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ASSESSING EMERGING MULTINATIONALS' "GLOBAL MINDEDNESS" PROFILES

Analisando os Perfis de "Mentalidade Global" de Multinacionais Emergentes

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ABSTRACT

Despite the relevance of developing a global mindedness (GM) in order for firms to explore global opportunities, extant literature on GM has mostly focused on developed country multinationals, overlooking its relevance to emerging country multinationals which have unique features and internationalization patterns. In addition, the studies addressing the impacts of GM on internationalization have mostly relied on the assumption of homogeneity rather than differentiation of GM among multinationals of the same country. This study addresses this theme by exploring GM diversity among Brazilian multinationals. For that purpose, a previously developed multidimensional GM scale is adapted and validated by means of a pretest and a confirmatory factor analysis with Bayesian estimators, and used as the basis for a hierarchal cluster analysis, later optimized by means of the K-means algorithm. As a result, a GM taxonomy is identified, encompassing fully globally minded, cross-culturally skilled, international market-oriented, and domestic market-oriented multinationals. To illustrate the taxonomy, four case studies involving major Brazilian multinationals are brought to the fore by means of interviews and secondary data. The configurations identified points to the need to study GM in conjunction with both institutional and economic factors in order to explain singularities of the internationalization of emerging companies and also differentiations among firms from a single emerging country.

Keywords: Global mindset; Emerging multinationals; Taxonomy; Internationalization.

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RESUMO

Apesar da importância do desenvolvimento de uma mentalidade global (MG), para que as empresas possam explorar oportunidades globais, a literatura existente sobre MG, em sua maioria, investiga as multinacionais de países desenvolvidos; menor ênfase tem sido dada às multinacionais de países emergentes, embora estas apresentem características e padrões de internacionalização únicos. Além disso, os estudos acerca dos impactos da MG sobre a internacionalização têm se baseado, em sua maioria, no pressuposto de homogeneidade, em vez de diferenciação da MG entre as multinacionais do mesmo país. Este estudo aborda esse tema, explorando a diversidade de configurações da MG entre multinacionais brasileiras. Para isso, uma escala multidimensional de MG foi validada, por meio de pré-teste e análise fatorial confirmatória com estimadores bayesianos; a seguir, foi realizada uma análise hierárquica de clusters, posteriormente otimizada com o algoritmo K-médias. Como resultado, uma taxonomia de MG foi identificada, englobando: multinacionais com mentalidade global total, empresas com habilidades interculturais, multinacionais orientadas para mercados internacionais e multinacionais focadas no mercado doméstico. Para ilustrar a taxonomia identificada, quatro estudos de caso envolvendo grandes multinacionais brasileiras são explorados. As configurações identificadas apontam para a necessidade de se estudar a MG das empresas em conjunto com fatores institucionais e econômicos para explicar as especificidades da internacionalização de multinacionais emergentes, bem como as diferenciações entre empresas de um mesmo país emergente.

Palavras-chave: *Mentalidade global; Multinacionais emergentes; Taxonomia; Internacionalização.*

1 INTRODUCTION AND OBJECTIVES

More than a decade ago, Bartlett and Ghoshal (2000) pointed out that firms from emerging economies would be able to develop international competitiveness in spite of being late movers. A major barrier for that might be, as they stated, those firms´ "liabilities of origin". These could encompass aspects such as the emerging economies firms' overdependence on domestic markets, inability to reach global standards, unawareness of their global potential, and lack of experience in international competition. These elements were seen as intimately connected to top management perceptions on global competition and might inhibit the internationalization of late movers. In fact, some authors have stressed that managerial mindsets may jeopardize the identification of global opportunities, the response to foreign markets, and the adaptation to other cultures (Bouquet; Morrisson; Birkinshaw, 2003; Gupta; Govindarajan, 2002; Javidan et al., 2011; Jeannet, 2000; Levy, 2005).

Therefore, in order to compete abroad, it would be required from emerging multinational corporations (EMCs) to overcome their "marginal mindset" (Bartlett; Ghoshal, 2000) and to improve their global mindedness. However, regardless the relevance of the global mindedness (GM) concept for the understanding of internationalization strategies and global expansion, the literature is rather scarce when it comes to studying its influence on the rise of EMCs (Srinivas, 1995; Rhagavan, 2008; Yin; Johnson; Bao, 2008).

International business literature suggests that, in emerging countries, institutional conditions shape specific property advantages, indigenous management models and internationalization strategies (PENG, 2008), which constitute a managerial "heritage" of the past (Berger, 2005). Because EMCs grew under unique institutional conditions, the level (or lack) of GM resulting from the exposition to such environments is expected to exert an impact on their internationalization strategies and expansion. For instance, their foreign investments frequently involve acquisitions as a means for promptly assimilating new competences and knowledge on foreign markets; nevertheless, they also often rely on their home country advantages instead of on the firms´ advantages (Dunning; Kimand Park, 2008; Guillen; Garcia-Canal, 2009). However, due to their global expansion in the last decades, it is likely that managerial mindsets of EMCs have undergone changes. Furthermore, despite EMCs had shared similar institutional environments in the past, it is likely that a closer look reveals that international exposition has led to some differentiation among those companies regarding their GM.

Thus, the following questions guided this study: What are the main characteristics of EMCs' GM? Has the GM of EMCs undergone changes and evolution through internationalization? What are the relevant factors in the differentiation of GM among multinationals born in an emerging economy?

In order to answer them, the main objective of this research is to develop a taxonomy for EMCs´ GM configurations. Such classification may be helpful in order to shed light on the EMCs unique characteristics and to identify their current condition regarding GM. Taxonomies uncover similarities and differences among groups of firms according to underlying dimensions which are useful for theoretical discussions and practical reasons (Fuller, 2010). They involve systematic observation of individuals´ characteristics in order to capture underlying properties which differentiate or resemble them. Moreover, taxonomies stand for the "classification of empirical entities" (Bailey, 1994, p. 6) and may reveal evolutionary differentiation. Therefore, such classification allows comparative insights and may reveal patterns and relationships that can bring new understandings on the strategic behaviors and internationalization outcomes of EMCs. In fact, they are suitable to identify specificities of first and late movers (see, for instance, Miller; Roth, 1994; Zhao et al., 2006).

Therefore, our objective is to identify GM taxons which emerge from EMCs' GM characteristics. The research realm involves Brazilian multinationals (BrMNs) which strove in a turbulent institutional environment, in the midst of unstable and unpredictable economic conditions, which led them to internationalize according to particular patterns. To answer the proposed objective, we pursued the following steps:

a) A review of the literature on global mindedness and global mindset. Global Mindedness (GM) is studied at an organizational level, as opposed to the global mindset individual level (e.g., Javidan et al., 2011, Felicio; Caldeirinha; Rodrigues, 2012), thus GM is appropriate for investigating the way in which internationalization strategies are formulated and implemented (Bouquet; Morrisson; Birkinshaw, 2003; Levy, 2005; Nummela; Saarenketo; Puumalainen, 2004).

b) Validation of a GM scale. The focus is the firm´s global mindedness; therefore, it applies to the organizational context, as addressed by some authors (e.g., Gupta; Govindarajan, 2002; Jeannet, 2000; Levy et al., 2007; Nummela et al., 2004). This focus was chosen because the research question and objective address an organizational-level analysis (i.e., characteristics of BrMNs). The scale was firstly developed by Yin et al. (2008) and, now, it is adapted to the context of the assessed emerging multinationals.

c) A test on whether GM may be applied as a means for differentiating firms, to challenge the view that BrMNs display an homogeneous outlook regardingGM, as proposed by authors such as Cyrino, Barcellos and Tanure (2010) and Tanure, Barcellos and Fleury (2009). In fact, global strategies may largely differ among companies due to their GM patterns (Levy, 2005). Therefore, our understanding is that BrMNs may present substantial diversity regarding their GM. To test this diversity assumption, we employed the GM scale validated at step "b" and made a cluster analysis. The cluster analysis allowed the identification of a GM taxonomy. Actually, this is the suggested approach for identifying taxons (Bailey, 1994).

d) To illustrate how GM diversity and the identified taxonomy are interwoven with BrMNs internationalization patterns, we also present four illustrative cases of major Brazilian companies.

