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The factors and conditions for national human resource development in Brazil

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Abstract

Purpose – The purpose of this paper is to understand the factors and conditions that influence national human resource development (NHRD) in Brazil. In this paper, the transitioning nature of the political, economic, social and educational conditions; the current challenges and trends that may impact NHRD; and the current status of NHRD research in Brazil are examined.

Design/methodology/approach – A search of the research literature focused on the political, economic, cultural, social and educational environment and the research associated with NHRD in Brazil was conducted. After searching several databases, including Academic Search Complete, Google Scholar, ERIC and EBSCO, several articles were selected and analyzed based on the depth of description of the conditions and research.

Findings – Among the factors discovered, race, gender and educational equality are still concerns. The complex nature of the relationship between the Brazilian Government, its people and organizations, as well as the efforts of Brazil's multinational and indigenous organizations to address their national development needs, are also presented.

Originality/value – Brazil is currently and projected to be a long-term player in the global economy; however, it struggles to cope with conditions incongruent to the country's long-term success. This paper frames the conditions and suggests ways of moving forward through human resource development practice, policy and research in Brazil.

Keywords Brazil, Global human resource development, Human resource development, Human resource development conditions, Human resource development policy, National human resource development (NHRD)

Paper type Literature review

Introduction

Transitional societies, i.e. those engaged in planned change and the management of these efforts (Levy, 1986), are perceived to be among those for which human resource development (HRD) can have a substantial impact. However, various dichotomies exist within these societies, such as the surplus of unskilled labor and the dearth of managers (Ke *et al.*, 2006), the development of exported skilled labor (Paprock *et al.*, 2006) and the development strategies of multinational corporations which seem to be detrimental to the host country (Hasler *et al.*, 2006). According to Hasler *et al.* (2006), Brazil as a transitioning society has raised its status as a developing country by recognizing and addressing the need for human capital development through policy. However, several years after their initial analysis, the nation is still coping with past and newly emerging issues (Queiroz and Golgher, 2008; Rezende, 2010) that threaten its progress. An understanding of the political, economic, educational and social environment will yield

important insights for those interested in constructing relevant HRD policies and strategies.

A new analysis of Brazil's past and emerging issues is warranted, given Brazil's relevance in the world economy, and its potential as a developing country. In addition to the previous conditions which still exist, new challenges have emerged and new achievements have been made. The purpose of this study is to understand the critical environmental factors vital for the development of a national human resource development (NHRD) policy in Brazil.

After a discussion of the theoretical framework and methods involved in this study, the specific factors examined are discussed. The political, economic, social and educational factors reveal areas where NHRD is needed, as do the current challenges and trends which are also described. A brief overview of the preceding circumstances for NHRD research in Brazil is then followed by the implications for HRD practice, policy and future research in Brazil.

Theoretical framework

Lynham and Cunningham's (2006) dimensions for analyzing NHRD is the framework for examining the critical factors that impact NHRD in Brazil. Their synthesis of several studies of NHRD in transitioning societies and developing countries suggests that the political, economic, social and education systems of a developing country are dimensions that reveal the necessities of NHRD. The authors also discuss components which contemporize the process of analysis. This includes a review of technology and environment-related indices, and a refreshed view of country classification and context.

Falling within the schema of a transitioning and developing country, Brazil's HRD policy is influenced by its unions, employing organizations and regional and national government (Cho and McLean, 2004). Previous inquiry of NHRD in Brazil (Hasler *et al.*, 2006) tracked Brazil's past and current transitional context, and discussed the strategic challenges associated with sustainable NHRD policy development. Brazil's status as a developing country is reflected in its pursuit of socioeconomic and political improvement, as well as the development of knowledge and skill at the individual and collective levels (Eqbal, 1980). Attentive to the framework constructed by Paprock's (2006) derivation of Harbison and Myers (1964) perspective on development, Hasler *et al.* (2006) noted several contrasting conditions such as regional prosperity versus extreme poverty, exemplary universities versus unequal educational opportunities and significant development investment versus persistent workforce training gaps.

Underlying Paprock's (2006) and Harbison and Myers's (1964) approaches are the concepts of human capital and human development. Both concepts help to illuminate the perceived value of, and progress toward, enhancing human resources. Human capital, the collective competencies, knowledge, skills and abilities cultivated through educational experiences and deployed on behalf of society, individuals or organizations (Becker, 1993) are considered by HRD as means for understanding national progress. Human capital development analysis is also seen as a means for comparing developing nations (Ardichvili *et al.*, 2012). Furthermore, as an indicator of a nation's status as a developing country, the UNDP publishes an index of life expectancy, gross domestic product and education which informs those focused on NHRD (Lynham and Cunningham, 2006).

