

**What We Talk About When We Talk About “Global Mindset”:  
Managerial Cognition in Multinational Corporations\***

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## **What We Talk About When We Talk About “Global Mindset”: Managerial Cognition in Multinational Corporations**

### **Abstract**

Recent developments in the global economy and in multinational corporations have placed significant emphasis on the cognitive orientations of managers, giving rise to a number of concepts such as “global mindset” that are presumed to be associated with the effective management of multinational corporations (MNCs). This paper reviews the literature on global mindset and clarifies some of the conceptual confusion surrounding the construct. We identify common themes across writers, suggesting that the majority of studies fall into one of three research perspectives: cultural, strategic, and multidimensional. We also identify two constructs from the social sciences that underlie the perspectives found in the literature: *cosmopolitanism* and *cognitive complexity* and use these two constructs to develop an integrative theoretical framework of global mindset. We then provide a critical assessment of the field of global mindset and suggest directions for future theoretical and empirical research.

**Key Words:** Global Mindset, Managerial Cognition, Competitiveness

## **What We Talk About When We Talk About “Global Mindset”:**

### **Managerial Cognition in MNCs**

As global competition continues to intensify, global mindset has emerged as a key source of long-term competitive advantage in the global marketplace. A growing number of academics and practitioners view global mindset, or the cognitive capabilities of key decision makers, as a critical success factor that affects a variety of organizational outcomes (Gupta and Govindarajan, 2002; Murtha, Lenway, and Bagozzi, 1998; Harveston, Kedia, and Davis, 2000; Jeannet, 2000; Levy, 2005). This emerging consensus reflects a recognition that the present-day competitive landscape requires a shift in focus from structural and administrative mechanisms to mindset-based capabilities (Bartlett and Ghoshal, 1990). As Gupta and Govindarajan (1998:2) suggest: “Success is all in the [global] mindset.”

The notion that global mindset or the cognitive capabilities of senior managers in multinational companies (MNCs) is important to firm performance dates back to the early works on foreign direct investment by Aharoni (1966) and Kindleberger (1969). However, it was Perlmutter (1969) who focused attention on managerial cognition by offering a formal typology of MNCs which explicitly incorporates the prevailing mindsets of senior executives. Over the last decade, developments in the global economy have re-focused attention on the cognitive dimension of MNCs as business realities have given rise to tremendous managerial complexity (Doz and Prahalad, 1991; Prahalad, 1990). As globalization intensifies, MNCs are subjected to simultaneous and often conflicting pressures for global integration and local responsiveness (Doz, Santos, and Williamson, 2001; Prahalad and Doz, 1987; Bartlett and Ghoshal, 1990). As a result, senior managers need to integrate and coordinate geographically dispersed operations and a culturally diverse workforce (Bartlett and Ghoshal, 1990). In addition, managers must respond to local demands and to manage inter-organizational relationships with diverse stakeholders, including host governments, strategic partners, customers, and suppliers

(Rosenzweig and Singh, 1991). Senior managers in MNCs must find a balance between competing country, business, and functional concerns (Murtha, et al., 1998; Evans and Doz., 1992). Researchers and practitioners alike suggest that managers who have developed a global mindset are better equipped to deal with the complexity wrought by multiple organizational environments, structural indeterminacy, and cultural heterogeneity—all of which characterize contemporary MNCs (Doz and Prahalad, 1991).

The growing recognition of the significance of the cognitive dimension of MNCs has led to the proliferation of different and often conflicting definitions and perspectives, as well as a limited number of empirical research studies in this field. On the conceptual side, terms such as “global mindset” (Rhinesmith, 1992), “transnational mentality” (Bartlett and Ghoshal, 1989), and “multinational mindset” (Caproni, Lenway, and Murtha, 1992) have gained increasing cachet in both the academic and popular presses in recent years. At the same time, the properties of these constructs remain relatively opaque. Global mindset has come to stand for everything that is supposedly global or transnational, from individual attitudes, skills, competencies and behaviors, to organizational orientations, structures and strategies, to policies and practices. In short, the diversity of perspectives and the pervasive use of the concept “global mindset” have resulted in conceptual ambiguities, as well as contradictory empirical findings.

In light of the significance of managerial cognition in MNCs, this paper analyzes and synthesizes the current thinking about global mindset. The following section reviews the research streams on global mindset and identifies two primary dimensions that underlie the various perspectives on global mindset. Next, we present a conceptual model of global mindset and develop some illustrative theoretical propositions. We then back and present an overall assessment of the global mindset field. Finally, we summarize our key contributions and offer directions for further theoretical development and research.

## **Literature Review**

In this section we provide a thorough review of the theoretical and empirical studies of global mindset published in books and peer-reviewed journals, including those studies that use different terminology but substantively examine the same phenomenon. At the same time, we exclude studies that do not explicitly deal with global mindset but are focused on such topics as global leadership, expatriates, and expatriation, even though they may include some of the same underlying variables as the literature on global mindset. Cataloguing the literature and taking stock of what has been done thus far, both theoretically and empirically, is one goal of this review. At the same time, we believe that it is useful to trace the underlying themes in the global mindset literature to two important theoretical constructs from the social sciences—cosmopolitanism and cognitive complexity—and then to use these constructs to propose a new integrative approach to global mindset.

In our review of the literature we find that the majority of studies conceptualize global mindset in relation to two salient dimensions of the global environment, most notably in relation to (1) cultural and national diversity and/or (2) strategic complexity associated with globalization. In the following section we first discuss the work of Perlmutter (1969), whose work on geocentrism (global mindset) spawned a stream of research focusing on the cultural dimension of the global environment. This first approach, which we label the *cultural perspective*, focuses on aspects of cultural diversity and cultural distance associated with worldwide operations and markets. It underscores the challenges of managing across cultural and national boundaries. We suggest that cosmopolitanism, and the attitudinal stance associated with cosmopolitanism, serves as an underlying theme of the cultural approach to global mindset. Second, we introduce the theoretical approach of Bartlett and Ghoshal (1989) and the subsequent research stream in international management that focuses on strategic complexity. This stream of work, which we label the *strategic perspective*, springs out of work in international strategy and focuses on aspects of environmental complexity and strategic variety stemming from globalization. This approach

highlights the challenge of managing complex operations and integrating geographically distant and strategically diverse businesses while simultaneously responding to local conditions (Prahalad and Doz, 1987). We propose that cognitive complexity and its associated cognitive capabilities serve as an underlying theme characterizing this stream of work in the literature on global mindset. In the final section of our literature review we introduce a third approach which we label the *multidimensional perspective*. This integrative stream of work, much of which draws on the foundational work of Rhinesmith (1992,1993, 1996), conceptualizes global mindset using *both* cultural and strategic terms as well as a variety of additional characteristics.

To provide a reference for the reader Table 1 summarizes the studies on global mindset reviewed in this paper. Table 2 provides a summary of the measures that have been used in empirical research of global mindset and the Appendix lists scale items.

**Insert Table 1 and Table 2 about here**

### **The Cultural Perspective**

Studies within the cultural stream of research conceptualize global mindset in the context of the increased cultural diversity associated with globalization. According to this school of thought, as firms globalize, their senior managers face the challenges of overcoming domestic myopia and an ethnocentric mindset, crossing cultural boundaries, interacting with employees from many countries, and managing culturally diverse inter-organizational relationships. The cultural perspective suggests that the answer to managing these challenges is to move away from an ethnocentric mindset and develop a global mindset—a mindset that involves cultural self-awareness, openness to and understanding of other cultures, and selective incorporation of foreign values and practices. Perlmutter’s (1969) ground-

breaking tripartite typology of managerial mindsets in MNCs serves as a conceptual anchor for the cultural perspective.

Breaking with previous work in international business, Perlmutter and his colleagues (Perlmutter, 1969; Heenan and Perlmutter, 1979; Chakravarthy and Perlmutter, 1985) offer a typology of MNCs that is explicitly based on the mindsets of senior executives. Perlmutter (1969) originally distinguished among three primary attitudes or states of mind toward managing a multinational enterprise: *ethnocentric* (home-country orientation), *polycentric* (host-country orientation), and *geocentric* (world-orientation). These orientations, Perlmutter proposed, influence and shape diverse aspects of the multinational enterprise, including structural design, strategy and resource allocation, and, most of all, management mindset and processes. An ethnocentric orientation is expressed in terms of headquarters and national superiority attitudes: “We, the home nationals of X company, are superior to, more trustworthy and more reliable than any foreigner in headquarters or subsidiaries,” (Perlmutter 1969:11). A polycentric orientation takes the form of a respectful disengagement from foreign cultures: “Let the Romans do it their way. We really don’t understand what is going on there, but we have to have confidence in them” (Perlmutter 1969:13). At their core, both of these attitudes represent beliefs regarding which persons and ideas are competent and trustworthy (foreigners vs. compatriots) (Heenan and Perlmutter, 1979: 17). Managers with a geocentric orientation, or a global mindset, manifest universalistic, supra-national attitudes, downplaying the significance of nationality and cultural differences in determining who is competent or trustworthy: “Within legal and political limits, they seek the best men (sic), regardless of nationality, to solve the company’s problems anywhere in the world” (Perlmutter 1969:13). Superiority is not equated with nationality as “Good ideas come from any country and go to any country within the firm,” (Heenan and Perlmutter, 1979: 20-21). In their later work,

Perlmutter and Heenan (1979) add a fourth attitude: the regiocentric attitude, meaning “regionally oriented,” which falls between polycentric and geocentric attitudes.

Perlmutter’s notion of geocentrism serves as an underlying construct for many of the contemporary conceptualizations of global mindset that focus on the challenge of overcoming ingrained ethnocentrism and transcending nationally-entrenched perceptions (Maznevski and Lane, 2004; Doz, et al., 2001; Adler and Bartholomew, 1992; Estienne, 1997). For example, Maznevski and Lane (2004) view global mindset as a meta-capability characterized by two complementary aspects: a comprehensive cognitive structure that guides attention and interpretation of information and a well-developed competence for changing and updating this cognitive structure with new experiences. They define global mindset as “the ability to develop and interpret criteria for personal and business performance that are independent from the assumptions of a single country, culture, or context; and to implement those criteria appropriately in different countries, cultures, and contexts” (Maznevski and Lane, 2004:172). The importance of transcending national borders and forming complex cultural understandings is also central in Adler and Bartholomew’s (1992) discussion of the “transnational manager.” They argue that the traditional international manager approaches the world from a single-country perspective whereas the transnational manager has a global perspective characterized by knowledge and appreciation of many foreign cultures.