The methodological approach in this paper is as follows: a previously developed multidimensional GM scale in three dimensions is adapted and validated by means of a pretest and a confirmatory factor analysis with Bayesian estimators. The resulting measures are used as the basis for a hierarchal cluster analysis leading to four clusters, which are then optimized by means of the K-means algorithm. This clustering procedures resulted in a GM taxonomy encompassing fully globally minded, cross-culturally skilled, international market-oriented, and domestic market-oriented multinationals. To illustrate the taxonomy, four case studies involving major Brazilian multinationals are brought to the fore by means of interviews and analysis of secondary data (documents, institutional websites and business publications.

2 THEORETICAL BACKGROUND

This theoretical review first discusses the different perspectives through which global mindset has been approached. At the end, a multidimensional framework which is aligned to different global mindset perspectives is presented. It was the basis for the development of a GM scale and our empirical investigation. The second sub-section links GM to BrMNs context.

2.1 Global mindedness: relevance and multiple approaches

The literature has emphasized the importance for corporations to develop their GM, in order to operate in the complex environment of global business. Actually, in a highly competitive and globally connected scenario, the top management team is supposed to be able to deal with strategic and cross-cultural complexities – "thinking globally and acting locally" (Kefalas, 1998; Arora et al., 2004). Levy et al. (2007) support this view and stress that this element can become a source of competitive advantage in international business.

Gupta and Govindarajan (2002) argue that GM is one of the elements of organisational intelligence that is required to identify and explore opportunities, even in diverse and distant regions; they state that in globalised business, managers are expected to be able to handle highly heterogeneous cultures and markets, understanding and interpreting them. After all, it refers to a situation in which *global managers* need to simultaneously ensure aspects, such as global efficiency and competitiveness, local/national flexibility and response, and leverage of learning through different markets and countries (Bartlett; Ghoshal, 1992).

These propositions are grounded in the notion that multinationals should simultaneously coordinate the needs for global integration and local response (Doz; Prahalad, 1991; Gupta; Govindarajan, 2002). According to this perspective, GM refers to specific lenses employed to interpret and decode reality, providing it with meaning. It also affects the strategic actions prioritised by companies (Levy, 2005).

In general, GM has been explored from three perspectives: cultural, strategic and multidimensional (Levy et al., 2007). These three perspectives are shown in the next sub-sections.

2.1.1 The cultural perspective: addressing the capacity to respond to cultural heterogeneity

The cultural perspective prioritizes issues related to national and cultural diversity, connected to business globalization (Adler; Bartholomew, 1992; Kobrin, 1994; Maznevski; Lane, 2004; Perlmutter, 1969). This line of thought strengthens, above all, the challenges faced by managers, as business expands worldwide.

For instance, the core assumption behind Perlmutter's (1969) seminal typology is that managers´ mindsets vary according to the adopted orientation for perceiving and coping with different cultures as internationalization progresses. His classification is consistent with the debate on the strategic management of global alignment and local responsiveness of multinationals (Bartlett; Ghoshal, 1998; Doz; Prahalad, 1991). Therefore, geocentric (or world-oriented) mindsets suit well the integration of both, global alignment and local responsiveness, and stand for the "transnational" solution. Ethnocentric (or home-country oriented) mindsets tend to prioritize global standardization and greater influence of the headquarters on foreign subsidiaries (Rugman; Verbke, 2001) and fit "global" strategies/structures (Bartlett; Ghoshal, 1998). Polycentric (or host country-oriented) mindsets, in their turn, emphasize local responsiveness and autonomy and fit "multidomestic" configurations. In a later work, a fourth type of mindset was added: the regiocentric mindset (Heenan; Perlmutter, 1979), which mixes characteristics of the geocentric and polycentric mindsets.

An ethnocentric orientation adopts home-country´s culture as the main paradigm for dealing with new environments. It is "is expressed in terms of headquarters and national superiority attitudes" (Levy et al., 2007, p. 233). Through adopting a polycentric orientation managers start to recognize that host-country cultures are different and, at the same time, difficult to understand. Geocentric-oriented managers, in turn, act "in a universalist and super national manner, thus reducing the meaning of nationality and cultural differences, when determining who is competent or reliable" (Levy et al., 2007, p. 233).

Adler and Bartholomew (1992) synthesize this perspective very well when they suggest that managers with transnational competences can understand the business environment from a global perspective, work in a culturally diverse environment, learn about various cultures, adapt to different cultures, enable a multi-cultural organizational environment, and have peer interaction with foreign colleagues. By doing so, the cultural perspective on global mindset strengthens cross-cultural and relational dimensions as well as corporations' and managers' skills required to understand other cultures and to communicate and interact with them, thus establishing and nourishing global relations.

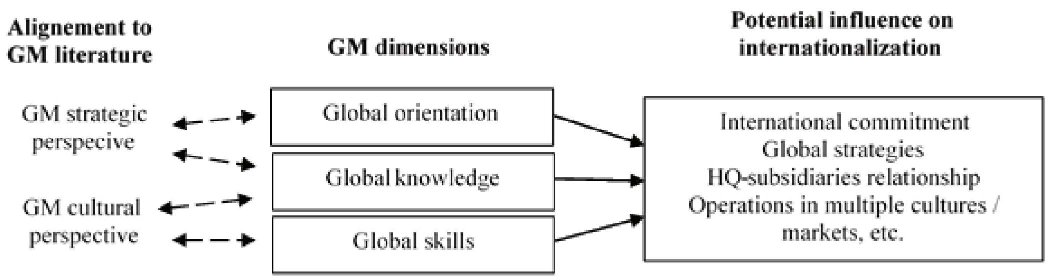
2.1.2 The strategic perspective: mindsets leading to integrative global strategies

The strategic perspective is initially based on classic studies on multinationals (Bartlett; Ghoshal, 1998). It prioritizes dimensions of strategic and organizational complexity generated by globalization (Arora et al., 2004; Gupta; Govindarajan, 2002; Harveston; Kedia; Davis, 2000; Kefalas, 1998; Nummela et al., 2004). Along those lines, Kefalas (1998) highlights that those who are able to think globally and act locally have the most adequate mindset to expand the organization worldwide. A premise that influences the GM concept, from a strategic perspective, is that managing multinationals, among other skills, implies having the ability to integrate and coordinate geographically distant operations and, simultaneously, respond to local demands (Doz; Prahalad, 1991); it involves tensions and balances between these polarities. In this scenario, the transnational manager should be able to: promote global efficiency and competitiveness and encourage flexibility and response at specific regional levels. Kefalas (1998) and Arora et al. (2004) address this polarity: the need for balance between global integration and local adaptive response. Arora et al. (2004) define global mindset in the standpoint of conceptualization (think globally) and contextualization (act locally) skills. Along the same lines, Gupta and Govindarajan (2002) define it as the opening for diversity that is present in different cultures and markets; it means being aware of theses diversities. Simultaneously, it is also the ability to integrate and synthesize this diversity. According to them, GM is the basis to identify and capture emerging opportunities. Hence, the "strategic perspective" emphasizes a global business orientation, the view of an interconnected world, the perception that there are opportunities in several places and, at the same time, the ability to understand and adjust local specific issues, in the markets where the organizations operate.