The framework used in this study is considerate of the foundational understanding of human capital and human development, the nature of transitioning and developing countries and the emergent dimensions and attributes which support contemporary analysis. It also addresses gaps in the Harbison and Myers (1964) framework (Lynham and Cunningham, 2006).

Statistical data, literature and personal conversations were analyzed and synthesized to develop a description of the political, economic, social and educational factors impacting Brazil. The current trends and issues, as well as the status of NHRD research in Brazil, are also discussed. The specific research questions were:

RQ1. What is the nature (historical and current) of the transitioning political, economic, social and educational context in Brazil?

RQ2. What are the current trends and issues which may impact NHRD in Brazil?

RQ3. What is the current status of NHRD research in Brazil?

Method
The search for statistical data and literature was focused on identifying past and current economic reports and studies which described the political, social and educational environments in Brazil, and the current events having national and international impact. Several keywords and phrases such as Brazil, International HRD, National HRD, Race in Brazil, Economics and Education were used to search several databases. The databases included Academic Search Complete, Google Scholar, ERIC and EBSCO. A search of the specific references listed in the literature and journals associated with HRD and education was conducted.

A staged review of the literature gathered involved an initial abstract reading and the subsequent reading of the entire document. The decision to conduct an initial and subsequent reading was based on the relevance of the historical and current information related to Brazil's political, economic, social and educational status, and the depth of description of NHRD research and trends influencing NHRD in Brazil. Finally, the lecture notes from presenter and the notes taken from personal conversation from a recent trip to Brazil were also analyzed.

Factors
Political
Understanding the political landscape of Brazil means appreciating its history from its Colonial origin (1500-1821), to its current state of Democratic rule (1990-present). The time in between these periods has shaped Brazil's political perspectives, as wars, coup d'etat's and military rule have influenced how it governs and the nature of their regional and international relationships. As recognized by Hasler *et al.* (2006), race has influenced the political process through the development of race-oriented initiatives and political organizations (Beato, 2004). More specifically, political activism on the part of Afro-Brazilians from 1984-2006 convinced the national and state leaders to address discrimination by exclusion, and racial oppression (Johnson, 2006). According to Johnson (2006), Afro-Brazilian activism and involvement in several political parties from 1976-2006 resulted in the increased involvement of blacks in the political process and a heighted awareness of the role that Afro-Brazilians played in the historical development of Brazil. In 1984, the State of Sao Paulo created the Council for the

Participation and Development of the Black Community. The organization was created to examine the status of blacks in the state and advance policies for social improvement. Johnson (2006) also described two other national initiatives designed to increase awareness: the Palmares Cultural Foundation, which partnered with private, educational and governmental organizations, and the Interministerial Working Group of the Black Population, which conducted participatory research, developed policies and created academic discussion forums.

The reformation from a military regime to democratic republic suited the country well, as the election of Fernando H. Cardoso in 1994 brought substantial economic reform and a greater awareness of racial inequities (Bensimon, 2013; Johnson, 2006). The agenda of the next president, Luiz Inacio Lula da Silva's, included a focus on national poverty. The current president, Dilma Rouseff, has presided over the lowest unemployment rate in recent years, and Brazil's transition from an industrialized economy (Bensimon, 2013). Rousseff's status as the first woman President and her appointments of women to key government positions has also brought attention to women's issues.

These recent successes are not without the counterweight of political minutiae. The leaders of regional, state, and national interests compete for their respective voices to be heard. Twenty-six states send representation to the Federal Senate and the Chamber of Deputies (CIA, 2013). However, one of the most fascinating facts is the number of political parties and political activism groups. The 2013 CIA World Fact book reports 30 different political parties with agendas focused on socialists, communist, democratic, labor, labor union and religious concerns. Corruption continues to shade national progress, as the news of bribery scandal involving one of Brazil's state-managed corporations Petrobras, several politicians and wealthy business leaders has negatively impacted national and international confidence (The New York Times, 2015, June 19).