Studies within the cultural stream also often conceptualize global mindset in terms of cross-cultural skills and abilities.<sup>1</sup> Adler and Bartholomew (1992) suggest that the transnational manager is defined by his or her ability to tread smoothly and expertly within and between cultures and countries on a daily basis. Estienne (1997) also focuses on cultural adaptability and notes that an international or global mindset can be thought of as a “willingness to learn” and “an ability to adapt.”

Kobrin (1994) conducted the first contemporary empirical study that specifically examined the construct of global mindset as defined by Heenan and Perlmutter (1979) and tested the oft-stated assumption that firms with a global, integrated strategy and/or global organizational structure will have a geocentric mindset. Kobrin (1994) measured geocentrism with a survey instrument that elicits the judgments, attitudes, and expectations of human resource managers about policies and managerial mindsets (see Appendix for scale items). Based on research results from data from sixty eight American manufacturing MNCS, Kobrin concludes that there is a relationship between a geocentric mindset and the geographic scope of the firm, although the direction of causality is not clear. He suggests that global mindset should be viewed as a multidimensional construct rather than as a single cognitive or attitudinal reflection of firm-level characteristics. Kobrin's measure was also used by Beechler, Levy, Taylor, and Boyacigiller (2004) who found in a recent study of 521 employees in working in two Japanese MNCs that geocentrism is positively related to employees' level of commitment in these companies.

### **An Underlying Dimension of the Cultural Perspective: Cosmopolitanism**

Reviewing the literature on global mindset in the cultural stream, we observe that although most writers do not mention the construct, cosmopolitanism and the attitudinal stance associated with it serve as an underlying theme of the cultural approach to global mindset. Therefore, cosmopolitanism should be viewed as one the major conceptual dimensions of global mindset represented in the literature.

The concept of cosmopolitanism has been part of the social sciences vocabulary for over fifty years (Merton, 1957; Gouldner, 1957)<sup>2</sup> and its meaning has evolved considerably over time. After falling out of favor, cosmopolitanism returned to the spotlight in the 1990s with the growth and proliferation of global systems and transnational cultures (see Hannerz, 1996; Harvey, 2000; Beck, 2000; Breckenridge, Pollock, Bhabha, and Chakrabarty, 2000; Vertovec and Cohen, 2002a; Archibugi, 2003). As Harvey (2000:529) asserts: "Cosmopolitanism is back...Shaking off the negative connotations

of its past...” Today it is embedded in a wider discourse on global order, world democracy, and the cosmopolitan society (Held, 1995; Beck, 2000) and represents a complex and multilayered phenomenon (Harvey, 2000; Vertovec and Cohen, 2002b).<sup>3</sup> In their review of the recent conceptualization of cosmopolitanism, Vertovec and Cohen (2002b:4) suggest that cosmopolitanism is something that simultaneously: (a) transcends the nation-state model; (b) mediates actions and ideals that are oriented both to the universal and the particular, the global and the local; (c) is against cultural essentialism; and (d) represents variously complex repertoires of allegiance, identity, and interest.

At the more personal or individual level, cosmopolitanism represents a “...perspective, a state of mind, or—to take a more process-oriented view—a mode of managing meaning” (Hannerz, 1996:102). “True” cosmopolitans are defined by their “*willingness to engage with the Other... openness toward divergent cultural experiences, a search for contrasts rather than uniformity...*” (Hannerz, 1996:163; italics added). At the same time, however, cosmopolitanism has been described as “... a matter of competence... a personal ability to make one’s way into other cultures, through listening, looking, intuiting, and reflecting” (Hannerz, 1996:193). While cosmopolitans are usually footloose and often involved with global systems and transnational cultures, a number of writers suggest that “...it is not travel that defines cosmopolitans—some widely traveled people remain hopelessly parochial—it is mindset” (Kanter, 1995:23).

It should be noted that while cosmopolitans are celebrated by some as the new “cultural heroes” of the global economy, they have frequently come under attack (Clifford, 1988; Robbins, 1992; Vertovec and Cohen, 2002). As Robbins (1992:171) expresses it: “the word cosmopolitan immediately evokes the image of a privileged person: someone who can claim to be a “citizen of the world” by virtue of independent means, high-tech tastes, and globe-trotting mobility.” Beside the privilege of mobility, cosmopolitanism has been used to represent universalism, impartiality, and objectivity, as well as

standing above cultural particularism and “locals.” While considerable debate has focused on the value-laden aspects of cosmopolitanism, it is not necessary to overlay the construct with assumptions of superiority: “Instead of renouncing cosmopolitanism as a false universal, one can embrace it as an impulse to knowledge that is shared with others, a striving to transcend partiality that is itself partial...” (Robbins, 1992: 181).

In our framework, cosmopolitanism does not denote an intrinsic value, but represents a state of mind that is manifested as an orientation toward the outside, the Other, and which seeks to reconcile the global with the local and mediate between the familiar and the foreign. A second key characteristic of cosmopolitanism is openness, a willingness to explore and learn from alternative systems of meaning held by others. Together, these two aspects encompass the key characteristics underlying the cultural approach in the literature to global mindset.

### **The Strategic Perspective**

Whereas the studies reviewed above all emphasize the importance of understanding cultural diversity and transcending national borders, studies using the strategic perspective conceptualize global mindset in the context of the increased complexity generated by globalization. MNCs deal with the challenge of effectively managing environmental and strategic complexity and integrating geographically distant operations and markets, while simultaneously responding to local demands (Prahalad and Doz, 1987; Prahalad, 1990; Kim and Mauborgne, 1996; Sanders and Carpenter, 1998). In the past, environmental and organizational complexity could be mitigated by structural means and adequate administrative mechanisms (Chandler, 1962), but such solutions are insufficient for the present-day MNC (Prahalad and Bettis, 1986; Doz and Prahalad, 1991; Evans, Pucik, and Barsoux, 2002). Moreover, complex structural solutions, such as the matrix form of organization, have proven all but unmanageable

(Bartlett and Ghoshal, 1990; Ghoshal and Bartlett, 1995; Pucik, Tichy, and Barnett, 1992). In light of the limitations of structural and administrative solutions, the strategic perspective suggests that the critical determinant of the strategic capabilities of MNCs lies in developing a complex managerial mindset (Bartlett and Ghoshal, 1989; Caproni, et al., 1992).

The strategic perspective on global mindset has its foundations in international strategy research conducted at Harvard in the 1970s and 1980s, and most notably in the ground-breaking research of Bartlett and Ghoshal (1989, 1990, 1992). These authors address the importance of management's mentality in managing across borders and identify the Transnational organization as the ideal organization. The Transnational organization is not a specific strategic posture or a particular organizational form but a new management mentality that "recognize(s) that environmental demands and opportunities vary widely from country to country...(and) also recognize(s) that different parts of the company possess different capabilities" (Bartlett and Ghoshal,1989:64). Interestingly, the arguments of Bartlett and Ghoshal, writing in 1989, closely mirror the arguments proposed by Perlmutter and Hennan (Perlmutter, 1969; Heenan and Perlmutter, 1979) two decades earlier. The primary difference between them is their focus on the drivers of global mindset—cultural heterogeneity for Perlmutter and Hennan versus strategic complexity for Bartlett and Ghoshal.

The strategic stream of literature starts with the premise that the increased complexity, heterogeneity, and indeterminacy of MNCs (Doz and Prahalad, 1991) must be reflected in the cognitive abilities of its managers in order for companies to succeed (e.g., Murtha, et al., 1998; Paul, 2000). Accordingly, these studies describe the properties of global mindset in terms of high cognitive abilities and information processing capabilities that help managers conceptualize complex global dynamics (e.g., Jeannet, 2000; Tichy, Brimm, Charan, and Takeuchi, 1992), balance between competing concerns and demands (e.g., Murtha, et al., 1998; Begley and Boyd, 2003), mediate the tension between the

global and the local (e.g., Kefalas, 1998; Arora, Jaju, Kefalas, and Perenich, 2004), distinguish between and integrate across cultures and markets (e.g., Govindarajan and Gupta, 2001; Gupta and Govindarajan, 2002), and scan and pay attention to global issues (e.g., Rhinesmith, 1993; Levy, 2005; Bouquet, 2005).

For example, in defining global mindset, Jeannet (2000:11) emphasizes the ability to integrate across domains: “The executive with a global mindset has the ability to see across multiple territories and focuses on commonalities across many markets rather than emphasizing the differences among countries.” He identifies several critical elements of global mindset: assessing global markets, analyzing globalization pathways, and providing adequate strategic response. According to this approach, global mindset must encompass strategy formulation and global strategic thinking. Jeannet (2000) also applies the concept of a global mindset at the corporate level and suggests that it encompasses “those cultural aspects of a company that define the extent to which the firm has learned to think, behave, and operate in global terms” (Jeannet, 2000: 199). He notes, however, that even if a company were populated with an adequate pool of managers, each possessing a global mindset, this would be insufficient if the company as a whole, expressed through its structure, processes, and behavior, did not also espouse the same principles.

While Jeannet (2000) and Tichy et al. (1992) define global mindset in terms of managers’ abilities to understand, recognize, and integrate across complex global dynamics, a few studies within the strategic stream focus on balancing between global integration and local responsiveness (e.g., Murtha, et al., 1998; Begley and Boyd, 2003) or on mediating the tension between “thinking globally” and “acting locally,” (e.g., Kefalas, 1998; Arora, et al., 2004). For example, Murtha et al. (1998) define global mindset as the “cognitive processes that balance competing country, business, and functional concerns” and examine the relationship between global mindset and cognitive shift in a sample of 305 managers in a US-based diversified MNC. In their study, global mindset is operationalized in terms of

individual expectations regarding the impact of globalization and strategic change along three dimensions: integration, responsiveness, and coordination. Using longitudinal data, these authors found that change in global strategy resulted in a cognitive shift toward a more global mindset across all managers in the organization.

