridge et al., 2008; Lane & Pollner, 2008). We refer to this as talent positioning. A shown in Fig. 1, and important challenge is to develop a bench strength in all of its positions within the company, both anticipated and unanticipated, in all current and future locations around the world (Rawlinson et al., 2008). The result of this is that the organization has the needed employees at the right place at the right time. In addition, it also ensures loyalty, thus aiding retention (Seigel, 2008).

5. Further research, challenges for GTM researchers, and concluding thoughts

Our proposed integrative framework illustrates the influences and interrelations of the factors in a MNEs external and internal environment that may help shape its GTM system. Although the GTM research is in the early stages of development, and is a relatively new multi-disciplinary field of enquiry that draws on a range of academic and applied perspectives, our framework identifies critical environmental contingencies, discusses the linkages between MNEs external and internal environment and the GTM system serves as a basis for future theory building, teaching, and practice.

Table 2
Summary of major GTM challenges and major IHRM activities.

Major GTM challenges
Talent flow
Two generations of employees: older or mature workers and younger workers
Shortage of needed competencies
Changes in the employment relationship
Regional workforces
Talent retention in international strategic alliances
General business competencies and cross-cultural competencies
Major IHRM activities in GTM systems
Developing HR reputation
Attracting individuals with interest in international work
Recruiting based on positions
Developing global leaders
Reducing repatriate turnover
Increasing employee engagement

The challenges and IHRM activities identified in Table 2 are purely exploratory, and further research is needed to develop and understand them. Space limitations prevent us from developing these challenges and IHRM activities as fully as they need, but we feel that by identifying and briefly discussing each challenge and IHRM activity might suggest several opportunities for further research in this area, and much more work could be done on essentially every aspect of in GTM.

5.1. Theory building

Our literature review suggests that most of existing research on GTM is based on anecdotal or limited information and has a number of theoretical deficiencies. The first step in theory building here would be to further examine the challenges we have identified and to further explore the relationships within and between the elements in our framework. In order to do so, researchers may choose to develop specific research propositions or hypotheses that operationalize their particular research focus.

Second, is to select an appropriate theoretical framework to expand upon the framework presented in this paper. We propose to do by using institutional theory and human capital theory. Although we used institutional theory as a foundation to organize the literature on GTM, this theory can further explain how the challenges identified in this paper influence the configuration of IHRM activities. Using institutional theory, IHRM researchers can view the challenges as legitimate forces that need balancing to gain access to and control needed resources to develop appropriate IHRM activities (see Björkman, 2006 for more on institutional theory). Human capital theory, in contrast can be used to explain the choices the MNE makes in managing IHRM activities to meet the GTM challenges. Using this theory, researchers can view global talent in terms of capital and thus make decisions about investments in talent just as they make decisions about investing in other types of capital. Costs related to attracting, retaining, and developing talent can be viewed as investments in the human capital of the firm. Furthermore, efforts to develop HR metrics that establish the value of investments in talent practices can be grounded in the logic of human capital theory.

Third, we suggest that because the field of GTM is relatively young, more qualitative methodologies may be used to facilitate grounded theory building including participant observation, interviews, and content analysis of archival documentation. Such qualitative methods might be employed, or paired with nonqualitative methods (e.g., surveys).

Fourth, to aid in our understanding of how the GTM literature maps onto the overall IHRM literature and to assist in identifying literature gaps for future research, we classified each paper into the three streams of IHRM research identified by Dowling, Welch, & Schuler (1999): Comparative IHRM, HRM in Multinational Companies (MNCs), and cross-cultural HRM. Scholars in the area of Comparative IHRM attempt to describe, to compare and to analyze HRM issues, policies, and practices in different countries (e.g., Brewster, 1999). Researchers exploring aspects of HRM in MNCs attempt to study HRM issues, policies, and practices related to the process of internationalization of firms (e.g., Briscoe et al., 2009).