Moving forward, Brazil's political leaders must continue to respond to the need for policies which promote equality across regions and states, and resolve the complicated problem of mutinous regional-focused and political party/activists agendas. President Rousseff, now in her second term, is starting to address the corruption issue with the removal of indicted ministers from the previous administration, but still treads lightly, given her perceived obligations to those who supported her rise to power (The Economist, 2012, August 16). The prominence of Brazil's labor unions and complicated nature of the regionally influenced tax code will undoubtedly influence the future political direction of Brazil. While the labor unions have been successful in drawing attention to wage and earning power issues (OECD, 2013), and the implementation of somewhat protectionist economic policies, these two developments also present themselves as challenges to international investment in Brazil (personal communication, Henry, 2013).

Economics

Hasler *et al.*'s (2006) discussion of the economic transitions during the early 1970s through the 1990s pointed to Brazil's evolution from a raw materials and agriculture-based economy to a technology-driven economy receptive to global business. The 1970s and 80s were marked by high inflation and high public debt. In the late 90s, Brazil began to address these major economic issues through a pillared approach that focused on inflation targeting, floating exchange rates and fiscal

responsibility (Silber, 2013). Privatization of power distribution, steel mills, railroads, telecom and iron ore mining also contributed to its current prosperity (Carvalho, 2013). The country's total GDP is seventh in the world at $2.4 trillion, and its GDP per composition by sector is: Agriculture 5.4 per cent, Industry 27.4 per cent and Services 67.2 per cent (Silber, 2013). In comparison, Brazil's 2003 GDP was reported as $492.3 billion (World Bank, 2004). Further evidence of Brazil's development can be seen through its 2014 score on human development index (HDI), which measures development through a composite of life expectancy, educational attainment and income indicators. Brazil's (HDI) score of 0.744 bests the rest of the world's 0.702 and ranks the country 79th in the world (UNDP, 2014). The country's Municipal Human Development Index, which applies indicators to the country's 5,565 municipalities, rose from 0.0493 in 1991 to 0.727 in 2010, a gain close to 50 per cent in 20 years (World Bulletin, 2013).

The combination of focused technological innovation and plenteous natural resources led to the creation of the Brazilian agricultural research corporation Embrapa in 1973. Formed to encourage agricultural innovation through research and development, Embrapa in coordination with the National Agricultural Research System has shepherded over substantial technological improvements (Embrapa, 2013). These new technologies have increased the production of grain and oil seeds 249.56 per cent from 1976-2011, and metric tons of meat increased from 4,270 to 24,673 from 1978-2011. Embrapa's influence in agribusiness has resulted in top 5 rankings in the world market for export and production of orange juice, sugar, soybeans, corn and cotton (Silber, 2013).

Despite these promising reports, old and emerging areas of weakness threaten to hinder economic growth and dampen the world's view of Brazil's socioeconomic progress (Queiroz and Golgher, 2008). While it is anticipated that more students will be attending school than ever before nationally, school funding as an expenditure of GDP is low at 5.7 per cent (UNDP, 2013) and unequal by region (Waltenberg and Vandenberghe, 2007). The positive feelings associated with the GDP values, human development indicators and prospect of technology-driven commodities growth are tempered by other economic developments, which has slowed growth and investment. A 1.0 per cent contraction of GDP is expected in 2015, with a modest resumption of growth by 0.9 per cent in 2016. Investment is expected to drop in 2015 to its lowest level since 2009 (IMF report, 2014). While the rate of unemployment has fallen, it is attributed to a decline in labor force involvement (IMF report, 2014). Furthermore, inconsistent macroeconomic policy, complex tax policies and high tariffs are perceived as unfavorable to trade. The implications of the Petrobras corruption scandal and Brazil's low credit rating (BBB) are also sources of discouragement for foreign investors (IMF report, 2014).

Social
The critical impact of increasing rates of HIV/AIDS infection was a major social issue identified by Hasler *et al.* (2006). However, it does appear that Brazil's response to what in the 1990s seemed to be a pending pandemic, has been sufficient in slowing the rate of HIV/AIDS infections (Okie, 2006). It is estimated that Brazil's campaign to inform its population about HIV causes and prevention has saved $2.2 billion in hospital expenses from 1996-2004 (Okie, 2006).