2.1.3 The multidimensional perspective and a proposed integrative framework

The multidimensional perspective mainly integrates both cultural and strategic perspectives; it may also contemplate other dimensions, such as knowledge, competences and psychological profile (Rhinesmith, 1992; Levy et al., 2007; Bowen; Inkpen, 2009). Paul (2000), for instance, explains that GM allows a company to, concurrently, value cultural diversity and promote strategic cohesion. On the other hand, Yin, Johnson and Bao (2008) propose a multidimensional approach based on the following dimensions: global orientation, global knowledge and global skills. These dimensions are consistent with the different approaches mentioned in the literature and have been employed in a study on GM in Chinese firms. For those authors, GM is firstly defined as "[...], a mental attitude which sees the world like one interconnected marketplace and prompts the willingness to actively explore it; and, secondly, as an aptitude to manage such diverse markets. It consequently contains three elements: global orientation, global knowledge and global skills" (Yin et al., 2008, p. 5). It drives top management attention patterns and global strategies (e.g., Levy, 2005) and motivates commitment and allocation of tangible and intangible resources abroad. Therefore, based on the previous work of Yin et al. (2008), we adopted the following integrative framework for GM, as it involves elements of both cultural and strategic perspectives (see Figure 1, below).

Figure 1 – GM: integrative approach



Source: developed by the authors, based on the literature review.

Global orientation refers to having a drive and attitude toward systematic and continuous international expansion (commitment to internationalization) and is adherent to elements of the strategic perspective formerly discussed (Arora et al., 2004; Gupta; Govindarajan, 2002; Harveston; Kedia; Davis, 2000; Nummela et al., 2004). Global skills, in their turn, involve having competencies to build and manage multicultural relationships; therefore, they are aligned to the cultural perspective (Kobrin, 1994; Maznevski; Lane, 2004; Perlmutter, 1969). Finally, global knowledge refers to having knowledge on industries and foreign countries; it also involves the capacity to detect global opportunities, being related to both perspectives (strategic and cultural).

Based on extant literature, it is possible to expect that GM (and its dimensions) may impact internationalization on multiple aspects, such as: internationalization commitment (Levy, 2005; Yin et al., 2008), definition of global strategies (Bouquet; Morrisson; Birkinshaw, 2003; Jeannet, 2000, Nummela et al., 2004), headquarter-subsidiaries relationship (Reis; Fleury; Fleury, 2011), operating in multiple cultures and markets (Gupta; Govindarajan, 2002), among others.

Due to its interconnectedness to GM literature, the model proposed by Yin et al. (2008) was adopted as a starting point for our work. This choice also took into account the possibility of future comparative studies involving multiple EMECs (e.g., from China and Brazil) through the adoption of the same framework.

2.2 GM in the context of EMECs

International Business literature used to characterize firms from emerging economies as: a) mature and integrated firms that grew in protected or uncompetitive markets (Bartlett; Ghoshal, 2000; Ramamurti, 2004); b) firms based on natural resources and which use cheap labor; c) firms lacking technological capabilities (Dunning, 1993); d) laggard firms in terms of managerial capabilities (Bartlett; Ghoshal, 2000); and e) firms accustomed to striving in turbulent environments (Khanna; Palepu, 1999). Srinivas (1995) emphasizes that enterprises from developing economies have been threatened by foreign competitors and should develop new capabilities in order to explore and capture new global opportunities. Those companies have, however, an underdeveloped GM which may constrain their internationalization.

In the case of Brazil, the environment in which both local enterprises and subsidiaries operated until the late 1980swas characterized by a large internal market, protected and heavily influenced by the decisions of government policy (Fleury; Fleury, 2011). Specifically, in the case of the local companies, which shaped a "parochial" mindset, entrepreneurs depended on local institutions, avoiding risk taking and being overly directed into the country, totally detached from the international context. Those features, influenced by the legacies of the colonial period, greatly jeopardized the development of their competitive strengths.

After the market opening, in 1991, some significant changes took place. These included the stabilization of the economy (especially inflation) and the opening of domestic markets, intensifying the entry of foreign products and increasing the level of local competition. During that decade: 1) state-owned enterprises, such as Embraer, Companhia Vale do Rio Doce, Companhia Siderurgica Nacional, among others, were privatized; 2) in the consumer goods industry, a concentration process took place (Ambev, in the beverage industry, is an emblematic example); 3) in the durable goods industry, denationalization was observed: some of the most advanced Brazilian firms were sold to foreign multinationals, just a few of them resisting.

Among private companies, those which survived and prospered had really developed competences to thrive in the competitive and turbulent domestic market, struggling fiercely with the subsidiaries of multinationals. In the case of state-owned enterprises, the privatization process injected new competences (particularly in finance and marketing); complementing the strong competences they had previously developed in production and technology. In that same period, Executive Education programs offered by Brazilian institutions evolved significantly, achieving good placing in international rankings. Simultaneously, a new field of experimentation was created with the Mercosur. Those factors contributed to the development of a wider international mindset, among managers and entrepreneurs. So, the roots of the internationalization process of Brazilian companies had emerged.

The economic sectors in which Brazilian firms compete internationally include a broad spectrum; the phenomenon is not linked to natural resources exploitation only. Some examples are: natural resources - Vale (mining), Petrobras (oil and gas); input suppliers - Companhia Siderúrgica Nacional and Gerdau (steel), Braskem (petrochemical); agribusiness - JBS-Friboi, Brazil Foods (Sadia/ Perdigão); complex product assemblers: Embraer (aircraft), Marcopolo (buses); consumer products

- AB Inbev/Ambev (beverages), Coteminas (textiles-apparel); components and system suppliers - Sabo (autoparts), WEG (electrical equipment); construction materials suppliers - Tigre, Duratex; information technology - CIandT (business intelligence), Stefanini (software), Bematech (hardware); engineering services - Odebrecht, Camargo Correa; other services - IBOPE, Fogo-de-chao, Spoleto.

The general characteristics of the internationalization process are the following:

- Brazilian companies, like most multilatinas (Cuervo-Cazurra, 2008), were slow to internationalize. Brazilian enterprises turned their eyes to the international environment only decades after they started operating, in most cases;
- Brazilian firms internationalized autonomously, according to their own decisions and strategies; there was no cooperation, either among industrial firms or between financial institutions (as is the case of Spain), and there was no support from the government (as is the case of China);
- In the beginning, the internationalization strategies focused on the Latin American countries, which imposed less geographic distances and cultural and institutional differences (Cyrino et al., 2010). More recently, a new trend has been observed: the need to cope with foreignness of liability, as well as the competitive disadvantage that stem from being late comer shave forced international expansion and an upgrading process simultaneously. That has been solved by expanding to less developed markets and upgrading in more developed markets simultaneously (Guillen; Garcia-Canal, 2009, p. 27).

This is a rather complex and multifaceted scenario, in which a wide range of companies have explored global opportunities and markets through multiple forms. It is well known that firms from the emerging economies have even become global leaders. Therefore, it seems to be worthwhile to question the assumption that most EMECs may have a parochial mindset. Instead of a monolithic “low” GM we propose to study the existing GM diversity and its implications for internationalization; it may shed additional light on the understanding of the influence of GM on EMECs internationalization.

3 METHODOLOGICAL APPROACH AND RESULTS

An organizational-level GM scale was developed in order to investigate how GM may be applied as a means for differentiating BrMNs due to the scarcity of validated GM scales (Javidan et al., 2011; Levy et al., 2007) for the organizational level, in spite of the relevance that has been given to the GM construct in international business literature. The lack of validation may cause shortcomings in the understanding of variables relationships and research conclusions (Mackenzie; Podsakoff; Podsakoff, 2011; Netemeyer; Bearden; Sharma, 2003).

The process for developing the scale started with the adaptation of the scale created by Yin et al. (2008), with the inclusion of two items that were adherent to the Brazilian context. Item translation e and reverse translation were employed. The scale validation process followed face validity by means of a pretest. Then, a sample of 64 firms out of a universe with 97 Brazilian firms with assets abroad was analyzed by means of Confirmatory Factor Analysis. The purpose was to check for convergent and discriminant validity, and also to fit a nomological network. The model parameters were adjusted by means of Bayesian estimators because: the sample size was not large (Rossi; Allenby; McCulloch, 2006) (there was a limited number of firms in the research universe and access to CEOs and directors was restricted); the items were in ordinal 5-point Likert scales and Bayesian estimators do not need to assume the distributions of variables to be normal (Byrne, 2001) and are less sensitive in the presence of outliers, crucial when variance is under analysis (Hahn; Doh, 2006). There were no missing values in the sample.