Finally, cross-cultural HRM researchers attempt to analyze the impact of multiple cultures on HRM issues, practices, and policies (e.g., Adler, 2008). Our review revealed a disproportionate emphasis on GTM in Multinational Companies. While studies on GTM in Multinational Companies are extremely important, more studies in the other two streams would also add significantly to the literature. Finally, similar to Werner (2002) review of the international management literature, our review suggests that levels of analysis in GTM research include countries, states, industry clusters, industries, firms, strategic business units, subsidiaries, teams, and individuals. Our review suggests that most GTM research has been at the macro rather than micro level. Specifically, the firm appears to be the dominant level of analysis, while only a small minority of studies is at the individual level or HRM system level. Numerous micro and cross-level IHRM topics appear to be potential research areas not currently addressed in top management journals.

5.2. GTM systems

We recommend that in further research scholars take a closer look at some of the complexities surrounding the formation of GTM systems, as well as the relationship among IHRM activities. Researchers could develop and examine a range of possible configurations or bundles of IHRM activities that include three key activities of attraction, development, and retention. One possibility is to derive a taxonomy of GTM system configurations by cluster analyzing firms on the basis of the configuration of IHRM activities. Future research is also needed to examine how IHRM activities of attraction, development, and retention operate together to confront the exogenous/endogenous challenges identified in this paper. The strategic HRM literature suggests that IHRM activities may supplement, substitute, or interact in positive or negative ways with each other (cf., Delery, 1998). Given the potential relationships among IHRM activities, researchers can examine not only which GTM systems are most important for which challenges, but which configuration of IHRM activities might best be used to realize objectives (see Lepak & Shaw, 2008). For example, further research can examine how GTM systems will differ for different employee groups (older workers vs. generation Y). As mentioned earlier, each of the two employee group will differ from the other each group contributes in different ways to organizations, and as a result, each group needs to be managed differently with its own unique employee value proposition. A related issue of investigation here is to examine if competitive advantage will be created when the GTM system is aligned with the needs of different employee groups including older workers and generation Y. This occurs because the alignment of employees with GTM system is difficult to copy or imitate by competitors, and hence, becomes a source of value creation (Barney, 1991; Becker & Huselid, 2006).

5.3. Exogenous/endogenous drivers and challenges and GTM systems

Strategic HRM research suggests that the design of a GTM system may be influenced by the characteristics of the challenges within the exogenous/endogenous environments. Research is needed to examine the constraints the exogenous/endogenous

challenges place on the ability to design a GTM system. For instance, because of globalization, if organizations need to be sensitive to regional conditions, they need to design GTM systems for the entire organization and also adapt their IHRM activities to multiple regions and industries, each with their own special and unique needs. Future researchers can examine the ways organizations can be most effective in making generic (i.e., can be implemented across cultures) GTM systems, and then tailoring IHRM activities in order to be sensitive to regional and industrial conditions in efficient ways. Further research is also needed to examine the extent to which there are country and cultural differences in the extent to which organizations tailor their GTM systems to regional and industrial conditions.

5.4. GTM effectiveness

Among the various areas discussed in this paper, limited research exists in which authors have examined assessments of the "effectiveness" of an organization's GTM system. Strategic HRM research suggests that effectiveness of a HRM system can be measured along a continuum ranging from HR outcomes to organizational outcomes to financial outcomes to market based outcomes. Further research is needed to examine why a particular GTM system is associated with a specific outcome (cf., Lepak & Shaw, 2008). Future theory-driven research is also needed to examine the causal chain that explains how attraction, development, and retention influence HR outcomes (e.g., motivation, productivity, turnover) and how those outcomes, in turn, are related to specific indicators of financial and market performance or other indicators of organizational effectiveness. An intriguing area for further research might involve how organizations develop GTM scorecards using the logic of balanced scorecards and strategy maps (Kaplan and Norton, 2004), or develop sophisticated models of how IHRM activities directly influence internal operations as well as customer satisfaction.