Race-based inequalities were also mentioned and discussed by Hasler *et al.* (2006). Consistent with the current climate, social status seemed to be understood according to a continuum of skin color, with the darker-skinned citizens being on the lowest rung (Okedji, 2004). The topic of racial identity continues to generate arguments about its importance to the Brazilian society and its potential impact on those with darker skin (Francis and Tannuri-Pianto, 2013). Two issues in particular persist in Brazil, educational inequality and college admissions quotas based on race (Martelelo, 2012; Francis and Tannuri-Pianto, 2013) and the implications of racial classification (Schwartzman, 2007; Bailey, 2008). An admissions process which includes racial self-classification and skin tone confirmation by a panel of reviewers who affirm identity based on a picture is discussed as a controversial means of addressing educational inequality (Bailey, 2008). Furthermore, shifts in racial classification over time – from a darker classification to a lighter classification – are attributed to the prospect of higher social and economic status (Schwartzman, 2007; Bailey, 2008).

New sociocultural concerns also present themselves as threats to the Brazilian society, and suggest opportunities for development. One threat is the production and consumption of illicit drugs. The country is a known producer of cannabis and ranks number two in the world for cocaine consumption (CIA, 2013). Additionally, Brazil's sense of distrust of some of their political leaders has been exacerbated by the pressure to complete the venues for the 2014 World Cup and the 2016 Olympics. Frustration with the government has been expressed through massive public protests in Brazil's major cities.

Finally, three social developments are impacting Brazil's international and national identity. The first is Brazil's growth as an international power due to its involvement in building alliances among nations in the southern hemisphere, and its leadership in promoting global health and renewable energy (Dauvergne and Farias, 2012). The establishment of technical cooperation agreements with other developing countries has increased their international influence. Second, the involvement of local non-government organizations (NGOs) in the Brazilian society has changed Brazil from the "inside-out"; since the 1970s, NGOs have encouraged democratic reform and political activism (Mercer, 2002). One of the more significant NGO achievements has been its role in bringing awareness to the problem of college access and developing university preparatory programs for disadvantaged students (Paster, 2014). Finally, a promising ideal which has implications for the value and impact of literacy in Brazil, beyond its usual focus on human capital improvement, as a means for development, also provides another prospective for HRD to consider. Bartlett's (2007) ethnographic research described the social importance of literacy programs in two Brazilian cities and reported that the students favored outcomes of sociability and manners. All of these outcomes suggest other ways HRD can encourage a society's development.

Education
Despite the positive implications of Brazil's stronger economy, its education system still fails to respond to its need for a more educated workforce. Hasler *et al.* (2006) noted the ineffectiveness of Brazil's formal education system and the apparent inequalities that existed in terms of access and quality. The authors cited Brazil's "unbalanced approach" to funding as a main reason for its failures. An examination of its educational system and its attempts at corrective action reveal a desire on the part of Brazil to address the

inequality issues which still exist. However, the resulting consequences of these actions suggest that a deeper understanding of the related systems is necessary.

Several actions taken and considered do reflect an intention to address overall quality, access to education and fairness. For example, funding reform legislation designed to direct resources from more affluent regions to impoverished areas and bolster public school teachers' pay was established in 1998. This reform was shown to positively impact student proficiency and establish a baseline for public spending on teachers' wages, if this policy was enacted (Menezes-Filho and Pazello, 2007). Waltenberg and Vandenberghe's (2007) study also suggests that a reallocation of educational resources can result in more balance educational achievements across students of differing socioeconomic backgrounds. Other reforms are designed to open access to more students with diverse backgrounds than the traditional higher education student of wealthier and European origins. These reforms include the expansion of private sector institutions, the increased availability of school loans and scholarships and the establishment of the Prouni program (University for All Program), a program that creates space for low-income students free-of-charge in exchange for exemption from taxes for non-profit institutions, and low taxes for profit-driven institutions (McCowan, 2007).

The public sector has also been involved in change through the establishment of a quota system for Brazilians of African dissent, and more recently, the replacement of the vestibular exam (entrance exam) and enrolment expansion in public universities has been discussed (McCowan, 2007). At first glance, these reforms appear to be appropriate, if not well-intentioned. However, a closer look must be given to the possible reduction of overall quality, lack of controls for tax reduction and exemption programs, the difficulty of low-income students to qualify for school loans and the impressions of unfairness that some may have because of a targeted quota system.

Current challenges and trends

The status of the political, economic and social and educational factors in Brazil provides a macro-level view of the conditions that may shape an NHRD policy. This section describes specific and current challenges and trends that are affecting Brazil and its organizations.