Another study that focuses on mediating the tension between the global and the local was conducted by Begley and Boyd (2003), who examine global mindset at the corporate level in a sample of 39 human resource managers in 32 high-tech MNS headquartered in the United States. They state that global mindset or “glocal” mentality is the skill “to recognize when global consistency, local responsiveness, or a balance of global and local tensions is best” (Begley and Boyd, 2003:30). These authors find that many respondents in their study consider a global mindset to be a desirable state, leading to competitive advantage. Begley and Boyd, like Jeannet (2000), argue that to embed global mindset in an organization, supporting policies and practices are needed to deal with tensions related to structural (global formalization vs. local flexibility), processual (global standardization vs. local customization), and power (global dictates vs. local delegation) issues.

Similarly, Kefalas (1998) and Arora et al. (2004) focus on the tension between “thinking globally” and “acting locally.” Kefalas suggests that global mindset is characterized by high levels of both conceptualization and contextualization abilities. Conceptualization refers to articulation of main concepts that describe a phenomenon and identification of the main relationships among these concepts and to the whole. Contextualization, on the other hand, refers to adaptation of a conceptual framework to the local environment (Kefalas, 1998; Arora, et al., 2004). Using Kefalas and colleagues’ approach to global mindset (e.g., Kefalas, 1998; Kefalas and Neuland, 1997; Kefalas and Weatherly, 1998), Arora et al. (2004) find in their empirical study of 65 managers in the textile industry that managers are better in thinking globally (conceptualization) than they are in acting locally (contextualization). Their research

results also show that among all demographic characteristics, training in international management, manager's age, foreign country living experience, family member from a foreign country, and job experience in a foreign country have statistically significant impacts on managers' global mindset. At the same time, they find no significant relationship between global mindset and tenure, job category, and managerial position. The authors conclude that global mindset is a trait that can be developed with training.

Govindarajan and Gupta (2001, 2002) also regard the ability to simultaneously consider local cultures and markets and global dynamics as the defining characteristic of global mindset. They conceptualize global mindset as a knowledge structure characterized by both high differentiation and high integration. At the corporate level, these authors define global mindset as the aggregated individual global mindset adjusted for the distribution of power and mutual influence among the group.

Govindarajan and Gupta (2001) acknowledge that the highest returns to investment in cultivating a global mindset will come from focusing on the more senior level. Nevertheless, their advice is unequivocal: If a company's goal is to capture and sustain global market leadership in its industry, it has to regard the development of a global mindset as a goal that encompasses every unit and every employee. These authors go on to suggest several mechanisms that can be used to cultivate a global mindset such as formal education (e.g., language skills), cross-border teams and projects, utilizing diverse locations for meetings, cultural learning programs, and expatriation (Govindarajan and Gupta, 2001).

Three recent empirical studies (e.g., Harveston, et al., 2000; Nummela, Saarenketo, and Puumalainen, 2004; Bouquet, 2005) examine the relationship among firm strategic position, market characteristics, and global mindset. Harveston et al. in their study of 224 managers in "born global" firms (firms engaged in foreign activities accounting for 25% of sales within three years of founding)

have more global mindsets, as well as more international experience and higher risk tolerance than managers of gradually globalizing firms. Nummela et al. (2004) examine the relationship among a firm's market characteristics, management international experience, and corporate global mindset in a sample of 72 small and medium Finnish companies. Their results show that market characteristics—globalness of the market in which the firm operates and the turbulence of the market—are positively related to global mindset. Management experience, measured as international work experience, is also positively related to global mindset whereas international education is not. The research results also show a positive relationship between global mindset and financial indicators of the firm's international performance whereas global mindset is not related to managers' subjective evaluations of international performance.

Bouquet (2005) also focuses on the relationship between a firm's decision environment and top management team (TMT) global mindset in his study of 136 MNCs. He defines global mindset as attention to global strategic issues, arguing that attention is the core element and a primary manifestation of global mindset. However, rather than hypothesizing a direct relationship between the firm's decision environment (i.e., firm's global strategic posture, firm's international interdependence, and global competition) and TMT attention to global strategic issues, he argues that global attention structures (i.e., structural positions related to globalization, global meetings, economic incentives for global efforts, and leadership development for globalization), which firms put in place to regulate allocation of attention, will partially mediate the relationship between firms' decision environments and TMT attention. Bouquet (2005) finds empirical support for the hypothesized relationships that characteristics of the environment of decisions influence the attention structures established by the firm, which, in turn, affects TMT attention to global strategic issues. Furthermore, the results show a concave relationship between TMT attention to global issues and firm performance. Bouquet (2005) concludes that excessive

as well as insufficient amounts of TMT attention to global strategic issues can have a negative effect on firm performance, which means that, contrary to accepted wisdom, more global mindset is not always better.

In contrast with the above studies that examine the relationship between a firm's characteristics and global mindset, Levy (2005) examines the relationship between TMT attentional patterns, viewed as a primary manifestation of global mindset, and the global strategic posture of firms. She finds consistent support for the proposition linking TMT attentional patterns, measured using content analysis of letters to shareholders of sixty nine American firms with the expansiveness of global strategic posture. The results suggest that firms are more likely to be highly global when their top management pays attention to the global environment and considers a diverse set of elements in this environment. On the other hand, firms led by top management teams that pay more attention to the internal environment are less likely to consider globalization as a viable strategic choice or to develop extensive global operations.

### **An Underlying Dimension of the Strategic Perspective: Cognitive Complexity**

Although it is seldom mentioned explicitly, cognitive complexity and the cognitive capabilities associated with it serve as an underlying theme of the strategic perspective to global mindset and therefore should be viewed as a second major conceptual dimension of global mindset. Work on cognitive complexity dates back more than 40 years (e.g., Bieri, 1955; Harvey, Hunt, and Schroder, 1961; Schroder, Driver, and Streufert, 1967; Schroder and Suedfeld, 1971; Streufert and Nogami, 1989; Streufert, Pogash, and Piasecki, 1988; Streufert and Streufert, 1978; Streufert and Swezey, 1986) and in the area of management, the complexity of managerial cognition has long been recognized as a significant factor affecting decision making, strategic choice, and organizational performance (Weick, 1979; Kiesler and Sproull, 1982; Bartunek, Gordon, and Weathersby, 1983; Schwenk, 1984; Duhaime and Schwenk, 1985; Ginsberg, 1990; Miller, 1993). For example, Weick (1979:261) advised managers

to “complicate yourself!” arguing that for managers to be effective, they need to develop the capability to see events from multiple perspectives and to generate several competing interpretations of events and their interactive effects.<sup>4</sup>

Cognitive complexity represents the degree of differentiation, articulation, and integration within a cognitive structure (Bartunek, et al., 1983; Weick and Bougon, 1986). That is, a cognitive structure composed of a comparatively large number of finely articulated and well integrated elements is regarded as relatively complex. While cognitive complexity usually represents the structural dimension of a cognitive structure (i.e., the internal organization of information units), when considering cognitive complexity in relation to a specific information domain, the structural and content, (i.e., specific information units or knowledge) dimensions become entwined. That is, without adequate knowledge, an individual cannot form a complex representation of the information domain. Therefore, our conceptualization of cognitive complexity encompasses both the structural and knowledge dimensions necessary to form complex representation and understanding.

Research on cognitive complexity has generally found that cognitively complex individuals have superior information processing capabilities. Cognitively complex people search for more wide-ranging and novel information (Dollinger, 1984; Karlins and Lamm, 1967; Streufert and Swezey, 1986), spend more time interpreting it (Dollinger, 1984; Sieber and Lanzetta, 1964), perceive a larger number of dimensions, and simultaneously hold and apply several competing and complementary interpretations (Bartunek, et al., 1983). In the multinational context, for example, cognitive complexity is needed to simultaneously balance the often contradictory demands of global integration with local responsiveness. Cognitive complexity has also been associated with more well-rounded impressions (Streufert and Swezey, 1986), ability to redefine problems (Lepsinger, Mullen, Stumpf, and Wall, 1989; Merron, Fisher, and Torbert, 1987), ability to balance contradictions, tolerance for ambiguity (Streufert,

Streufert, and Castore, 1968), and consideration of more alternative viewpoints (Chang and McDaniel, 1995). Taken together, these works attest to the significance of cognitive complexity, or alternatively, to the detrimental effects of cognitive simplicity in a rapidly changing, complex world.

### **The Multidimensional Perspective**

In addition to the two major streams in the global mindset literature identified above, there is a third stream of research in the global mindset literature that incorporates both the cultural and strategic dimensions, as well as several additional characteristics. This multidimensional research stream, increasingly evident in the literature beginning in 1994, is heavily influenced by the work of Rhinesmith (1992, 1993, 1996) whose definition of global mindset (see Table 1) combines elements from both the cultural and strategic perspectives.

Rhinesmith (1992:64) argues that people with global mindsets tend to drive for the bigger, broader picture, accept life as a balance of contradictory forces, trust organizational processes rather than structure, value diversity, are comfortable with surprises and ambiguity, and seek to be open to themselves and others. Thus, according to Rhinesmith, global mindset entails high levels of cognitive capabilities, especially scanning and information processing capabilities, as well as the ability to balance competing realities and demands and to appreciate cultural diversity. Rhinesmith's approach represents a multidimensional perspective to global mindset, incorporating not only the cultural and the strategic dimensions but also individual characteristics drawn from the literature on global leadership.

Most work in the multidimensional stream builds directly on Rhinesmith's approach (e.g., Ulrich, Jick, and Kerr, 1995; Srinivas, 1995; Neff, 1995; Kedia and Mukherji, 1999; Paul, 2000). Authors writing in this stream, in addition to characterizing global mindset in terms of the abilities to recognize and understand complex and often unexpected business, cultural, and geopolitical dynamics, list a variety of attributes when describing global mindset. Kedia and Mukherji (1999), for example,

state that global mindset is characterized by openness and an ability to recognize complex interconnections. Building on Rhinesmith (1993) and Kefalas and Neuland (1997), Kedia and Mukherji (1999) assert that three main characteristics of a global mindset that distinguish it from a non-global mindset are a unique time perspective, a unique space perspective, and a general predisposition. A unique time perspective means having a long-term view of international business activities and a unique space perspective is defined as extending personal space well beyond immediate surroundings. Managers who have the general disposition required for global mindset are “more tolerant of other peoples and cultures, consider cultural diversity an asset, thrive on ambiguity, balance contradictory forces, and rethink boundaries” (Kedia and Mukherji, 1999: 236). Kedia and Mukherji also draw on work in the global leadership literature and note that global mindset includes an emotional connection, capacity for managing uncertainty, ability to balance tensions, and savvy (Gregersen, Morrison, and Black, 1998). Moreover, they argue that in order to be globally effective, managers need not only a global mindset, but also a certain set of supportive knowledge and skills.