Convergent validity was verified by means of analysing the average variance extracted, while discriminant validity was checked by the comparison between extracted and shared variances (Fornell; Larcker, 1981). As a double check in cases when an extracted variance could be lower than a shared variance, the procedure of comparing a model with two constructs combined with a model with both constructs kept separate was employed (Bagozzi; Phillips, 1991); for this particular procedure, estimation employed maximum likelihood. Reliability was assessed by means of the composite reliability index.

The developed and validated scale was then used to investigate the differentiation of BrMNs regarding their GM by means of a cluster analysis. The number of clusters were chosen in an exploratory manner after a first step with an hierarchal procedure. We used Manhattan (absolute) distance with standardized variables (and so no variable had greater impact than others) and Ward linkage, which tends to minimize variance within the groups. After four clusters were created, we optimized this initial solution by means of the K-means algorithm, thus making the first solution to improve in terms of homogeneity within and heterogeneity between the groups.

In order to illustrate GM diversity, four case studies were conducted, involving major BrMNs, each one representing one cluster. With regard to the case studies, a set of methods for data collection, including primary and secondary sources, were combined, as suggested by the literature (Eisenhardt, 1989; Ghauri, 2004, Ghauri; Firth, 2009). Analyses of documents of the surveyed organizations, collection of information on websites, searches on business publications and interviews with managers provided the elements for triangulation. The cases presented encompass major BrMNs which took part of the sample described further.

3.1 GM scale development

We initially adapted the nine-item scale developed by Yin et al. (2008) to investigate Chinese firms, being the option encompassing the three dimensions: global orientation, global knowledge, and global skills, which are adherent to extant literature on global mindset (see Figure 1) and were included in a preliminary scale.Two items were added to the original instrument because of BrMNs specificities: 1) the capability to recognise new global opportunities, and 2) the adaptability of managers abroad. Regarding the first, it has been argued that successfulBrazilian companies have adopted an "active waiting" strategy; they systematically and actively scan the external environment and promptly capture emerging opportunities such as entering new markets, developing new products/services, and acquiring strategic assets (Sull; Escobari, 2005). The second item was added due to significant adaptation and expatriation issues observed among Brazilian managers (Tanure et al., 2009), mainly lack of skills to adapt and work in foreign environments. Chart 1, below, shows the eleven items which comprised this preliminary version.

Chart 1 – GM dimensions

Dimensions	Items	Adherence to GM perspectives
Global orientation	to make efforts to understand foreign markets (customers, competitors and general market situations); to make large investment commitment internationally; to create a worldwide web of relationships (suppliers, distributors, peer firms and customers).	Strategic perspective
Global knowledge	to have knowledge of foreign cultures; to have knowledge of the industry and markets on a global scale; to have the capability to recognize new global opportunities; to have knowledge on the socio-political, economic, financial and legal aspects of major foreign countries*****.	Strategic and cultural perspectives
Global skills	to have cultural sensitivity and the ability to work with people from different cultures; to have staff members who are proficient in English and in the languages spoken in key foreign markets; to be skillful in communicating with people overseas using modern information systems and telecommunications technologies*****; to have managers who can easily adapt to the environment of the foreign subsidiaries.	Cultural perspective

*Note: not included in the final version of the scale.

Source: adapted from Yin et al. (2008).

Two pre-tests with theresulting eleven-item scale - one applied to scholars and specialists and another to Brazilian firms - demonstrated that two of the original items were redundant or confusing for the respondents. These two items (see Chart 1, above) were removed from the sample.

3.2 GM scale validation for the BrMNS

The resulting 9-item scale was sent to 97 Brazilian companies which had assets abroad; they were identified as the research universe of BrMNs of companies which owned foreign manufacturing plants as well as technology-based professional services (construction, information technology, and other specialized services) with offices abroad. All items were graded by a 5-point Likert type scale (ranging from "totally disagree" to "totally agree") addressing to what extent those characteristics (see Figure 2, above) applied to the participants. 64 (65.9%) out of a total of 97 firms that had been contacted agreed to answer the questionnaire. The respondents were directors or presidents. A general profile of the sample is shown in Table1.

Table 1 – Studied companies profile

Sector	N	%
Natural resources-based industries	3	4.7
Basic products	11	17.2
Systems assemblers	9	14.1
Components and subsystems suppliers	9	14.1
Consumer goods	10	15.6
Engineering, construction and infrastructure	6	9.4
Information technology	11	17.2
Other specialised and technical services	5	7.8
Total	64	100

Source: the authors.

Through the collected data, we calculated the variance extracted from each construct to check their reliability by means of confirmatory factor analysis using AMOS 18.0 statistics package. We were able to check the convergent validities of the three constructs – Global Orientation, Global Knowledge and Global Skills – as dimensions of Global Mindedness. The average variances extracted (see Fornell; Larcker, 1981) wereall higher than 50%.

For discriminant validity, we compared the common variance (average extracted variance) in all constructs to the covariance (shared variance) between them (Fornell; Larcker, 1981); we observed that the extracted variance in all constructs was higher than their shared variance with other constructs, except for the variance of global skills (0.78) and its covariance with global knowledge (0.84). However, these measures are similar (0.78 and 0.84) and the extracted variance of global variance (1.18) is larger than its covariance with global skills.

As a double check for discriminant validity, we performed a comparison between a model with global orientation and global knowledge as a single construct (alternative model) and the original model (original model) presenting the constructs as separate dimensions. These models were estimated by means of maximum likelihood and the comparison was based on differences of the chi-square measures between both (alternative and original) models. Table 2 shows the results, revealing that the difference between chi-squares is statistically significant and, therefore, the measures of global skills and global knowledge refer to different constructs.

Table 2 – Discriminant validity between global knowledge and global skills

Model	Chi-Square	Degress of Freedom	p-value
Original (separate constructs)	26.66	24	0.326
Alternative (global knowledge and global skills as a single construct)	58.09	26	0.001
Original - Alternative	31.43	2	0.000

Source: the authors.

We also conducted a nomological validation by measuring the correlations between the dimensions of global mindedness. The correlations were all positive and significant at the level of 10%.

All parameter prior distributions were set as normal with zero mean and wide variance, thus making the sampling space broad enough for these priors to be non-informative (Byrne, 2001); this made the observed data predominate in the results of the parameter posterior distribution (Congdon, 2006). A Random Walk Metropolis-Hastings algorithm was employed as the Monte Carlo Markov Chain (MCMC) method with a burn period of 500 iterations. Simulation was interrupted after 232,004 interactions, far after the achievement of convergence (set to be equal to or less than 1,002).

Parameter trajectories were analysed, all being normally distributed. Additionally, traces were visually stable and autocorrelations tended to be equal to zero, so the measures developed for each dimensions of global mindedness were considered valid. The following coefficients were set to be equal to one: the coefficient between global orientation and the efforts to understand foreign markets; the coefficient between global knowledge and the knowledge of foreign cultures; and the coefficient between global skills and the ability to work with people from different cultures. Table 3 contains the other parameters means and standard deviations.

Table 3 – SEM estimates (mean and standard deviations) for the fitted model

	Mean	Std. deviation
Global Orientation è investment	1.11	0.18
Global Orientation è network	0.78	0.17
Global Skills è languages	0.80	0.12
Global Skills è adaptation	0.92	0.08
Global Knowledge è industrial knowledge	0.86	0.15
Global Knowledge è opportunities	0.59	0.12

Source: the authors.

3.3 Application of the GM scale – differentiating BrMNs through GM

In this section, we describe the cluster analysis that was performed aiming at developing the taxonomy for BrMNs regarding their GM levels. Our initial extraction was done by means of hierarchical clustering, which suggested the existence of three to four clusters; all variables were standardized. Afterwards, further clustering (K-means algorithm) was conducted and BrMNs were assigned to four clusters (see Table 4).

