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Developing Competencies for International Entrepreneurship: The Role of a Global Mindset

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Abstract. The focus of this paper is on Entrepreneurial Global Mindset, an important cognitive capability and a source of sustainable competitive advantage for an international new venture. Developing a global mindset means acquiring a set of specific competencies. We put forward a definition of entrepreneurial global mindset and a model linking global mindset and its constituents to competencies and effective task performance. Based on the available evidence regarding what constitutes a global mindset in entrepreneurs and which mindset-related competencies are trainable rather than innate, we suggest that some of these competencies can and should be taught as part of the entrepreneurship education curriculum. We propose entrepreneurship education and training strategies geared toward stimulation of international entrepreneurship and increasing the probability of success of international new ventures.

Key words: global mindset, international entrepreneurship, competence development.

> Success is all in the [global] mindset (Govindarajan & Gupta, 1998)
>
> [P]eople with a global mindset look at the world as an arena in which to express their talents, maximize their success, and influence others (Rhinesmith, 1996)

1. Introduction

In this paper we suggest entrepreneurship education and training strategies geared toward stimulation of international entrepreneurship (IE) and increasing the probability of success of international new ventures. McDougall and Oviatt (2000: 903) conceptualize IE as a "combination of innovative, proactive, and risk-seeking behavior that crosses national borders and is intended to create value in organizations". It is implied that one way of defining an international venture 'success' is in terms of relevant entrepreneurial behaviors that result in value creation. Venkataraman (1997: 132), noting that what constitutes 'success' and 'failure' in entrepreneurship is somewhat contentious, suggests two meaningful performance benchmarks: (1) the absolute level of economic performance that provides a return for enterprising effort (i.e., private wealth) and (2) the social contribution of the individual's effort (i.e., social wealth). Drawing on these definitions, for the purposes of this paper we define 'success' in terms value creation, understood broadly as economic performance and social wealth.

Although there is a certain degree of empirical controversy and variety of approaches to understanding success factors in IE (Rialp et al, 2003), there clearly emerged a few broad determinants relevant to the 'individual entrepreneur' level of analysis adopted in this paper. These determinants of success include identifying international opportunities (alertness in seeking, speed and efficiency in seizing) (Dimitratos and Jones, 2005); developing social (personal and business) networks (Oviatt and McDougall, 2005a, 2005b; Coviello and Munro, 1995); possessing/developing relevant knowledge (Kuemmerle, 2002; Zahra et al, 2000); exerting a managerial global vision (Oviatt and McDougall, 1995; Rialp et al, 2005), and commitment (Rialp et al, 2005).

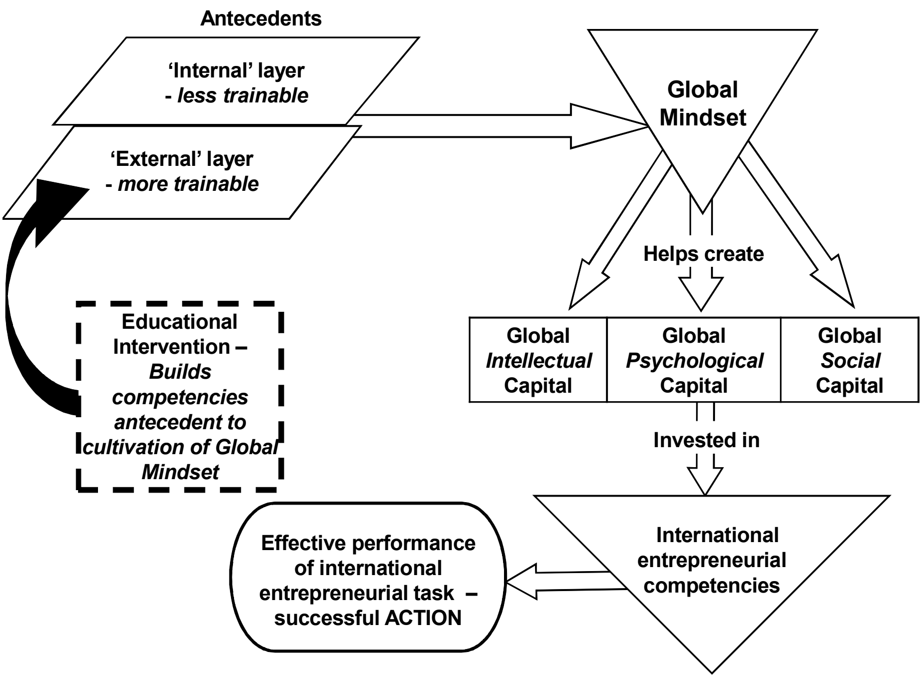
It is widely recognized by policymakers and researchers that IE leads to greater economic wealth (see GEM, 2007). Therefore, various government assistance programs are put in place in many countries to assist entrepreneurs in expanding their ventures internationally. Empirical evidence seems to suggest, however, that this assistance has limited impact (e.g., Anderson et al., 2001) because, among other reasons, it does not help entrepreneurs develop the right mindset to appreciate the importance of internationalization (Commission of the European Communities, 2003; Anderson et al., 2001) and manage the interactions and transactions internationally (Hitt et al., 2001). To fill in the existing gap we argue the 'right mindset' for international entrepreneurs is a 'global mindset' and propose education and training approaches focused on developing a global mindset in aspiring and practicing international entrepreneurs.