### **Global Mindset, Information Processing, and Managerial Performance:**

#### **An Integrative Framework**

In the following section, we propose an approach to global mindset that integrates across the literature reviewed above, drawing on the underlying constructs of cosmopolitanism and cognitive complexity. We purposefully restrict our discussion to the individual level of analysis and define global mindset at this level, while proposing that future work should also incorporate top management team and organizational level phenomena. In addition, while we acknowledge that others have included a variety of traits and skills in characterizing global mindset, we focus primarily on the cognitive properties of global mindset as we view them as the most fundamental building blocks of the construct.

#### **Defining Global Mindset**

We view global mindset as an individual-level construct that captures and represents a unique multidimensional cognition. Thus, global mindset is an individual-level cognitive structure or, more generally, a knowledge structure. We define global mindset as *a highly complex cognitive structure characterized by an openness to and articulation of multiple cultural and strategic realities on both global and local levels, and the cognitive ability to mediate and integrate across this multiplicity.*

Elaborating on this definition, global mindset is characterized by three complementary aspects: (1) an openness to and awareness of multiple spheres of meaning and action; (2) complex representation and articulation of cultural and strategic dynamics; and (3) mediation and integration of ideals and actions oriented both to the global and the local. These three elements create a multidimensional continuum along which global mindset can be evaluated and measured. Thus, individuals with the highest levels of global mindset are simultaneously aware of and open to multiple spheres of meaning and action and able to bridge and synthesize across these spheres.

### **Global Mindset and Information Processing**

The importance of global mindset rests on the proposition that cognitive structures not only represent and order an information domain, but also significantly affect information processing. We explore this link by examining how global mindset affects the cognitive capabilities of individuals and their decision-making patterns, thereby exerting significant influence on the strategic capabilities of firms. Figure 1 presents our integrated model of global mindset and information processing.

#### **Insert Figure 1 about here**

Our framework is grounded in the information processing theory.<sup>5</sup> Analytically, we begin with a basic information processing model that involves three phases: attention (or information acquisition), interpretation, and action (Daft and Weick, 1984).<sup>6</sup> Cognitive structures, global mindset included, affect the processes of attention and interpretation, subsequently influencing future action. Moreover, the

effects of individual cognitive structures are particularly pronounced in dynamic and complex environments that are characterized by information overabundance, ambiguity, and uncertainty. Under such conditions, where the environment does not provide clear cognitive cues, attention and interpretation patterns tend to reflect individual propensities rather than environmental constraints (Abrahamson and Hambrick, 1997).

Drawing on the literature on cosmopolitanism and cognitive complexity we can explicate the effect of global mindset on the processes of “noticing and constructing meaning” (Kiesler and Sproull, 1982) under conditions of rapid change, uncertainty, and complexity that characterize the environment facing managers in most global organizations. First, at the attentional or information gathering stage, cognitive structures shape attention patterns by directing attention toward certain aspects of the environment while “blocking” others. In this respect, cognitive structures act as a lens through which individuals perceive the environment. Thus, global mindset affects information processing patterns by directing attention to multiple and diverse sources of information about both the global and local environments. Cosmopolitanism brings an open, non-judgmental stance to the perception of information, thus enabling individuals to be open to and acquire information from a variety of sources and arenas without regard to its national or cultural origin. At the same time, cognitive complexity enables individuals to perceive and finely articulate more information elements and to integrate them into more complex schemas.

The effect of cognitive structures, however, goes beyond shaping attention and information acquisition to affect interpretative patterns. At the interpretation stage, cognitive structures affect the process of “sense making” or how information is perceived, interpreted, assimilated, and understood (Daft and Weick, 1984). As mentioned above, global mindset is characterized by openness and high levels of differentiation and integrative capacity. Thus, information is not only perceived, but also

evaluated without regard to its national or cultural origin. Moreover, individuals with high integrative abilities can synthesize information from varied and unlikely sources and incorporate diverse interpretative frameworks into the decision-making process. Finally, reflexive interpretative processes can potentially lead to the construction of a new and more complex understanding of the environment (Barr, Stimpert, and Huff, 1992). Thus, global mindset shapes interpretative processes by promoting a non-prejudicial and nonjudgmental perception and evaluation of information, integration of information from diverse sources, and reflection on both the interpretative process itself and existing mental models. Individuals who have a global mindset are more likely to arrive at complex, innovative, and non-conventional interpretations that do not simplify global realities, but rather represent them in all their complexity, ambiguity, and indeterminacy.

The impact of an individual's global mindset does not stop with that person. Indeed, the processes of "noticing and constructing meaning" that are associated with global mindset may have significant implications for the strategic capabilities of the firm. While strategic behavior is shaped by a multitude of factors, both the managerial cognition and the upper echelon perspectives suggest that information processing capabilities of employees, particularly those in senior positions, significantly affect strategic response (e.g., Hambrick and Mason, 1984; Stubbart, 1989; Barkema and Vermeulen, 1998; Egelhoff, 1991; Finkelstein and Hambrick, 1996; Nystrom and Starbuck, 1984; Ford, 1985; Thomas, Clark, and Gioia, 1993). Senior managers interpret issues relevant to strategic decision-making and possess the power necessary for implementing choices derived from those interpretations (Hambrick and Mason, 1984). Moreover, information processing capabilities of senior managers are especially important under conditions of rapid change, uncertainty, and complexity where strategic response involves interpreting and "enacting" the business environment (Daft and Weick, 1984; Smircich and

Stubbart, 1985; Carpenter and Fredrickson, 2001). Thus, we propose that firms whose senior executives possess a global mindset will enact more effective global strategies.

At the same time, some recent evidence suggests that global mindset may not always lead to effectiveness. For example, Bouquet (2005) finds a curvilinear relationship between TMT global mindset and firm performance. It may be, as Bouquet (2005) asserts, that “too much global mindset” may indicate or cause a fragmentation of attention across too many countries, that depth of understanding may suffer, and that there is a limit as to how much global mindset is effective. However, Bouquet (2005) takes a behavioral rather than cognitive approach to global mindset, measuring the behaviors rather than the cognitive capabilities of the TMT. Therefore, it is not unrealistic to propose that the managers in his study may have been simply overwhelmed by the amount of information processing requirements posed by the global context, thus leading to the fall in performance at higher levels of “global mindset.”

Although empirical work has not yet examined this issue, we propose that there is an optimal fit between global mindset and organizational effectiveness. Under conditions of rapid change and high levels of complexity, key decision makers must have a global mindset to understand and respond to their environment. However, a global mindset also entails high levels of information processing demands which could either overwhelm decision makers or slow down decision making to unacceptable levels in the face of rapid environmental change. Thus, it is possible that higher levels of global mindset among key decision makers will have a positive impact on a firm’s effectiveness but only when it is accompanied by support structures and processes within the firm such as modular networks, communities of practice, distributed management and centers of excellence (Begley and Boyd, 2003). While an extensive discussion of these relationships is beyond the scope of this paper we will explore a number of these ideas in the section below devoted to future research directions. Before doing so,

however, we first provide a critical assessment of the field and discuss the implications of our integrative approach to global mindset.

### **Discussion**

As the literature review indicates, the current thinking on global mindset can be categorized into three research streams: cultural, strategic, and multidimensional. Beyond these common themes, however, there is diversity both within and across research streams, as well as conceptual ambiguity in the field. Studies vary widely in their conceptualization and definition of the construct, level of analysis, and operationalization of global mindset. In addition, empirical studies report inconsistent and contradictory findings. Due to this diversity of perspectives and results, we offer here a critical reading of the literature as a first step toward building a more theoretically-grounded and rigorous research agenda.

**The core properties of global mindset.** The most fundamental inconsistency in the current literature concerns the core properties of global mindset. The above review indicates that studies provide diverse answers to the question, “What is a global mindset?” Its core properties are described in three, relatively distinct, sets of terms. The first set of terms is *cognitive* where studies explicate the core properties of global mindset using cognitive and information processing terms such as “knowledge structure,” “cognitive structure,” “ability to develop and interpret,” “attention,” “sensemaking,” and “conceptualization and contextualization abilities.” The second set of terms used by authors to describe global mindset can be called *existentialist* as studies define global mindset using terms such as a “way of being,” “state of mind,” “orientation,” “openness,” and “awareness,” although a careful reading of these definitions also reveals a strong cognitive underpinning. The third set of descriptors is *behavioral* where studies define global mindset in behavioral, dispositional, and competency-related terms such as “propensity to engage,” “ability to adapt,” “curiosity,” and “seeking opportunities,” among others.

Obviously, this diversity of terms and perspectives on global mindset, which draw on different and distinct theoretical and research perspectives, presents a considerable challenge for theoretical integration across the field.

**Dimensionality of global mindset.** As the literature review indicates, global mindset has been conceptualized and measured both as a unidimensional and a multidimensional construct. The unidimensional conceptualizations primarily focus on the cross-cultural aspects of global mindset (Gupta and Govindarajan, 2002; Kobrin, 1994). On the other hand, the multidimensional approaches, which often draw on the international strategy literature, conceptualize global mindset in terms of integration and localization challenges faced by MNCs.<sup>7</sup> We have argued in this paper that there are two primary dimensions—cultural and strategic—that should be reflected in the conceptualization and measures of global mindset. Moreover, the level of complexity and multidimensionality of the global environment suggests that global mindset is likely to be a multidimensional construct.

**Level of analysis.** As Table 1 indicates, research on global mindset has been conducted at multiple levels of analysis (i.e., individual, group, and organization). Thus, in the current literature, global mindset can tentatively be considered as a multilevel construct, involving conceptual and methodological issues specific to multilevel research (see Rousseau, 1985 for an excellent discussion of methodological issues that arise from multi-level research). Because of the diversity of perspectives yet lack of debate on this issue, one of the most basic questions highlighted by our literature review is whether global mindset can indeed be considered an attribute of individuals, groups, and organizations. A related question concerns the theoretical relationships among the global mindset constructs at different theoretical levels.<sup>8</sup> For example, while researchers often speak of individual *and* organizational global mindsets (Govindarajan and Gupta, 1998; Bartlett and Ghoshal, 1989), the question of whether these constructs are identical across levels remains unanswered.