As alluded to above, Brazil's unemployment rate is reported at a relatively low 5.5 per cent (CIA, 2013). However, a combination of a shortage of workers and the influence of labor unions on salaries and other benefits requires intense consideration for Brazilian organizations seeking growth. Demographics and the meaning of work in Brazil also influence development decisions. Much like the USA, Brazil is anticipating the departure of its older workforce, and the arrival of younger members of the workforce (Dutra, 2013). The entry of younger, more culturally diverse workers is also accompanied by differing views of the meaning of work. Work is seen by some as a means of survival and independence, pleasure and satisfaction for the majority, and merely an obligation for a minority of Brazilians (Dutra, 2013).

Muritiba et al.'s. (2012) study of Brazilian multination organizations highlights the challenges to their internationalization, and reveals issues related to their international workforce policies. The case study finds that environmental uncertainty in terms of the lack of long-term planning for workforce needs, the shortage of qualified professionals available for international assignments, comparatively more rigid labor laws in the

countries where they operate, the prevalence of informal internal management structures and cultural distance from the foreign country are hindrances to the internalization process. The findings suggest the need for more structured and considerate human resource planning and development. For multinational corporations residing in Brazil, the challenges include a complicated work permit process, a lack of governmental incentives to attract and retain foreign professionals and a low level of proficiency in foreign languages (L.A. Pasquotto, personal communication, 14 June, 2013). These challenges are in addition to the aforementioned state of union-corporation relations, and unfavorable tax policies.

Brazil's efforts to address its workforce development, policy, management and cultural issues are earnest. Public and private initiatives have emerged with the purpose of developing industry- or organization-specific competence. As operated by the National Industry Confederation (CNI), the National Service for Industrial Learning (SENAI) manages 809 educational facilities, which includes 28 regional centers, and 208 laboratories. This system of professional education is involved in the promotion and development of certificate programs in oil and gas, civil construction, metallurgy and transportation, among others. It administers over 300 online courses in 20 technical areas, and promotes innovation in engineering, construction, energy and defense, telecommunications, information technology and photonics through its 23 innovation centers (CNI. Org, 2013; Bensimon, 2013). SENAI's accomplishments have received worldwide attention, as it has been asked to assist in the development of similar programs in other developing countries (CNI. Org., 2013).

Nationally, an increased focus on technology has resulted in the development of several policies designed to encourage training and development. The 2004 Innovation Law facilitated the development of strategic collaborations between public research institutions, businesses and universities to promote research, innovation and development (RDI). The 2005 Lei do Bem law financially incentivizes the promotion of RDI in businesses, and in 2007, PACTI, the plan of action for science, technology and innovation, was initiated. More than $22 billion was invested to expand and consolidate a national system of science, technology and innovation. The investment was intended to encourage technological innovation in business, focus RDI in strategic fields and utilize technology, science and innovation for societal improvement (Rezende, 2010). The centrality of technological expansion as a national initiative can be seen by its Technology Achievement Index (TAI) score. TAI provides a means for comparing a nation's technological progress. The index combines technology creation, diffusion of innovation and diffusion of old innovations (Desai *et al.* (2002). Brazil has shown modest progress, achieving a 0.311 in 2002 and 0.335 in 2009 with a 53 ranking out of 91 countries (Nasir *et al.*, 2011).

The private sector's response to people development has taken the form of corporate education. Organizations like Petrobras, Vale and Repsol Sinopec offer technical training, management and leadership development, social and cultural responsibility programs (Bensimon, 2013). Foreign-based multinational corporations located in Brazil, like 3M, Cummins and Foxconn, are adapting westernized HRD by creating new practices respectful of Brazilian culture. Responding to the void in post-secondary education, these corporate universities are extending its service to employees as well as suppliers, and clients (Bruce *et al.*, 2003; Vieira *et al.*, 2007). Within these corporate universities, there is a shift from training and development departments as tactical

support to strategic learning and development entities where knowledge management is an essential business objective (Vieira *et al.*, 2007). Furthermore, a push toward facilitating employee self-development has spurred the interest in e-learning (Fischer, and Albuquerque, 2005).

National human resource development

NHRD is thought to be vitally important for promoting national and local stability, interrupting cycles of poverty, violence, underemployment and joblessness. According to Cho and McLean (2004), NHRD done right, dynamically and strategically addresses educational and labor redundancies, is influenced by research and theory – but directed toward practice, conscious of political systems and is interdisciplinary. Possible outcomes include more socially acceptable employment and improved educational quality. It is also considered a means for strengthening a country's workforce and mitigating the impact of disease (Harbison and Myers, 1964; Mclean, 2004).