Table 4 – Global mindedness dimensions for Brazilian multinationals

	Clusters			
	Domestic market oriented	Cross-culturally skilled	International markets oriented	Fully globally minded
Global orientation	2.25	2.89	4.19	4.62
Global knowledge	1.92	3.78	3.76	4.54
Global skills	1.83	4.07	2.89	4.52
Cases	4 (6.25%)	15 (23.43%)	18 (28.1%)	27 (42.2%)

Source: the authors.

The smallest group consists of *domestic market-oriented* firms (n=4; f=6.25%), with the lowest mean scores regarding global knowledge (M=1.92), and global skills (M=1.83). Thus, these BrMNs are analogous to firms which Gupta and Govindarajan (2002) contend as having a "parochial" mindset, i.e., firms that are less able to assess and understand diversities across cultures and markets. Moreover, *domestic market-oriented* firms also show the lowest score for global orientation (M=2.25) which involves aspects such as being committed to internationalization and investing in a worldwide web of relationships. This result recalls characteristics that are typical in emerging multinationals: they are newcomers to international business, often depend on their domestic markets and are unaware of their global potential (BARTLETT; GHOSHAL, 2000); furthermore, they frequently do not know how to compete in international markets and how to access business networks abroad (Mathews, 2006; Thite et al., 2016).

Cross-culturally skilled companies (n=15; f= 23.43%), in their turn, presented the highest mean scores in global knowledge (M=3.78) and global skills (M=4.07). Hence, they know foreign markets and are able to recognize opportunities abroad and to deal with foreign cultures. These firms may therefore show local responsiveness (Bartlett; Ghoshal, 1998; Doz; Prahalad, 1999) in host countries), being able to adapt to a diversity of cultures and markets (Gupta; Govindarajan, 2002; Perlmutter, 1969). On the other hand, their lowest mean is in global orientation (M=2.89). Thus, such companies are locally responsive but may be less active in searching new foreign opportunities (Bouquet; Morrisson; Birkinshaw, 2003; Levy, 2005) or in integrating their operations abroad (Gupta; Govindarajan, 2002). Although globally-oriented, they are relatively less eager to approach new markets compared to fully globally-minded firms, as shown in Table 4.

An opposite pattern is seen in the *international market-oriented* BrMNs (n=18; f=28.1%). Their highest mean scores were observed in global orientation (M=4.19) and global knowledge (M=3.76), and the lowest in global skills (M=2.89). In comparison to the former group, while having less ability to build and manage multicultural relationships, these companies may show a higher willingness toward systematic and continuous international expansion. In fact, Levy (2005) shows that companies that are more globally-oriented are more likely to display a global expansive outlook. Furthermore, it is noteworthy that emerging multinationals may show an accelerated internationalization (Thite et al., 2016) which allow them to rapidly catch opportunities abroad but at the expense of not developing their cross-cultural skills adequately.

Finally, the largest group (n=27; f=42.2%) showed the highest mean scores in all three GM dimensions. These firms were identified as *fully globally-minded* BrMNs. Globally-minded firms are likely to be able at the same time to integrate their operations across cultures and markets and to respond accordingly to a diversity of cultures and markets (GUPTA; GOVINDARAJAN, 2002); in other words, they may be capable to think globally and also to act locally (ARORA et al., 2004). This result strengthens the argument that emerging companies can indeed overcome their "marginal mindsets" to compete abroad (Bartlett; Ghoshal, 2000). Taken together the four clusters challenge the view that BrMNs in general display only homogeneous and "low" GM levels (e.g., Cyrino et al., 2010, Tanure et al., 2009). Actually, four types were found showing BrMNs nuances regarding their global orientation, global knowledge and global skills. Such diversity is exemplified by means of the four cases presented in the next section.

3.4 Case studies

The four cases were selected in order to fit conceptual categories (Eisenhardt, 1989), i.e., the four GM types formerly identified. Hence, the cases described as follows are representatives of each group that emerged through the cluster analysis. Moreover, practical reasons also influenced the selection process: the accessibility to interviews with top executives and the availability of secondary sources. Therefore, one case for each GM type was selected (they were assigned to each type through the cluster analysis). As requested by the companies, their names were omitted and kept confidential. Chart 2 shows the general profile on the chosen companies.

Chart 2 – Profiles of the studied cases

	Case A Fully globally minded	**Case B** Cross-culturally skilled	**Case C** International markets oriented	**Case D** Domestic market oriented
Industry	Aeoronautics	Petrochemical	Cement	Footwear
Creation	1969	1953	1925	1952
First exportation	1977	1970	2001	Not provided
First plant abroad	2004	1979	2001	2003
Motivations for FDI	Efficiency seeking (integrating Global Production Networks), market seeking, strategic asset seeking	Resources seeking, strategic assets seeking	Efficiency seeking, market seeking, strategic assets seeking	Market seeking, efficiency seeking

Entry modes	*Joint ventures*, acquisitons, *greenfield*	JVs, acquisitions	JVs, acquisitions	JVs, acquisitions
Foreign locations	Asia, EU, North America	Africa, EU, Latin America, and North America	North America, South America, Europe, Asia, Africa	South America and Asia (shoes uppers plant)
Domestic market revenues (*)	More than 1 billion	More than 1 billion	More than 1 billion	More than 1 billion
International operations revenues (*)	Not provided	More than 1 billion	More than 1 billion	Between 300 million and 1 billion

(*) Annual, in Brazilian Reais.

Source: the authors, based on the multi-source data collection described above.

3.4.1 Case A: Fully globally minded company

Company A was created in 1969 as a state-owned enterprise. Although its first product, was designed according to local market specifications, its production depended on contracts with large international firms for the supply of parts and components. At the same time, Company A was commissioned to deliver a customized product to the ministry, which was made possible under a partnership contract with a foreign manufacturer. Company A was able to learn state-of-the art technology while participating in that partnership.

The first product became a success in the local market and, after being certified by foreign agencies, it started to be exported to developed countries: France and UK (1977) and US (1978). The challenge that Company A faced became how to provide maintenance and after-sales services in foreign countries. A partnership agreement a worldly-known multinational, helped Company A to settle the issue. The second product was a slightly larger and more sophisticated becoming a success in the American market.

Thus, Company A was able to build industrial knowledge and develop an initial international market strategy. However, its third product prioritized technological concerns instead of market needs, becoming a fiasco. This failure led Company A to a delicate financial situation. In trying to circumvent this situation, Company A decided to invest in another project inviting suppliers to join as risk partners. This decision ensued Company A's turnaround.

In the middle of the above mentioned crisis, Company A was privatized; the new administration brought in strong competences in international finance and international marketing. Representative offices were opened in Australia (1997), China (2000) and Singapore (2000). Profiting from the experience of the risk-partnering approach, Company A launched a new project with eleven partners, including the most renowned manufacturers in the industry. To elaborate the technical specifications, Company A created missions that circulated the world, capturing information from clients, suppliers and (potential) competitors. The design phase involved simultaneous engineering, more than 600 engineers from dozens of firms were involved in the project working for several months at Company A's headquarters. Therefore, the company increased significantly its global orientation, global knowledge and global skills.

Company A established its first assembling plant abroad in China as a pre-condition to supply the Chinese market. The interdependence with the Chinese partner is a constant challenge for Company A, which was able to expand its global skills and its knowledge of the Chinese way of doing business. Other overseas assembling plants were lately implemented in the US and in the EU.

More recently, Company A reinforced its presence in other businesses. This required the development of new knowledge and new competencies related to GM, including how to cope with international conflicts settled at the World Trade Organization. The following chart shows the main characteristics of this illustrative case regarding its GM.