**Operationalization of global mindset.** Another source of methodological concern is the operationalization of global mindset. Global mindset has been operationalized using diverse measures and data sources both within and across theoretical levels—in some cases as a unidimensional construct (Gupta and Govindarajan, 2002; Kobrin, 1994) and in others as a multidimensional construct. As Table 2 indicates, measures at the individual level use two primary measures: self-report questionnaires measuring individual attitudes and preferences (Arora, et al., 2004; Gupta and Govindarajan, 2002) and expectations regarding the MNC’s global strategy (Murtha, et al., 1998). At the team level, studies use behavioral and textual measures of top management team global mindset (Levy, 2005; Bouquet, 2005) and at the organizational level, studies utilize perceptual data of globalization-related organizational policies and practices (Kobrin, 1994; Gupta and Govindarajan, 2002).

This diversity of measures, which reflects the conceptual heterogeneity and ambiguity discussed above, calls for critical assessment of the content and construct validity of the various measures at different levels of analysis (level-specific validity). In general, establishing content validity would involve specifying the relevant content domain of global mindset at each level of analysis. Establishing construct validity would involve explicating a theoretical network of constructs—antecedents and/or outcomes—that relate to global mindset in a consistent theoretically predicted way (Carmines and Zeller, 1979).<sup>9</sup> These specifications, which are theoretical in nature, may prove to be exceptionally difficult to identify for an abstract construct such as global mindset. Nevertheless, a first step toward insuring an adequate level-specific operationalization of global mindset would be to map out the relevant universe of content that defines global mindset at each theoretical level and explicate the theoretical relationships between global mindset and its antecedents and/or outcomes.

**Empirical research.** Although there have been very few empirical studies of global mindset to date, the above review indicates the diversity of perspectives taken by researchers. In fact, because of

this diversity and results that are often inconsistent and conflicting, very few conclusions can be drawn about the empirical relationships between global mindset and other individual- or organizational-level variables. For example, one of the most significant questions is whether global mindset follows strategy and structure or vice versa. For example, Levy (2005) finds a significant relationship between global mindset and global strategy, suggesting that TMT global mindset drives globalization. On the other hand, Murtha et al. (1998), Nummela et al. (2004), and Harveston et al. (2000) suggest that managerial global mindset follows strategy, rather than the other way around. Yet another study, by Bouquet (2005) suggests that the relationship between TMT global mindset and firm characteristics is mediated by firms' attention structures and that the link between these characteristics and global mindset is not straightforward. Finally, and contrary to the above findings, Kobrin (1994) and Arora et al. (2004) conclude that global mindset is not related to firm characteristics.

Another important question at the organizational level concerns the effect of global mindset on firm performance. Here the evidence is slim and again inconsistent. Nummela et al. (2004) find a positive relationship between global mindset and financial indicators of the international performance of firms and no significant relationship between global mindset and managers' subjective evaluations of performance. Bouquet (2005), on the other hand, finds a curvilinear relationship between TMT attention to global issues and firm performance.

Finally, surprisingly little is known about the empirical relationship between global mindset and individual characteristics. While a few writers in the field of global leadership explore these issues (e.g., McCall and Hollenbeck, 2002; Maznevski and Lane, 2004), Arora et al. (2004) provide the only direct evidence that individual characteristics such as international management training, foreign country living experience, and foreign country job are related to managers' global mindset. Nummela et al. (2004) offer tangential evidence on this relationship with their finding that TMT international work

experience is positively related to global mindset, whereas TMT international education is not related to global mindset.

### **Summary and Implications**

There are a number of important contributions to our understanding of the conceptual and empirical relationships involving global mindset that reflect the interest in global mindset as a way to cope with increasing cultural diversity and environmental complexity of the global arena. The capabilities associated with global mindset have been singled out as *the* critical building blocks of present-day MNCs, significantly affecting the global competitiveness of firms, yet researchers are faced with the challenge of explicating the complex construct of global mindset. To help move the field forward we have proposed a framework that specifies the core properties of global mindset and establishes a link between global mindset and global competitiveness of firms. In summary, we discuss the implications of our integrative framework and offer directions for future research.

#### **Implications of the Integrative Framework**

As our review and critique of the literature indicate, there are still fundamental unresolved issues regarding global mindset. The integrative framework we put forward offers a parsimonious conceptualization of global mindset and addresses the following major questions: (1) What are the core properties of global mindset? (2) At what level(s) of analysis should global mindset be studied? (3) Is global mindset a unidimensional or a multidimensional construct? (4) How should global mindset be operationalized and measured at each level of analysis? (5) What are the possible links between global mindset and effective global management?

First, we conceptualize global mindset as a highly complex individual-level cognitive structure characterized by openness, differentiated articulation of cultural and strategic dynamics on both local and global scales, and integration across these multiple domains. Thus, we define the core properties of

global mindset in cognitive terms rather than providing an exhaustive list of attitudes, dispositions, and skills. At the same time, developing a clear model linking cognitions with traits, skills and behaviors, while beyond the scope of this paper, represents a critical avenue for future work on global mindset.

Second, we define global mindset as an individual-level construct. By providing an explicit description of the target level of analysis, this definition enhances theory development and empirical work on global mindset (Klein, Dansereau, and Hall, 1994; Rousseau, 1985). However, while we define global mindset at the individual level, as a cognitive construct it is robust and can also be considered an attribute of groups and organizations and examined across multiple levels (Walsh, 1995; Schneider and Angelmar, 1993). In addition, a cognitive approach can help underpin the causal determinants of global mindset at different levels of analysis and explicate the relationships between global mindset across levels.

Third, our approach clearly points out that global mindset is a multidimensional construct, incorporating both cultural and strategic dimensions, as well as local and global levels. These dimensions offer a preliminary mapping of the relevant content domain of global mindset. However, from a cognitive perspective, content is only one aspect of cognitive structures. Conceptually, cognitive structures can be analyzed in terms of their content and/or structure (Walsh, 1995). Thus, in addition to delineating the relevant content domain of global mindset, our definition of global mindset also explicates its structural properties by suggesting that it is a complex cognitive structure characterized by high differentiation, articulation, and integration.

Fourth, by defining global mindset using a cognitive framework and by specifying both its structural and content dimensions, we provide an approach that is conducive to operationalization. While it is beyond the scope of this article to provide a systematic review of methods to assess cognition, the managerial cognition literature offers several approaches to assessing both the content and

structure of cognitive structures (see Walsh, 1995 for detailed review; see also Huff, 1990; Barr, Stimpert, and Huff, 1992; Calori, Johnson, and Sarnin, 1994; Lant, Milliken, and Batra, 1992). For example, Calori et al. used the cognitive mapping technique to measure the complexity of managerial mindset and Barr et al. used textual analysis of organizational documents to measure the mental models of executives.

Finally, we explore the information processing consequences of global mindset, thus proposing a clear theoretically-based link between global mindset and effective global management. We suggest that a global mindset has significant effects on information processing patterns that may translate into superior managerial capabilities of firms operating in the global arena. Thus, grounding global mindset in the cognitive and information processing literature allows for the testing of the oft-stated but rarely tested assumption that a global mindset is necessary for the effective management of global firms (Bartlett and Ghoshal, 1992; Ohmae, 1989; Doz and Prahalad, 1991). If a global mindset is indeed found to be related to the organizational effectiveness of MNCs, this will have profound implications for research and practice in international management in general and international human resource management in particular.

As the literature reviewed in this article reveals, scholars from a number of disciplines have attempted to define global mindset, resulting in a myriad of definitions, which is the mark of a relatively young field. Moreover, the large number of dimensions often used to define global mindset makes it difficult to measure and test propositions involving global mindset. By defining global mindset using a cognitive framework, we provide an approach that is easier to both understand and operationalize in future research efforts. We also draw attention to managerial cognitive capabilities in MNCs in the hope of engendering a “cognitive revolution” in international management research. In our call for a renewed focus on cognition, we follow the lead of Doz and Prahalad (1991) who argued that the newly emerging

MNC mandates nothing less than a paradigmatic shift where the mindsets or cognitive orientations of managers constitute the basic unit of analysis.

### **Directions for Future Research**

There are still numerous research areas that need to be addressed on global mindset, its antecedents, and its impact on the management and performance of MNCs. While the questions we have regarding global mindset are virtually limitless, our literature review and model suggest the following research agenda.<sup>10</sup>

**How does global mindset develop over time?** The notion that global mindset is a capability that can be developed over time resonates in the recent work of Lane, Maznevski, Mendenhall, and McNett (2004) and the earlier work of Srinivas (1995). In particular, Bird and Osland (2004) taking a developmental approach, make an important distinction between novice and expert global managers. Previous research suggests that international experience (c.f. Arora, et al., 2004; Aycan, 2001; Black, Morrison, and Gregersen, 1999; Black, Gregersen, Mendenhall, and Stroh, 1999), as well as international management development and cross-cultural training programs (c.f. Selmer, Torbiorn, and de Leon, 1998; Stahl, 2001) can play a role in the development of global managers and, by implication, their global mindsets (McCall and Hollenbeck, 2002).

At the same time it has also been argued that international experience may not lead to the development of a global mindset if an individual does not have a requisite level of inquisitiveness and openness (Bird and Osland, 2004; Black, et al., 1999). Global mindset, like other cognitive capabilities, may require certain innate qualities:

An individual's thinking style develops with **genetic** influence, modeling of others, and a process of formal education. In other words, one's ability to think critically is to a certain extent **genetically** predetermined but is strongly influenced by formal and informal learning experiences (Redding, 2001:58, emphasis added).

This leads us to examine the role of nature versus nurture in developing a global mindset and its implications regarding the selection and development of managers. An obvious next step would be to

conduct longitudinal research on employees sent on international assignments to see if global mindset does indeed grow with international exposure. Research is also needed to determine how international assignments may be designed and managed to ensure that they result in an increase in this important capability.

For example, what types of human resource management policies are more likely to foster the development of a global mindset within the TMT and throughout the organization? Can geocentric HR policies and greater opportunities for international assignments increase the development of a global mindset? Can company-wide, multi-cultural training programs foster the development of global mindset within employees? Stahl's work on intercultural assessment centers posits that characteristics that are important determinants of success in international assignments may be "teachable" in management development programs (Stahl, 2001) and our own work suggests that selecting individuals with higher levels of cognitive complexity and cosmopolitanism are an important necessary prerequisite to the success of such programs.