5.5. GTM as a bridge field

Based on our review, one can categorize GTM as a "bridge field". Future researchers can address the reverse academic-practice gap (cf., Rynes, Gyluk, & Brown, 2007), that is to examine "whether the issues of the greatest importance to practitioners receive commensurate coverage by researchers" (Rynes et al., 2007: 1004). The literature suggests that issues, problems, and ideas discussed by HR managers and professionals are occasionally examined by the academic IHRM community. Rynes (2007) provides important suggestions for communicating effectively with practitioners (p. 1047): change language or simplify academic jargon (e.g., academic terms such as theory, research), examine research questions based on practical needs or puzzling empirical phenomena, focus on "real" organizational life and current events, use a variety of methodologies (e.g., grounded theory, case analyses, or ethnography) (see Rynes, 2007 for more suggestions). Future research is also needed to facilitate the transfer of knowledge from academics to practitioners. One possibility is to use Action Research (Rynes & Trank, 1999), which is based on the implementation of new practices in real organizational settings, and is designed to address pressing problems that have been identified by organizational members (Rynes & Trank, 1999). In addition future research can focus on using complementary sources: academic literature, trade studies, and consultancy reports. The are several advantages of using such an approach such as increased collaboration between academics and practitioners, improved quality of papers and findings, greater publicity, and better holistic solutions (see Rynes & Trank, 1999 for more information). Academics, however, should be careful not to compromise on theory building or testing at the expense of seeking managerial relevance and pragmatic solutions.

5.6. Other areas

Future research could examine several other issues that can be organized along two levels: organizational level and individual/ group level.

At the organizational level there are two potential areas of further research: Global Talent Challenges (GTCs) and Extent of Coverage.

To explicitly include the economic realities of good time and bad times in discussions of GTM, it might be helpful to utilize a broader umbrella concept such at Global Talent Challenges (GTCs). Global talent challenges include managing a firm to ensure just the right amount of talent, at the right place, at the right price, and at the right time when at times there may be shortages of talent and at other times surpluses of talent. These are all for the purposes of balancing the workforce with the needs of the firm in the short term, and positioning the firm to have the workforce needed in the longer term (Schuler et al., in press). Use of the GTCs framework greatly expands the treatment of GTM beyond the traditional base of "managing the global talent shortage."

MNEs have a choice in the extent of those employees to be covered in their global talent management programs. This can range from the top 10% to the virtually all employees, 100%. Reflecting programs to include a select few might incorporate the terminology of "Type A players", and "Type A positions" (Collings & Mellahi, 2009; Huselid, Beatty, & Becker, 2009). These scholars argue that while all employees and all positions help the organization succeed, a few contribute substantially more to its success, and, therefore, warrant more resources and development. Those that include all employees and all positions suggest that all employees contribute to the success of the organization, and that all need to be continually developed (cf., Guthridge & Komm, 2008). Further research might explore the impact of varying degrees of inclusiveness.

At the individual/group level there are two potential areas for future research: Career Management and Global Teams. Although MNEs recognize the value of and need for retaining employees they appear to be encouraging a contradictory policy. This is the policy that encourages employees to be responsible for their own careers and success within organizations. Put simply, it is a policy of "Me, Inc." that conceptualizes individual learning and mobility as positive and necessary. The result of this policy may be employees leaving an organization and moving to another one, even though the present employer is wholly acceptable, just because the individual is led to think about mobility in very positive career terms. MNEs conceive of IHRM and GTM policies and practices that might facilitate becoming an "employer of global choice", they may need to assess the potential contradictory effects of other IHRM and GTM policies and practices that are actually harmful to the organization. Of course, during times of global economic and financial recession, the talent shortage turns to talent surplus, then what? Career development programs in a scenario of surplus might be reduced to the top 10% of workforce, rather than the entire 100%. How employees might react to a GTM program that has varying degrees of inclusiveness might be an interesting topic of inquiry (Schuler et al., in press).