Chart 3 – Company A´s main GM characteristics

Global orientation	Strong. Has massively invested in international markets (Company A mostly relies on international sales). Has global operations and coordinates a global web of partners and suppliers.
Global knowledge	Strong. Has adapted products to customers' needs in multiple cultures and markets (it operates in over than 50 countries). Has diversified its products in order to capture global opportunities and to overcome competition challenges. Forecasts global trends in the industry in order to address future demands.
Global skills	Strong. Systematically manages multicultural projects. Has hired professionals with international background and foreign specialists. Has managed a network of multicultural partnerships.

Source: the authors.

3.4.2 Case B: Cross-culturally skilled company

Company B was founded in 1953, as part of a nationalist movement. As a state-owned enterprise, Company B was tried the monopoly of oil exploration and refining in Brazilian territory. The implementation of Company B's operations was made under a turn-key type of contract with large international engineering firms and, gradually, Case B mastered the knowledge associated to plant design and operation. One of the key incidents that drove the company to become fully knowledgeable in that area was the oil crisis: in the 1980s, when Company B's supply sources changed dramatically, the country introduced the alcohol (ethanol) program and Company B changed radically its operation procedures. The negotiation of oil supply required the company to invest more intensively in its market intelligence group. The international networking also required the development of distinctive competences and international knowledge.

At the same time, to guarantee supply, Company B started exploration projects abroad, initially in Latin America and soon after in the Middle-East with great success. The exploration projects involved off-set type of negotiations with foreign governments and other international companies in the exploration business. As these projects might have strong environmental impacts, Company B had to develop knowledge of political systems and governance structures, transferring this experience to the teams that were assigned to international activities. Company B's largest exploration projects are currently located in Africa.

In the 1990s, Company B faced a period of radical changes. Although it underwent the privatization process without losing its state-owned character, the monopoly rule was broken and the oil multinationals started to operate in the country. That pushed Company B into a restructuring process, in which international operations gained increasing relevance.

However, that orientation was short-lived. The recent discovery of ultra-deep oil deposits in the Brazilian coast led Company B to reassess its internationalization process, given the enormous magnitude of resources needed to make the project profitable. In addition, the fact that Company B has remained state-owned also contributed to the lack of global orientation.

That explains why, despite the exploration projects and commercial activities abroad, international operations of Company B are not currently significant. An acquisition in the US was undone a few years after the change of strategy with losses for the company. Investments in Argentina and Bolivia are also problematic and the acquisition made in Japan is put on sale. Thus, Company B symbolizes the cross-cultural skilled mindedness: it has strong global knowledge and skills, but a low global orientation.

Chart 4 – Company B´s main GM characteristics

Global orientation	Reduced. Operations abroad are well-established, but international strategies drivers are currently under review. Company B´s loose intraorganizational networks lead to units with high level of autonomy lacking global integration.
Global knowledge	Strong. Operates in multiple cultures/countries (more than 30) all over the world. Has knowledge in adapting operations to complex institutional environments even when significant cultural, administrative, economic and geographic distances are in place.
Global skills	Strong. Systematically manages multicultural projects. Experienced in the implementation of exploration projects abroad with local co-workers and partners. Has hired professionals with international background and foreign specialists.

Source: the authors.

3.4.3 Case C: International market-oriented company

Company C was founded in 1936 as part of a Brazilian industrial conglomerate, initially dedicated to the textile-apparel industry. By means of acquisitions and organic growth, it became the largest cement producer of the country, benefitting from an almost monopolistic position. An inhibiting factor in the firm's GM development was the fact that cement is a bulk product, used in local construction, difficult to transport for long distances. As a family group, Company Ckept a conservative approach in terms of GM development.

Actually, Company C's awakening for the international market only took place in the mid-1990s when its international competitors established operations in Brazil and began to capture its market share. Company C reacted through a slow internationalization process, accelerated from 2005 on, as bolder decisions regarding corporate governance were made.

In 2001, Company C acquired two plants in Canada. The acquisition took place as the Canadian anti-trust authorities made a decision obliging the former owner to sell the plants. The lack of global skills was rapidly tackled with the implementation of a task force that, in a couple of months, elaborated a manual: Company C Best Practices, which was then made available to the foreign operations. From then on, Company C became globally-oriented, undertaking high investments to expand in North and South America and then in Europe. The European undertaking is revealing of the company's new global orientation. First, it acquired a minority stake at an European firm, then it allied with another Brazilian firm to take full control of the European acquisition. After the deal was complete, Company C renegotiated with the allied partner: the latter took the ownership of the subsidiaries of the European multinational located in Brazill, while Company C got hold of the subsidiaries located in different parts of the world, especially China.

Company C is among the 10 largest cement producer in the world and intends to rank among the three largest in a short period of time. It is clearly a company with high worldwide orientation and knowledge, but it still lacks some global skills. Perhaps due to its rapid and intense internationalization, the firm still has serious difficulties to expatriate and to establish its international management model.

Chart 5 – Company C´s main GM characteristics

Global orientation	Strong. Has experienced a fast expansion abroad and is highly committed to explore foreign markets.
Global knowledge	Strong. Has elaborated a manual of Best Practices to foreign operations and developed global partnerships.
Global skills	Limited. Managers have faced challenges with regard to their adaptation to other countries and cross-cultural interactions.

Source: the authors.

3.4.4 Case D: Domestic market-oriented company

Company D was founded in 1952, in São Paulo, to produce parts for shoe assembling. Its product line was expanded to include several different products sold in industrial and consumer markets. In 1974, Company D became a manufacturing contractor, engaged in the production for different brands in the Brazilian market, a very labor intensive activity. The firm expanded through acquisitions and organic growth, becoming one of the largest manufacturers in Brazil. Aiming to benefit from governmental incentives for those who create jobs in the poorest regions of the country, Company D moved its factories to the northeast during the 1990s. In 1996, Company D and one of the global leaders in sports fashion established an exclusivity agreement through which the former became the only manufacturer of the branded goods developed by the latter in Latin America.

The internationalization of Company D began in 2005 by means of the acquisition of Company X, in Argentina, to create a distribution channel to the Mercosur's markets. Two years later, the production in Argentina was implemented with the acquisition of Company Y. But Company's D's most relevant acquisition, held in 2007, was Company Z, another Brazilian manufacturer of sports shoes. Company D became the biggest shoe manufacturer in Brazil and added the ALFA brand of sports shoes, previously developed by Company Y to its product portfolio.

Company D decided then to "move up the value chain" (Bartlett; Ghoshal, 2000), investing in Research and Development to enhance the ALFA products. It acquired a firm in India to perform labor intensive tasks. In other words, aiming to move to higher value-adding activities, Company D decided to transfer the jobs created in the northeast of Brazil to distant India. The Indian operation began in 2011 with 1,000 workers, bearing plans for an expansion to 10,000 workers, while closing some Brazilian plants. Notwithstanding, the local market is still its main target.

The case shows that Company's D's concerns with global markets are very recent. Beforehand, it operated based on local knowledge, local orientation and local skills. To a large extent, the manufacturing agreements settled with powerful multinationals provided the shield and the necessary orientation to global markets. Company D recent internationalization is lightly changing the picture, but its strategy is still focused on the domestic market.

Chart 6 – Company D´s main GM characteristics

Global orientation	Weak. Explores international operations with the sole motive of enhancing home country competitiveness.
Global knowledge	Limited. Its international operations are concentrated in one country where a partner facilitates host country relationships.
Global skills	Reduced. International operations rely on host country managers and workers with a minimum of expatriates and cross-cultural interaction.

Source: the authors.

3.4.5 Synthesis of the four studied cases

The studied cases illustrate GM characteristics of the four selected BrMNs. Taken together, they display specificities of each global mindedness type (Chart 7). They also reinforce that firms´GMis associated with their behaviors in internationalization as suggested by Levy (2005) and Bouquet, Morrisson and Birkinshaw (2003). Company A, for instance, is fully globally minded and shows strong global orientation, knowledge and skills. It is highly internationalized and developed multiple international relationships since its early stages. On the other hand, it was observed that the global orientation of Company B (cross-culturally skilled) has been diluted by an unclear internationalization strategy. Moreover, the company has units which are locally adapted but lack global integration. In such circumstances, the firm is at risk of overlooking the bigger global picture of its international operations (Gupta; Govindarajan, 2002). On the other hand, Company C (international-market oriented) showed strong commitment to internationalization, but a lack of global skills which are required for building up relationships abroad (Adler; Bartholomew, 1992; Bartlett; Ghoshal, 1992).