**How is global mindset at the individual level related to global mindset at the TMT and organizational levels?** One question that has not been posed, but which we find crucial, is the relationship between global mindset at the individual level and the impact of global mindset at the organizational level. Who in an organization needs a global mindset? Is there a tipping point, or a critical mass of individuals within an MNC that needs to possess a global mindset in order for it to have an impact on organizational performance? Moreover, what is the influence of diversity within the TMT on this crucial managerial characteristic? The organizational literature presents somewhat conflicting results regarding the impact of diversity on team performance (see Williams and O'Reilly, 1998), suggesting that perhaps the international management literature may be a bit too optimistic regarding the positive impact of organizational diversity on the development of global mindset.

What role does organizational culture play in developing and sustaining a global mindset? Will, for example, organizational cultural values of adaptability, fostering risk taking and flexibility facilitate the experimentation that is conducive to the development of a global mindset? What role is played by organizational boundary spanning processes and structure? Do organizations with formal mechanisms in place to transfer learning across national boundaries foster the development of higher levels global mindset?

**What is the relationship between global mindset and effective managerial action?** Having a global mindset is necessary but not sufficient to become an effective global manager. As Bird and Osland (2004:60) note, global mindset must be combined with the ability to define the appropriate actions to take and the ability to actually execute those actions. These observations lead us to the question of what specific behavioral attributes are necessary for global mindset to result in actions that impact organizational performance.

**What is the relationship between global mindset and organizational performance?** Is having a TMT with a global mindset a competitive advantage in all MNCs regardless of strategic focus? The prevailing literature generally supports the notion that when it comes to global mindset, more is better, but Bouquet (2005) cautions that there may be limits to the effectiveness of global mindset. Is the relationship between global mindset and organizational performance strongest in those firms pursuing a transnational strategy as suggested by Murtha et al. (1998), or may it be even more important in the metanational organizations championed by Doz et al. (2001) who argue that “learning from the world” is critical in today’s global knowledge economy?

**How does global mindset differ from other related constructs such as cultural intelligence, global leadership and expatriate success?** For example, how are global mindset and cultural intelligence (CQ) related (Earley and Mosakowski, 2004; Thomas and Inkson, 2004)? Earley and

Mosakowski (2004) define CQ as “the ability to make sense of unfamiliar contexts and then blend in.” This definition makes CQ quite distinctive from global mindset, yet one could argue that having a higher level of CQ could facilitate the development of a global mindset.

As a final note, we suggest that further theory building and empirical work on global mindset should draw on broader theoretical perspectives beyond its current basis in international management and should be conducted in diverse settings. It would be ironic if the construct of global mindset were to continue to be developed from a largely Western perspective and ignore the increasing number of voices calling for the testing of management theories in contexts that explicitly test their universality (Hofstede, 1980b; Boyacigiller and Adler, 1991).

## Notes

<sup>1</sup> Although outside the scope of this paper, a similar theme can be found in the literature on global leadership (e.g., McCall and Hollenbeck, 2002).

<sup>2</sup> Merton (1957) initially conceptualized cosmopolitans as individuals who are oriented toward the outside world and locals as those who are narrowly concerned with the affairs of the community to the exclusion of world affairs. Extending this concept to university faculty, Gouldner (1957:290) characterized cosmopolitans as “those lower on loyalty to the employing organization, higher in commitment to their specialized role skills, and more likely to use outer reference group orientation” (Gouldner 1957:290). While the cosmopolitan-local distinction was parsimonious, subsequent research (e.g., Gouldner, 1958; Flango and Brumbaugh 1974; Glaser 1963; Goldberg, Baker, and Rubenstein 1965; Goldberg 1976) found the construct to be more complex and multidimensional. For example, Gouldner (1958) divided cosmopolitans into two groups: outsiders and empire builders. Locals were split into four groups: dedicated, true bureaucrats, homeguards, and elders. Goldberg et al (1965) expanded the cosmopolitan-local classification system to include four categories. In addition to the cosmopolitan and local categories, a third category, termed “complex,” described those employees who are simultaneously loyal to both their employing organization and profession. The fourth category, termed “indifferent” described those employees who were loyal to neither.

<sup>3</sup> Within the past five years, a host of initiatives and publications concerning cosmopolitanism have appeared (see Hollinger, 2002 for a review of these developments). While we draw on this literature, a comprehensive discussion of the concept of cosmopolitanism is beyond the scope of this brief overview.

<sup>4</sup> The underlying logic behind this advice lies in the “law of requisite variety” that maintains that if a system is to survive, its internal complexity should match the complexity of its environment (Ashby, 1956).

<sup>5</sup> While information processing theory has been applied at the individual (e.g., Hult and Ferrell, 1997; Leonard, Scholl, and Kowalski, 1999; Wang and Chan, 1995), top management team (e.g., Sweet, Roome, and Sweet, 2003), and organizational levels of analysis (e.g., Wang, 2003; Egelhoff, 1991), consistent with our approach to global mindset as an individual-level construct, our primary focus in this discussion is at the individual level. At the same time, there is an obvious and important overlap between the levels of analysis, as the more macro strategy literature views the top management team of MNCs as the location where a large portion of the strategic information processing capacity of the organization lies (Egelhoff, 1991:197).

<sup>6</sup> In general, the information processing model is based on three fundamental tenets. First, individuals have limited information-processing capacity and therefore attend to only certain facets of the environment while ignoring others (Sproull, 1984). Second, environmental information undergoes interpretation that gives structure and meaning to the data (Daft and Weick, 1984). Third, these interpretations influence action (Daft and Weick, 1984; Dutton and Duncan, 1987; Kiesler and Sproull, 1982).

<sup>7</sup> The most explicit example of a multidimensional measure is used by Murtha et al. who draw on the integration-responsiveness framework (Prahalad and Doz, 1987). They measure global mindset in terms of managers’ expectations regarding integration, responsiveness, and coordination. Similarly, Arora (2004) uses a self-report instrument that reflects two drivers of global value (local competencies and global coordination) suggested by Govindarajan and Gupta (2001).

<sup>8</sup> Put differently, the issue is whether the global mindset constructs theorized and measured at different levels are isomorphic, partially identical, or only weakly related (Rousseau, 1985). According to Rousseau (1985:8) “isomorphism exists when the same functional relationship can be used to represent constructs at more than one level...isomorphism implies that constructs mean the same thing across levels...” Partial identity implies that constructs, although similar, “behave” somewhat differently across levels. In addition, the same constructs used at different levels may be only weakly related.

<sup>9</sup> Arora et al. (2004), for example, established the construct validity of their global mindset measure by testing the relationships between global mindset and a set of individual background characteristics (training in international management, foreign country living experience and job experience, family member of foreign origin), often considered to be antecedents of global mindset. They found that global mindset was significantly positively related to these characteristics. These theoretically predicted relationships tentatively support Arora’s et al. (2004) global mindset measure.

<sup>10</sup> Some of the future research we are suggesting has already been conducted on related constructs (e.g., how to increase success on international assignments; global leadership development; etc.) but not on global mindset *per se*.

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**Table 1**

**Previous Research on Global Mindset**

<b>Study</b>	<b>Definition</b>	<b>Level of Analysis</b>	<b>Theoretical Foundations</b>	<b>Key Propositions/Major Findings</b>
<b>CULTURAL PERSPECTIVE</b>				
Perlmutter (1969); Heenan and Perlmutter (1979)	Geocentrism is a global systems approach to decision making where headquarters and subsidiaries see themselves as parts of an organic worldwide entity. Superiority is not equated with nationality. Good ideas come from any country and go to any country within the firm.	Individual and Organization	Perlmutter (1969)	Geocentric approach influences and shapes diverse aspects of the multinational enterprise, including structural design, strategy and resource allocation, and management processes.
Adler and Bartholomew (1992)	Transnationals are defined by their knowledge and appreciation of many cultures and ability to effectively conduct business internationally.	Individual	Bartlett and Ghoshal (1990); Hambrick et al. (1989); Hamel, Doz, and Prahalad (1989)	To be effective, transnational managers need both the culturally-specific knowledge and adaptation skills required in international firms, and the ability to acquire a worldwide perspective and to integrate the worldwide diversity required in multinational firms. The transnational manager must be discrete when choosing to be locally responsive and when to emphasize global integration.
Kobrin (1994)	A geocentric international human resource management system values ability over national origin.	Organization	Perlmutter (1969); Heenan and Perlmutter (1979)	In a sample of 68 American manufacturing firms, no significant relationship was found between geocentric mindset and firm size, length of international experience, organization structure, strategy, or globalization of the firm's industry. Geocentric mindset correlated significantly with geographic scope of the MNC and various aspects of IHRM policies and practices.
Estienne (1997)	International mindset is a "willingness to learn" and an "ability to adapt."	Individual	Bartlett and Ghoshal (1989)	Developing global mindset allows companies to become truly transnational, and capable of using cultural diversity for competitive advantage.
Beechler, Levy, Taylor, and Boyacigiller (2004)	Geocentrism is the extent to which nationality is unimportant when selecting individuals for managerial positions.	Organization	Perlmutter (1969); Perlmutter and Heenan (1979); Kobrin (1994);	In a sample of 521 employees working in two Japanese MNCs worldwide, perceptions of geocentrism were found to be positively related to employees' commitment, but not related to employees' excitement.
Maznevski and Lane (2004)	Global mindset is the ability to develop, interpret and implement criteria for personal and business performance that are independent from assumptions of a single country, culture, or context.	Individual	Cognitive schemas and systems thinking	Global mindset allows managers to make decisions in a way that increases the ability of their firms to compete internationally.