Although NHRD's theoretical underpinnings have come under fire (Wang, 2007; Wang and Swanson, 2008), NHRD remains as a prevalent research topic (Alagaraja and Wang, 2012). A 2004 issue of *Advances in Developing Human Resources* focused on various approaches to NHRD in China (Yang *et al.*, 2004), India (Rao, 2004), Kenya (Lutta-Mukhebi, 2004) Poland (Szalkowski and Jankowicz, 2004), Singapore (Osman-Gani, 2004), St. Lucia (Scotland, 2004) and the UK (Lee, 2004), to name a few. These case studies examined the economic and social contexts which inspired the development of NHRD policies and discussed how these factors shape and continue to influence policy. While clarifying the respective socioeconomic contexts of countries holding developed and developing status, collectively these studies affirm the necessity of context-driven NHRD policy.

NHRD research in Brazil

Maintaining its status as a transitioning society (Hasler *et al.*, 2006), Brazil presents a favorable environment for continued sociocultural and economic advancement. As the focus of Hasler *et al.* 's (2006, p. 99) study, Brazil is described as a "nation of contradictions", in that despite its role in the global marketplace, social and educational problems abound. Important environmental issues such as educational inequities among racial groups, race-based political affiliations, inadequate education structures to meet the demand for labor and regional and racial disparities in the educational system presented themselves as areas of potential impact for HRD. More positive implications associated with efforts put forth by governmental, educational, corporate and non-governmental entities also emerged. At the time, these entities represented the collective effort to develop Brazil's human capital.

Other perspectives now inform HRD research focused on Brazil (Ardichvili *et al.*, 2012; Azevedo, 2013). As a framework for exploring factors which influence HRD, Ardichvili *et al.*'s (2012) macro-level analysis of Brazil's human capital development strategies as compared to Russia, India and China offers a view of the development investments, programs and conditions prevalent in these nations. Those who both understand a westernized view of HRD, and have a keen awareness of the current political, economic and sociocultural environment in Brazil, have also contributed to the advancement of HRD research and practice in Brazil (Azevedo, 2013). For example, Azevedo (2013) queries a native Brazilian and HRD researcher and professor, and found

HRD to still be discussed in terms of the functions of HRM, and located in colleges of business. Dr Cornacchione suggests that Brazil's colleges of business and their private organizations are typically responsible for HRD subareas, such as training and development. He also sees career development, organization development and instructional systems design as a welcomed and vital part of Brazil's long term growth (Azevedo, 2013). As Brazil continues to develop, HRD is viewed as a framework for understanding and forecasting the social movements which can support Brazil's sustainability.

Since Hasler *et al.*'s (2006), study, major events have taken place which further illustrate Brazil's progression, and should accelerate the pace of HRD research in Brazil. In 2007, offshore oil reserves, known as the pre-salt oil fields, were discovered. These fields are projected to produce 50 billion barrels of oil, and make Brazil a top 5 oil producer by 2020 (*The Economist*, 2012). Brazil's hosting of the 2014 FIFA World Cup, and the 2016 Summer Olympics in Rio de Janeiro, also indicates the world's recognition of Brazil as a burgeoning nation. On a political note, accusations of spying on the part of the USA have, at the very least, chilled relations between the two countries (*The New York Times*, September 17, 2015).

The signs of progression are also accompanied by signs of inadequacy, as it relates to Brazil's ability to support the initiatives. Retrieving and processing Brazil's oil will require a deeper pool of technical know-how than Brazil has currently. Additionally, preparing for the world events to be hosted in Brazil, and bridging the rifts that exist between the USA and Brazil, will demand more principle-driven political cooperation and a comprehensive long-term development strategy. The refreshed view of the political, economic, social and education context mentioned in this study, as well as the contemporary challenges and trends, create new leverage points and openings for future HRD practice, policy and research in Brazil. The implications are discussed below.

Implications for HRD practice, policy and research
HRD practice
In consideration of the political, economic, social and education factors and the challenges and trends which may impact the practice of HRD in Brazil, several ideas steps can be taken to address these concerns. Assuming the role of facilitator/coordinator, HRD professionals should lead the effort to determine the strategic priorities of the multiple numbers of political parties. This role should continue to focus on the reforms leading to equal status for women and minorities across the nation and its respective regions. Acting as developers of people and organizations, Brazil has experienced success in its effort to limit the rate of HIV/AIDS infection through education. A similar approach must be utilized to address the issues of illicit drug use, unethical behavior and racial bias. Training and awareness programs not based on Western views of these issues but based on the specific impact of these issues on the Brazilian society and economics may draw attention to the detrimental effect on health, national growth and individual income and cultural development. Furthermore, the systemic nature of corporate corruption and racial bias requires an effort that introduces and explains how these issues are initiated and perpetuated over time.