Finally, Company D (domestic market-oriented) prioritized a regional internationalization: its main market in South America (in spite of its plant in India which has the support of a local partner). It keeps however its domestic market as its main strategic focus. Hence, the company is less focused on understanding and exploring a diversity of cultures and markets (Gupta; Govindarajan, 2002).

Chart 7 – Synthesis of the studied cases

Company	Global orientation	Global knowledge	Global skills
A (Fully globally minded)	Strong	Strong	Strong
B (Cross-culturally skilled)	Reduced	Strong	Strong
C (International market-oriented)	Strong	Strong	Limited
D (Domestic market-oriented)	Weak	Limited	Reduced

Source: the authors.

4 CONCLUDING REMARKS

Despite the relevance of developing a GM in order for firms to explore global opportunities, extant literature on GM has mostly focused on developed country multinationals, overlooking its relevance to emerging country multinationals which have unique features and internationalization patterns. One of the few exceptions is the research conducted by Yin et al. (2008) which focused on Chinese multinationals. This study therefore contributes to the literature on GM research in the context of “late movers” multinationals, from emerging countries like Brazil. Moreover, it also brings a methodological contribution since the development and testing of a metric to measure GM might contribute towards future leading research on this topic.

In addition, the studies addressing the impacts of GM on internationalization have mostly relied on the assumption of homogeneity rather than differentiation of GM among multinationals of the same country. Therefore, this study addressed this theme by exploring GM diversity among Brazilian multinationals. In this sense, it is not reasonable to assume that EMCs have limited GM in all its dimensions, if any. It may also be the case that their path in closed nations with strong governmental influence may have driven and given conditions and opportunities that led them to develop GM and to internationalize in very particular manners. Also, the paper contributes by combining the GM strategy and culture perspectives by measuring, classifying and empirically analyzing the data of Brazilian companies. While analyzing both perspectives simultaneously, the research keeps track of their variables and effects separately, even though interpretation is made integrative.

The outcome of the cluster analysis indicates that the GM dimensions may be a means for differentiating BrMNs. The profiles of the analyzed companies suggest that the identified taxonomy (i.e., fully globally minded firms, cross-culturally skilled firms, etc.) may group diverse internationalization patterns. Fully globally-minded BrMNs has the higher levels in each GM dimension (global orientation, global knowledge, and global skills). This cluster encompassed considerably internationalized companies which operate in highly competitive and globalized industries. Cross-culturally skilled companies, in their turn, operate mostly in mature or well-established markets and/or markets based on natural resources or focus intensively on product adaptation. Although they are globally-oriented, their current appetite for approaching new markets is, however, relatively less aggressive in comparison to fully globally-minded firms.

With regard to international market-oriented BrMNs, this cluster is formed by companies that are highly focused on their internationalization and some of them may show fast global expansion. However, as their weaker dimension is global skills, challenges regarding adaptability abroad and local response may materialize. Domestic market-oriented firms are more timid in terms of international presence and have consolidated operations in Brazil, focusing, preponderantly, on the local market. They are mostly novices in the international arena. International operations may not be a strategic priority for these BrMNs. They have been compelled to invest abroad due to new domestic competitors, emerging opportunities, or demands from international clients. This is the smallest group; however, our understanding is that a similar profile is likely to be identified among companies that have not internationalized yet. Further research should investigate this aspect, since future internationalization of Brazilian companies could be restricted to a specific type and this could have impacts in internationalization development and performance. The results may suggest that GM development and internationalization patterns could relate to aspects depending on industry and competition contexts, a vein that could be an interesting option for future research.

This study has a set of limitations which should be managed in future research. A first aspect concerns the adopted GM measure, which involved a single respondent in each company; although vastly employed, this approach has the limitation of capturing a single view of the organization. A second limitation concerns the case studies. Although the aim of studying cases was to illustrate each GM type, in-depth case studies would provide additional insights on the impacts of GM on EMECs strategic behaviors over time. In spite of these aspects, the results of the study indicate that this a promising research field which deserves to be further explored. Nevertheless, one of the purposes for developing and validating the scale was to build a tool for measuring GM, and this can be useful for future studies willing to make comparisons among different markets and regions. The same can be concluded about the taxonomy proposed.

In fact, EMECs literature has mostly relied on institutional and economic factors to explain EMECs' behaviors (Cuervo-Cazurra, 2008; Peng, 2008). GM may contribute to this debate, shedding light on how firms behave depending on their mindset features. Thus, the impacts of different combinations of global orientation, global knowledge and global skills on EMECs international strategies deserve to be further investigated. In this sense, the developed scale may contribute to future research. Moreover, such scale has the potential to be suitable for future research focusing on strategic behaviors and global strategies of BrMNs and other enterprises (market choice, level of gradualism, entry modes, subsidiary ownership, etc.).

Potential impacts of GM on international performance should be also addressed, as the lack of some dimension may influence either the attitude towards internationalization (due to the global orientation level), or the capacity to identify global opportunities (global knowledge level), or, still, the ability to operate in foreign cultures (global skills level). Another interesting issue to explore would be the relationships between organizational GM and individual GM: how managers' global mindset impacts the dimensions addressed in this article? Furthermore, given its potential impacts on BrMNs' internationalization, it would be advisable to investigate GM antecedents and how its dimensions may be enhanced by companies.

REFERENCES

ADLER, N.; BARTHOLOMEW, S. Managing globally competent people. **Academy of Management Executive**, v. 6, n. 3, p. 52-65, 1992.

ARORA, A. et al. An exploratory analysis of global managerial mindsets: a case of U.S. textile and apparel industry. **Journal of International Management**, v. 10, n. 3, p. 393-411, 2004.

BAGOZZI, R. P.; YI, Y.; PHILLIPS, L. W. Assessing construct validity in organizational research. **Administrative Science Quarterly**, p. 421-458, 1991.

BARTLETT, C. A.; GHOSHAL, S. What is a global manager? **Harvard business Review**, p. 124-132, Sept.-Oct. 1992.

______. GHOSHAL, S. **Transnational management**. Boston: McGraw-Hill, 1998.

______; ______. Going global: lessons from late movers. **Harvard Business Review**, v. 78, p. 132-142, 2000.

BAILEY, K. **Typologies and taxonomies**: an introduction to classification techniques. Sage University papers Thousands Oaks, CA: Sage Publications, 1994. (Series on quantitative applications in the social sciences, 7-102).

BERGER, S. **How we compete**: what companies around the world are doing to make it in today's global economy. New York: Doubleday, 2005.

BOUQUET C.; MORRISSON, E.; BIRKINSHAW J. Determinants and performance implications of global mindset: an attention-based perspective. **Research Paper 30**, London Business School, 2003.

BOWEN, D.; INKPEN, A. Exploring the role of 'Global Mindset' in leading change in international contexts. **The Journal of Applied Behavioral Science**, v. 45, n. 2, p. 239-260.

BYRNE, B. **Structural equation modeling with AMOS**: basic concepts. applications. and programming. Mahwha, New Jersey: Lawrence Erlbaum, 2001.

CONGDON, P. **Bayesian models for categorical data**. Chichester, UK: John Wiley & Sons, 2006.

CUERVO-CAZURRA, A. The multinationalization of developing country MNEs: the case of multilatinas. **Journal of International Management**, v. 14, p. 138-154, 2008.

CYRINO, A.; PENIDO, E.; TANURE, B. International trajectories of Brazilian companies: Empirical contribution to the debate on the importance of distance International. **International Journal of Emerging Markets**, v. 5, n. 3/4, p. 358-376, 2010.