## STRATEGIC PERSPECTIVE

Bartlett and Ghoshal (1989; 1991)	A transnational mindset is understanding the need for multiple strategic capabilities, viewing problems and opportunities from both local and global perspectives, and a willingness to interact well with others.	Individual and Organization	Harvard Business School research in the 1970s.	Based on their five-year study of nine of the world's largest corporations, the transnational mindset is hypothesized to lead to superior long-term performance.
Tichy, Brimm, Charan, and Takeuchi (1992)	Global mindset is the ability to conceptualize complex geopolitical and cultural forces as they impact business.	Individual		Global mindset leads to a heightened awareness of one's perceptions of other cultures and customs and to learn respect of those differences.
Murtha, Lenway, and Bagozzi (1998)	Global mindset is cognitive processes of balancing competing country, business, and functional concerns.	Individual	Prahalad and Doz (1987); Bartlett and Ghoshal (1989); Porter (1986).	In a sample of 305 managers working in a single MNC, global mindsets evolved over a three-year period as the change to a global strategy resulted in a cognitive shift toward a more global mindset across all managers in the organization.
Kefalas (1998)	Global mindset is a mental model characterized by high levels of both conceptualization and contextualization.	Individual	Rhinesmith (1992); Bartlett (1995); Redding, Porter, and Crow (1995).	People who are global thinkers and local actors possess the mindset that is the most appropriate for expanding an organization's activities globally.
Harveston, Kedia, and Davis (2000)	Global mindset is the propensity of managers to engage in proactive and visionary behaviors to achieve strategic objectives in international markets.	Individual	Perlmutter (1969); Burpitt and Rondinelli (1998).	In a sample of 224 managers, managers of born global firms had more global mindsets, more international experience, and higher risk tolerance than managers of gradually globalizing firms.
Jeannet (2000)	Global mindset is a state of mind able to understand a business, an industry sector, or a particular market on a global basis.	Individual and Organization	Jeannet's various studies; Levitt (1983).	Firms that implement a global mindset ahead of others will have a competitive advantage.
Gupta and Govindarajan (2001; 2002)	Global mindset combines an openness to and awareness of diversity across cultures and markets with a propensity and ability to synthesize across this diversity.	Individual and Organization	Cognitive psychology; Murtha, Lenway, and Bagozzi (1998); Koblin (1994).	A deeply embedded global mindset is a prerequisite for global industry dominance. It enables the company to exploit emerging opportunities.
Harvey and Novicevic (2001)	Global mindset incorporates timescape dimensions into strategic decision-making processes.	Individual and Organization	Rhinesmith (1992); Paul (2000); Kedia and Mukherji (1999)	The development of a time-oriented corporate mindset will become the primary driver of the firm's competitive posture in the marketplace.
Begley and Boyd (2003)	Based on Maznevski and Lane's (2004) individual-level definition applied at the company level.	Organization	Maznevski and Lane (2004); Doz and Prahalad	Based on interviews with 39 HR executives in 32 high-technology MNCs headquartered in the United States, it was found that corporate global mindset emerges from policy

Arora, Jaju, Kefalas, and Perenich (2004)	Global mindset is the ability to analyze concepts in a broad global array and the flexibility to adapt to local environment and be sensitive to context.	Individual	Rhinesmith (1992); Gupta and Govindarajan (2002); Kefalas and Weatherly (1998)	development characterized by a high consistency/high responsiveness approach. In a sample of 65 U.S. textile managers, managers were better in thinking globally than acting locally. Global mindset is related to several demographic and background characteristics.
Nummela, Saarenketo, and Puumalainen (2004)	Global mindset includes <i>proactiveness</i> on international markets, manager's <i>commitment</i> to internationalization, and an international <i>vision</i> .	Individual	Fletcher, 2000; Gupta and Govindarajan (2002); Kedia and Mukherji, 1999).	In a sample of 72 small and medium size Finnish companies, a significant relationship is found between managerial international work experience, firm's market characteristics and global mindset, but no relationship between education and global mindset. Global mindset is found to be related to significantly more foreign partners and customers and larger percentage of revenues from foreign markets, but not related to manager's perception of international performance
Levy (2005)	Attention to the global environment is a primary manifestation of global mindset.	Top management team	Hambrick and Mason (1984); Ocasio (1997); Bartlett and Ghoshal (1989).	In a sample of 69 American firms, attention to the global/external environment and attention breadth were significantly positively related to global strategic posture of firms whereas attention to the internal environment was negatively related.
Bouquet (2005)	Attention to global issues is a primary manifestation of global mindset.	Top management team	Ocasio (1997); Prahalad and Doz (1987)	In a sample of 136 MNCs, characteristics of the decision environment affected the attention structures established by the firm, which in turn, affected TMT attention to global strategic issues. There was a concave relationship between TMT attention to global issues and firm performance

### MULTIDIMENSIONAL PERSPECTIVE

Rhinesmith (1992, 1993, 1996)	A global mindset means that we scan the world from a broad perspective, always looking for unexpected trends and opportunities to achieve our personal, professional, or organizational objectives.	Individual		People with global mindsets drive for the bigger, broader picture, balance contradictions, trust process over structure, seek opportunities in surprises and uncertainties, value diversity, and continuously seek improvement.
Srinivas (1995)	Global mindset is characterized by eight components: curiosity and concern with context, acceptance of complexity; diversity consciousness; seeking opportunity; faith in organizational processes; focus on continuous improvement; extended time perspective;	Individual	Rhinesmith (1992); Diverse sources	Global mindset leads to three strategic leadership thrusts: formulation and evocation of vision, crafting of a strategy to realize the vision, and focus on mobilization of human resources. These in turn result in business-goal outcomes and attitudinal outcomes.

Neff (1995)	systems thinking. Rhinesmith's (1993) characteristics of global mindset.	Individual	Rhinesmith (1993)	The combination of local leadership and global mindset enables the company to maintain that delicate balance between global efficiency and local responsiveness.
Ashkenas, Ulrich, Jick, and Kerr (1995)	Rhinesmith's (1993) characteristics of global mindset.	Individual	Rhinesmith (1993); Hedlund (1986)	A successful global leader sees the larger worldview, focuses on process, and is willing and able to manage global complexities.
Kedia and Mukherji (1999)	Global mindset is characterized by openness, an ability to recognize complex interconnections, a unique time and space perspective, emotional connection, capacity for managing uncertainty, ability to balance tensions, and savvy.	Individual	Kefalas and Neuland (1997); Rhinesmith (1993); Gregerson, Morrison, and Black (1998).	To be globally competitive, managers need a global mindset and supportive knowledge and skills. Global mindset enables managers to understand the complexities of managing an interdependent and complex global network, and in playing the required part within the network.
Paul (2000)	Global corporate mindset is the extent to which management encourages and values cultural diversity, while simultaneously maintaining a certain degree of strategic cohesion.	Organization	Porter (1985)	The more global the company's mindset, the easier it becomes to support a global business approach in existing markets, as well as to enter new markets and pursue a global strategy.

**Table 2**  
**Measures of Global Mindset**

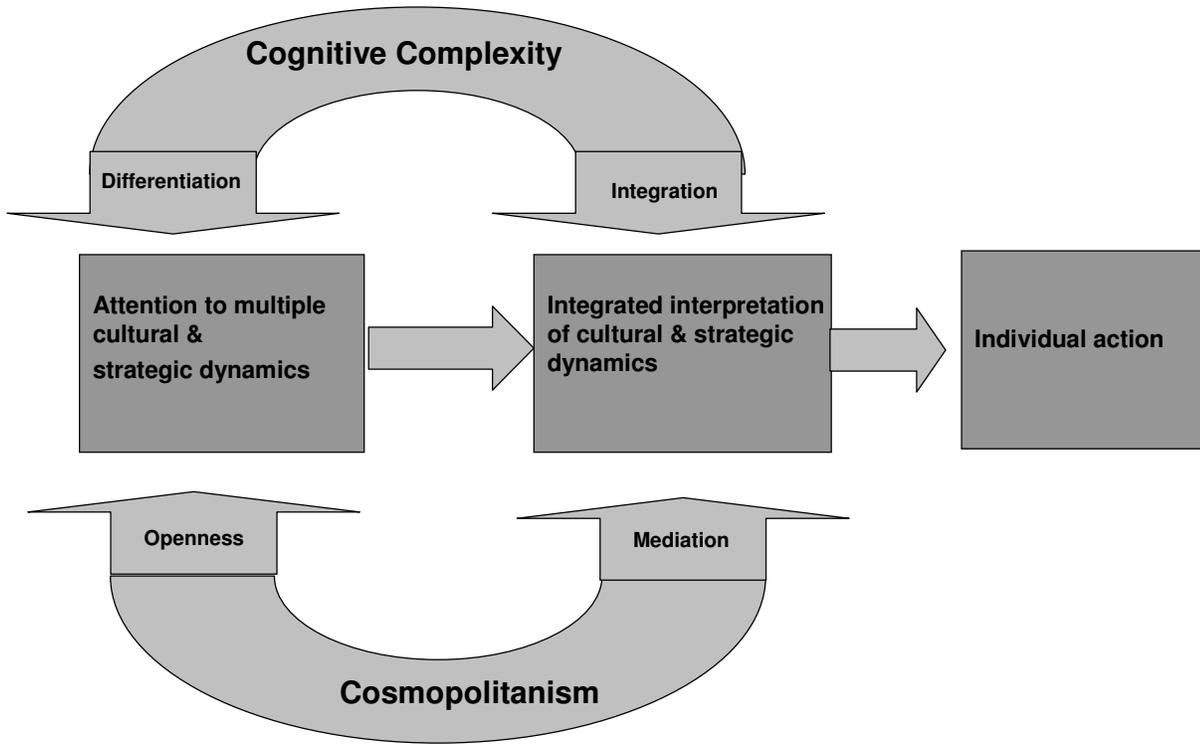
<b>Study</b>	<b>Measured Construct</b>	<b>Type of Measure</b>	<b>Dimensionality</b>
<b>INDIVIDUAL LEVEL</b>			
Murtha, Lenway, & Bagozzi (1998)	Global mindset	Expectation	Multidimensional <ul style="list-style-type: none"> <li>▪ Integration</li> <li>▪ Responsiveness</li> <li>▪ Coordination</li> </ul>
Gupta & Govindarajan (2001, 2002)	Global mindset	Self-perception	Unidimensional
Harveston, Kedia, and Davis (2000) <sup>1</sup>	Geocentric mindset	Self-perception	Unidimensional
Arora, Jaju, Kefalas, and Perenich (2004) <sup>2</sup>	Global mindset	Perception and self-perception	Multidimensional <ul style="list-style-type: none"> <li>▪ Conceptualization</li> <li>▪ Contextualization</li> </ul>
Nummela, Saarenketo, and Puumalainen (2004)	Global mindset	Perception	Multidimensional <ul style="list-style-type: none"> <li>▪ Proactiveness</li> <li>▪ Commitment to internationalization</li> <li>▪ International vision</li> </ul>
<b>GROUP LEVEL</b>			
Levy (2005)	TMT attention patterns	Content analysis	Multidimensional <ul style="list-style-type: none"> <li>▪ Attention to environmental elements</li> <li>▪ Attention breadth</li> </ul>
Bouquet (2005)	TMT attention patterns	Behavioral	Multidimensional <ul style="list-style-type: none"> <li>▪ Global scanning</li> <li>▪ CEO foreign travel</li> <li>▪ Richness of communications with overseas managers</li> <li>▪ Discussions of globalization decisions</li> </ul>