As MNEs globalize themselves, and thus need to coordinate themselves more closer than ever, MNEs may increasingly rely on global team rather than individuals (Brewster et al., 2005; Nayman, 2003). This area appears to offer an important opportunity for IHRM and GTM researchers. More knowledge on how MNEs can develop cross-cultural teamwork competencies could be very helpful. It appears that IHRM practices should contribute greatly to this competency buildup, but more research could offer helpful details on exactly how organizations can design IHRM systems that support and facilitate the utilization of knowledge-intensive teamwork (KITwork) to develop and sustain a competitive advantage (see Jackson et al., 2006). This said, however, the question is what is the role of GTM? Does GTM shift from an individual-based IHRM issue to a team-based IHRM issue? Then are all IHRM policies and practices for GTM really designed around teams rather than individuals?

5.7. Managerial relevance

This review suggests that most organizations are facing several global challenges. The potential role of IHRM activities in addressing those selected challenges has clear implications for managing talent or individuals with high levels of human capital. The prevailing logic, thus far, has largely assumed that as MNEs first began expanding their international operations, they often assumed that IHRM activities of the parent country could and would be adopted worldwide. Consistent with this perspective, they staffed key management positions in their foreign operations with talent from the parent country. Increasingly, however, the efforts of most IHRM staff now have been redirected toward managing talent on a global basis, recognizing that it is critical for managers to examine how IHRM activities of attraction, development, and retention operate together to confront the exogenous/ endogenous challenges identified in this paper. Managers and IHRM professionals need to design GTM systems that fit the contours of the present context - a context that is more complex and multifaceted - while also anticipating the future concerns of varied stakeholders. For instance, managers and IHRM professionals will need to design their GTM systems so that certain "configurations" of IHRM activities are better than others with respect to attracting, developing, and retaining talent. Utilizing GTM systems as a long-term global talent management strategy in concert with the laws, culture, society, politics, economy, and general environment of a particular location are key to managing the global challenges for many MNEs.

6. Conclusion

Many of the most pressing global challenges facing global firms today are directly related to human capital challenges. Many human resource practitioners and HR consultants (HR professionals) are now recognizing this, especially those that operate globally, the multinational enterprises. Academics are also showing a strong interest as evidenced by their work in the new area referred to as "global talent management". In this article, we attempted to review that academic work on GTM and to organize that literature by creating an integrative framework for understanding and advancing further research in global talent management. To guide this research our framework highlights several selected challenges in GTM, and several drivers of those challenges. It also highlights the potential role of IHRM activities in addressing those selected challenges. Our proposed integrative framework illustrates the influences and interrelations of the factors in a MNEs external and internal environment that may help shape its GTM system.

Our review suggests that GTM research can categorized as a "bridge field", is in the early stages of development, and is a relatively new multi-disciplinary field of enquiry that draws on a range of academic and applied perspectives – much more work could be done on essentially every aspect of GTM. Accordingly, there is a strong need for theory building, for micro and cross-level IHRM topics, for understanding the complexities surrounding the formation of GTM systems, as well as the relationship among IHRM

activities for examining the causal chain that explains how attraction, development, and retention influence HR outcomes (e.g., motivation, productivity, turnover), and for transferring knowledge from academics to HR professionals (and vice-versa). We have pointed out where future studies can make incremental advances in those areas as well as in those that have been largely overlooked in the past.

Finally, we hope that our article and our framework adds value to the existing work in GTM on a number of ways: (1) in particular, we hope that our framework provides clarity, promotes dialogue, and encourages new directions in practice and research that begin to examine critical challenges faced by HR professionals and academics with respect to managing global talent such as incorporating concerns about the need for firms to implement IHRM activities related to employee reductions; (2) as presented, we also hope that our proposed framework illustrates the influences and interrelations of the factors in a MNEs environment such as a global economic recession that may help shape its GTM actions; and (3) finally, we hope that our framework proposes critical environmental contingencies, discusses the linkages between an MNEs environment and GTM, and describes the many challenges for GTM (that are described throughout the article) that could be the focus for further research.

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