DOZ, Y.; PRAHALAD, C. K. Managing DMNCs: a search for a new paradigm. **Strategic Management Journal**, v. 12, n. S1, p. 145-164, 1991.

DUNNING, J. H. **Multinational enterprises and the global economy**. United Kingdom: Addison-Wesley, 1993.

______; KIM, C.; PARK, D. Old wine in new bottles: a comparison of emerging marketing TNCs today and developed country TNCs thirty years ago. In: SAUVANT, K. P. (Ed.). **The rise of transnational corporations from emerging markets**. Williston, USA: Edward Elgar Publishing Inc, 2008.

EISENHARDT, K. M. Building theories from case study research. **Academy of Management Review**, v. 14, n. 4, p. 532-550, 1989.

FELICIO, J.; CALDEIRINHA, V.; RODRIGUES, R. Global mindset and the internationalization of small firms: The importance of the characteristics of entrepreneurs. **International Entrepreneurship and Management Journal**, v. 8, n. 4, p. 467-485, 2012.

FLEURY, A. C.; FLEURY, M. T. **Brazilian multinationals**: competences for internationalization. Cambridge, UK: Cambridge University Press, 2011.

FORNELL, C.; LARCKER, D. F. Evaluating structural equation models with unobservable variables and measurement error. **Journal of Marketing Research**, v. 48, p. 39-50, 1981.

FULLER, M. Building-blocks of strategic management: a multi-dimensional, pan-theoretical taxonomy of business strategies. **Management Decision**, v. 48, n. 1, p. 5-16, 2010.

GHAURI, P. Designing and conducting case studies in international business studies. In: MARSCHAN-PIEKKARI, R.; WELCH, C. (Ed.). **Handbook of qualitative research methods for International Business**. Cheltenham, UK: Edward Elgar, 2004.

______; FIRTH, R. The formalization of case study research in international business. **Journal für Marketing** (der Markt), v. 48, p. 29-40, 2009.

GUILLEN, M.; GARCIA-CANAL, E. The American model of the multinational firm and the new multinationals from emerging economies. **Academy of Management Perspectives**, v. 23, n. 2, p. 23-35, 2009.

GUPTA, A. K.; GOVINDARAJAN, V. Cultivating a global mindset. **The Academy of Management Executive**, v. 16, n. 1, p. 116-126, 2002.

HAHN, E. D.; DOH, J. P. Using Bayesian methods in strategy research: an extension of Hansen et al. **Strategic Management Journal**, v. 27, n. 8, p. 783-798, 2006.

HARVESTON, P. D.; KEDIA, B. L.; DAVIS, P. S. Internationalization of born global and gradual globalizing firms: the impact of the manager. **Advances in Competitiveness Research**, v. 8, n. 1, p. 92-99, 2000.

HEENAN, D.; PERLMUTTER, H. **Multinational organizational development**: a social architecture perspective. Reading, MA: Addison-Wesley, 1979.

JAVIDAN, M. et al. Global Mindset: the construct and measurement. In: ACADEMY OF INTERNATIONAL BUSINESS ANNUAL CONFERENCE. **Proceedings**... Nagoya, Japan, 2011.

JEANNET, J. P. **Managing with a global mindset**. London, UK: Times/Prentice Hall, 2000.

KEFALAS, A. Think globally, act locally. **Thunderbird International Business Review**, v. 40, n. 6, p. 547-562, 1998.

KOBRIN, S. Is there a relationship between a geocentric mind-set and multinational strategy? **Journal of International Business Studies**, v. 25, n. 3, p. 493-511, 1994.

LEVY, O. The influence of top management team attentional patterns on global strategic posture of firms. **Journal of Organizational Behavior**, v. 26, n. 7, p. 797-819, 2008.

______. et al. What we talk about when we talk about global mindset: Managerial cognition in multinational corporations. **Journal of International Business Studies**, v. 38, n. 2, p. 231-258, 2007.

MACKENZIE, S. B.; PODSAKOFF, P. M.; PODSAKOFF, N. P. Construct measurement and validation procedures in MIS and behavioral research: Integrating new and existing techniques. **MIS Quarterly**, v. 35, n. 2, p. 293-334, 2011.

______; LANE, H. W. Shaping the global mindset: designing educational experiences for effective global thinking and action. In: BOYACIGILLER, N.; GOODMAN, R.; PHILLIPS, M. (Ed.). *Crossing cultures*: insights from master teachers. Londres: Routledge, 2004.

NUMMELA, N.; SAARENKETO, S.; PUUMALAINEN, K. A global mindset: a prerequisite for successful internationalization? **Canadian Journal of Administrative Sciences**, v. 21, n. 1, p. 51-64, 2004.

MATHEWS, J. A. Dragon multinationals: new players in 21st century globalization. **Asia Pacific Journal of Management**, v. 23, n. 1, p. 5-27, 2006.

NETEMEYER, R. G.; BEARDEN, W. O.; SHARMA, S. **Scaling procedures**: issues and applications. Thousand Oaks, CA: Sage Publications, 2003.

PAUL, H. Creating a mindset. **Thunderbird International Business Review**, v. 42, n. 2, p. 187-200, 2000.

PENG, W. M.; WANG, D. Y.; JIANG, Y. An institution-based view of international business strategy: a focus on emerging economies. **Journal International Business Studies**, v. 39, p. 920-936, 2008.

PERLMUTTER, H. The tortuous evolution of the multinational corporation. **Columbia Journal of World Business**, v. 4, n. 1, p. 9-18, 1969.

PRAHALAD, C. K. Globalization: the intellectual and managerial challenges. **Human Resource Management**, v. 29, n. 1, p. 27-37, 1990.

RAGHAVAN, A. Going global and taking charge: the road ahead for the Indian manager. **Vikalpa**, v. 33, n. 4, 2008.

RAMAMURTI, R.; SINGH, J. (Ed.). **Emerging Multinationals from Emerging Countries**. Cambridge, UK: Cambridge University Press, 2008.

REIS, G.; FLEURY, M.; FLEURY, A. Ems' subsidiaries competences as a result of the interplay between culture and global mindedness. In: ACADEMY OF INTERNATIONAL BUSINESS ANNUAL CONFERENCE. **Proceedings**... Washington DC, July 2012.

RHINESMITH, S. H. Global mindsets for global managers. **Training & Development**, v. 46, n. 10, p. 63-69, 1992.

ROSSI, P.; ALLENBY, G.; MCCULLOCH, R. **Bayesian statistics and marketing**. Chichester, UK: John Wiley and Sons, 2006.

RUGMAN, A.; VERBEKE, A. Subsidiary specific advantages in multinational enterprises. **Strategic**

Management Journal, v. 22, n. 3, p. 237-250, 2001.

MILLER, J.; ROTH, A. A taxonomy of manufacturing strategies. **Management Science**, v. 40, n. 3, p. 285-304, 1994.

SRINIVAS, K. M. Globalization of business and the third world: challenge of expanding the mindsets. **Journal of Management Development**, v. 14, n. 3, p. 26-49, 1995.

SULL, D.; ESCOBARI, M. **Success against the odds**: what Brazilian champions teach us about thriving in unpredictable markets. London: Elsevier, 2005.

TANURE, B.; BARCELLOS, E.; FLEURY, M. T. Psychic distance and the challenges of expatriation from Brazil. **The International Journal of Human Resoure Management**, v. 20, n. 5, p. 1.039-1.055, 2009.

THITE, M. et al. Internationalization of emerging Indian multinationals: Linkage, Leverage and Learning (LLL) perspective. **International Business Review**, v. 25, n. 1, p. 435-443, 2016.

YIN. E.; JOHNSON, J.; BAO, Y. Global mindedness and the performance of Chinese multinationals. In: CHINA GOES GLOBAL CONFERENCE. **Proceedings**... Harvard University, Boston, USA, October 8-10, 2008.

ZHAO, X. et al. A taxonomy of manufacturing strategies in China. **Journal of Operations Management**, v. 24, n. 5, p. 62-636, 2006.