The transition to a service-oriented workforce and the increasing use of technology as a way of cultivating their abundant natural resources suggests the need for an increased awareness of knowledge management process, technology and the duties

involved in the knowledge management process. For example, knowledge gained and shared as a result of the technical cooperation agreements which promote global health and renewable energy has improved Brazil's status and influence among nations in the southern hemisphere. Capturing what has been learned after implementation of the agreements enhances their ability to specialize and respond to different conditions. Finally, the shortage of skilled labor suggests the need for timely and efficient instructional and employee development practices.

HRD policy

Brazil appears to be going in the right direction in terms of policy supporting the development of technology, skilled workers and the promotion of innovation; further strides must be taken to address several long-standing problems. Having recognized the need for investment in their own human capital, legislation which provides funds to promote the development of agencies providing education in engineering, construction, energy and telecommunications has been authorized. However, given the multitudinous political interests, further work needs to be done to codify national development priorities. Such an agreement would mean specifying the collective priorities, intentions, roles and goals of its political parties, education leaders, business leaders, unions and NGOs. The independent approach which sees lobbying for the purpose of their individual needs does not benefit the entirety of Brazil, and leaves the nation without the pool of knowledge workers needed to respond to its transition to a technology and service-based economy.

Policy refocusing is needed in several areas where it seems the methods no longer support the intention. Education reforms attempting to address the unequal access and quality must be re-shaped. A process requiring affirmation of one's skin tone to qualify for admissions unnecessarily causes anxiety during the application process and further marginalizes individuals with the darker skin tones. Efforts must be taken to restructure policies which make it difficult to hire and retain qualified foreign workers. Brazil must also consider the national and international impact of the complex tax laws. Both issues are barriers to addressing labor shortfalls. Examining the components of the human development indications and the policies that either support or prohibit national progress would also be beneficial to Brazil image and influence. Reviewing policies related to health, education and per capita income would mean specifically responding to the increasing illicit drug use, illiteracy and education quality.

Finally, as a third prong in addressing HRD policy issues in Brazil, the creation of independent investigative task forces or research initiatives would open dialogue and generate ideas about how to resolve three complex concerns. The problems of government/corporate corruption, vacillating adherence to stated economic policy and changing workforce demographics should be explored to determine the causes (for the first two problems), the long-term impact and ways to move the resolutions through the legislative process.

HRD research focused on Brazil

Lynham and Cunningham's (2006) framework for analyzing NHRD is effective in helping to categorize and understand the apparent concerns of transitioning countries.

In fact, more research focusing on the individual factors (i.e. political, economic, social and education) needs to done. A more in-depth investigation capturing the

perspective of individuals and organizations in Brazil will reveal the extent to which these factors impact the HRD process and their ways of coping with them. NHRD theory will be enhanced through consideration of the perspectives held by major state and regional institutions, multinational organizations and NGOs. The perspectives of these institutions will further inform policy makers and practitioners of the issues which deter or advance the transitioning process. More specifically, HRD research in Brazil could focus on the impact that governmental policies have on multinational organizations who attempt to cultivate their own workforce through development. Brazil's embrace of technology creates research opportunities in the areas of knowledge management and e-learning. Leveraging its ability to create technical partnership and its growing use of corporate universities, researchers can explore the processes involved in bringing learning to organizations and regions with fewer resources. Finally, Azevedo's (2013) research draws attention to the need for research capturing the philosophies and approaches behind what are typically considered HRD practices.

Conclusion

Although Nair *et al.* (2007) do call for researchers to investigate NHRD practices of new countries, revisiting Brazil as a focus for NHRD research is warranted, given its importance in the world economy and status as a rapidly transitioning nation. This article describes the political, socioeconomic, sociocultural and educational factors helpful for developing NHRD policies. It also discusses the implications for HRD practice, policy and research in Brazil. The various interests and needs, as well as the status of their current HRD efforts, suggest that HRD can help in establishing coalitions and set policy priorities for NHRD in Brazil.

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