**ORGANIZATION LEVEL**

Jeannet (2000)	Global mindset	Perception and quantitative organizational data	Multidimensional <ul style="list-style-type: none"> <li>▪ Business strategies</li> <li>▪ Managerial talent pool</li> <li>▪ Firm's organization</li> </ul>
Gupta & Govindarajan (2001; 2002)	Global mindset	Perception	Multidimensional <ul style="list-style-type: none"> <li>▪ Dimensions not specified</li> </ul>
Begley & Boyd (2003)	Global mindset	Semi-structured interviews	
Kobrin (1994); Beechler, Levy, Taylor, & Boyacigiller (2004)	Geocentrism	Perception	Unidimensional

**Figure 1**

**Information Processing Model of Global Mindset**



## APPENDIX: GLOBAL MINDSET SCALES

### I. INDIVIDUAL LEVEL

#### **Murtha, Lenway, and Bagozzi (1998)**

**Scale:** 7-point Likert scale (ranging from “extremely unlikely” to “extremely likely”).

##### *Integration expectations*

As the company globalizes, I believe that the country operations most familiar to me will:

1. Have global marketing responsibility for one or more products.
2. Produce one or more products for global markets.
3. Go global with locally developed products.
4. Lead global product development processes.

##### *Responsiveness expectations*

As the company globalizes, I believe that the country operations most familiar to me will:

1. Demonstrate clear benefits to the local economy.
2. Have flexibility to respond to local conditions.
3. Harmonize the company’s activities and products with national government policies.
4. Adapt existing products to local markets.

##### *Country coordination expectations*

As the company globalizes, I believe that the country operations most familiar to me will:

1. Provide early warning of global competitive threats.
2. Put global objectives ahead of country bottom line.
3. Identify local business opportunities with global potential.
4. Learn from the company’s operations in many other countries

##### *Divisional coordination expectations*

As the company globalizes, I believe that the country operations most familiar to me will:

1. Coordinate strategy on a global basis.
2. Take product development input from more countries.
3. Coordinate among countries to rationalize production.
4. Anticipate countries’ needs.
5. Balance price and market share objectives.
6. Respond quickly to countries’ requests and needs.

#### **Gupta and Govindarajan (2001, 2002)**

**Scale:** 5-point Likert scale (ranging from “strongly disagree” to “strongly agree”).

1. In interacting with others, does national origin have an impact on whether or not you assign equal status to them?
2. Do you consider yourself as equally open to ideas from other countries and cultures as you are to ideas from your own country and culture of origin?
3. Does finding yourself in a new cultural setting cause excitement or fear and anxiety?
4. When visiting or living in another culture, are you sensitive to the cultural differences without becoming a prisoner of these differences?

5. When you interact with people from other cultures, what do you regard as more important: understanding them as individuals or viewing them as representatives of their national cultures?
6. Do you regard your values to be a hybrid of values acquired from multiple cultures as opposed to just one culture?

**Arora, Jaju, Kefalas, and Perenich (2004)**

**Scale:** 5-point Likert scale (ranging from “strongly disagree” to “strongly agree”).

*Conceptualization*

1. In my job, the best one can do is to plan ahead for at the most one year.
2. Doing business with former enemies is not patriotic.
3. I think it is necessary today to develop strategic alliances with organizations around the globe.
4. Projects that involve international dealings are long term.
5. I take pride in belonging to an international organization.
6. I believe that in the next 10 years the world will be the same as it is today.
7. In this interlinked world of ours, national boundaries are meaningless.
8. Almost everybody agrees that international projects must have a shorter payback period than domestic ones.
9. We really live in a global village.
10. In discussions, I always drive for bigger, broader picture.
11. I believe life is a balance of contradictory forces that are to be appreciated, pondered, and managed.
12. I consider it to be a disgrace when foreigners buy our land and buildings.
13. I really believe that 5 – 10 years is the best planning horizon in our line of business.
14. I find it easy to rethink boundaries, and change direction and behavior.
15. I feel comfortable with change, surprise, and ambiguity.
16. I get frustrated when someone is constantly looking for context.
17. Contradictors are time wasters that must be eliminated.
18. I have no time for somebody trying to paint a broader, bigger picture.
19. I believe I can live a fulfilling life in another culture.
20. Five years is too long a planning horizon.

*Contextualization*

1. I enjoy trying food from other countries.
2. I find people from other countries to be boring.
3. I enjoy working on world community projects.
4. I get anxious around people from other cultures.
5. I mostly watch and/or read the local news.
6. Most of my social affiliations are local.
7. I am at my best when I travel to worlds that I do not understand.
8. I get very curious when I meet somebody from another country.
9. I enjoy reading foreign books or watching foreign movies.
10. I find the idea of working with a person from another culture unappealing.
11. When I meet someone from another culture I get very nervous.
12. Traveling in lands where I can't read the street names gives me anxiety.
13. Most of my professional affiliations are international.
14. I get irritated when we don't accomplish on time what we set out to do.
15. I become impatient when people from other cultures seem to take a long time to do something.
16. I have a lot of empathy for people who struggle to speak my own language.
17. I prefer to act in my local environment (community or organization).
18. When something unexpected happens, it is easier to change the process than the structure.
19. In trying to accomplish my objectives, I find, diversity, multicultural teams play valuable role.
20. I have close friends from other cultural backgrounds (Arora et al., 2004: 409-410).

### **Nummela, Saarenketo, and Puumalainen (2004)**

**Scale:** 5-point Likert scale (ranging from “disagree totally” to “agree totally”).

#### *Proactiveness on international markets*

1. It is important for our company to internationalize rapidly.
2. Internationalization is the only way to achieve our growth objectives.
3. We will have to internationalize in order to succeed in the future.
4. The growth we are aiming at can be achieved mainly through internationalization.

#### *Commitment to internationalization*

1. The founder/owner/manager of the company is willing to take the company to the international markets.
2. The company's management uses a lot of time in planning international operations.

#### *International vision*

1. The company's management sees the whole world as one big marketplace.

## **II. GROUP LEVEL**

### **Levy (2005)**

#### *Attention to the external and internal environment*

Top management team attention was measured as attention paid to specific element of the environment in the letter to shareholders. External environment elements included: competitors, customers, dealers, strategic partners, and foreign-related aspects of the environment. Internal environment elements included: Board of Directors, employees, owners, and top management.

#### *Attention Breath*

Attention breath was measured as dispersion across ten environment element: : competitors, customers, dealers, strategic partners, Africa, Asia-Pacific, Europe, the Middle East, Latin America, and North America.

### **Bouquet (2005)**

**Scale:** Additive of the following four (A-D) indicators

#### *A. Global scanning*

**Scale:** 5-point Likert scale (ranging from signifies “very rarely” to “very frequently”)

1. Top executives collect strategic information (such as market share and competitor data from around the world) in a consistent format on a regular basis
2. The data your company collects from around the world is pre-filtered by information analysts before being disseminated
3. Your top executives use business intelligence software to analyze global market developments
4. Your top executives use benchmarking systems that routinely compare the company against key competitors worldwide

*B. CEO foreign travel*

1. Indicate how much time (in percentage) the CEO spends working at the company headquarters, traveling throughout the domestic market, and traveling outside the domestic market.

*C. Communications with overseas managers*

1. Indicate how often they use email, letters and memo, telephone, videoconference, and/or face-to-face meetings to discuss non-routine decisions with overseas managers.

*D. Discussions pertaining to major globalization decisions*

**Scale:** 5-point Likert scale (ranging from signifies “very rarely” to “very frequently”).

1. Indicate the extent to which major globalization decisions are made after intensive discussions between top managers

### III. ORGANIZATION LEVEL

**Jeannet (2000)**

Scale: Not provided

*Looking at the business strategies pursued by the firm*

1. What number of businesses should actually compete on a global scale?
2. Are there businesses with explicit global mandates?
3. How large is the corporate volume generated by businesses operating under expressed global mandates?
4. How many businesses operate under a formal global strategy?

*Looking at a firm's managerial talent pool*

1. How many managers understand their business in global terms?
2. How many managers in upper management pool operate under global mandates?

*Looking at a firm's organization*

1. At which level does the first geographic split in organization occur?
2. How many functional managerial positions operate under global mandates?
3. How many teams or task forces have global mandates?
4. Extent of global IT structure.

**Gupta and Govindarajan (2001; 2002)**

**Scale:** 5-point Likert scale (ranging from “strongly disagree” to “strongly agree”).

1. Is your company a leader (rather than a laggard) in your industry in discovering and pursuing emerging market opportunities in all corners of the world?
2. Do you regard each and every customer wherever they live in the world as being as important as a customer in your own domestic market?
3. Do you draw your employees from the worldwide talent pool?
4. Do employees of every nationality have the same opportunity to move up the career ladder all the way to the top?

5. In scanning the horizon for potential competitors, do you examine all economic regions of the world?
6. In selecting a location for any activity, do you seek to optimize the choice on a truly global basis?
7. Do you view the global arena not just as a playground (that is, a market to exploit) but also as a school (that is, a source of new ideas and technology)?
8. Do you perceive your company as having a universal identity and as a company with many homes or do you instead perceive your company as having a strong national identity?

**Kobrin (1994)**

**Scale:** 5 or 7 point Likert scale (ranging from “strongly agree” to “strongly disagree”).

1. A manager who began his or her career in any country has an equal chance to become CEO of my company.
2. In the next decade, I expect to see a non-U.S. CEO in my firm.
3. In the next decade, I expect to see one or more non-U.S. nationals serving as a senior corporate officer on a routine basis.
4. In my company, nationality is unimportant in selecting individuals for managerial positions.
5. My company believes that it is important that the majority of top corporate officers remain American (reverse coded).