The objective of entrepreneurship education is to provide a vehicle for a structured and formal development of entrepreneurial competencies (Alberti et al, 2004) consisting of a set of knowledge, skills and abilities that enable an entrepreneur to successfully perform the job role (Baum et al., 2001; Chandler and Hanks, 1994; Man and Lau, 2000; Man et al., 2002). Cultivating these competencies, as convincingly argued by Man et al. (2002: 125), is a more efficient entrepreneurship support strategy than other measures due to a proven direct correlation between the level of competencies and the venture performance.

Developing a global mindset means acquiring a set of specific competencies. The purpose of this paper is two-fold: (1) to demonstrate how these competencies are related to the process of successful IE and (2) to suggest global mindset competencies that should be focused on in training and education for IE. Based on the available evidence regarding what constitutes a global mindset in entrepreneurs and which mindset-related competencies are trainable rather than innate, we propose that some of these competencies can and should be taught as part of the entrepreneurship education curriculum.

To position the concept of global mindset in the field of IE and pinpoint the role of entrepreneurship education and training in its development we suggest the following model (Figure 1).

Figure 1: The role of Global Mindset in international entrepreneurial task performance



The model builds on merging existing research in international management and entrepreneurship. Leveraging off the 'competence' stream in entrepreneurship research (e.g., Man, 2005; Man and Lau, 2000), the model connects international entrepreneurial task performance with entrepreneurial competencies related to IE. Entrepreneurial competence is a dynamic phenomenon consisting of inputs (antecedents), process (behaviors), and outcomes (performing the task to an accepted standard) (Man et al., 2002; Mole et al., 1993). IE competencies are the outcome of global intellectual, psychological and social capitals developed by the individual entrepreneur as a result of possessing a global mindset. While the behavioral perspective on entrepreneurial competence is concerned with action, capital represents "a store of value that facilitates action" (Light, 2004: 145) or "resource for action"

(Coleman, 1988: S95). Mindset is an important driver determining what competencies the individual develops over time because it guides the process of selection of worthy behaviors (Beechler and Javidan, 2007) and, hence, accumulation of these three capitals. As discussed in more detail further in the paper, we define entrepreneurial global mindset as an individual-level dynamic capability. Antecedents of this capability include less trainable and more trainable elements. We argue that entrepreneurship education and training can contribute to stimulating IE through building competencies antecedent to the cultivation of global mindset.

Before moving on to the main discussion, it is important to stress that global mindset as a cognitive capability represents a source of sustainable competitive advantage for an international venture. This contention is supported by a vast stream of literature within the tradition of the resource-based view of the firm (e.g., Barney, 1991). For example, Ireland, Hitt and Sirmon (2003) view an entrepreneurial mindset (in conjunction with entrepreneurial culture and leadership) as a growth orientation helping entrepreneurs to manage resources strategically, apply creativity and develop innovation with the ultimate goal of attaining competitive advantage and creating wealth. Because of their unique mindsets and orientations (Limpkin and Dess, 1996), entrepreneurs' cognitive resources are likely to have strengths and weaknesses in various competitive environments and, therefore, constitute a potential source of competitive advantage (Alvarez and Busenitz, 2001).

We structure our argument following the model presented in Fig. 1. In the first section of this paper we focus on the central construct in our model – Global Mindset. We first briefly review the existing definitions and conceptualisations of global mindset and then discuss the dimensions, antecedents and outcomes of global mindset. We then link the global mindset dimensions with IE competencies as pre-requisites for an effective task performance by international entrepreneurs. Pointing to the differences between entrepreneurs and managers of multinational corporations, we offer our own definition of entrepreneurial global mindset. On the premise that global mindset development should be incorporated into entrepreneurship education curriculum, in the next section we introduce the notion of the 'layers' of competence, noting the distinction between trainable and non-trainable layers. Finally, we focus our attention on those elements of global mindset which are more amenable to change and further development. In conclusion we summarize our key ideas and discuss the implications of this research.

2. Global Mindset in Prior Research

The concept of mindset was developed in the field of cognitive psychology to understand how people make sense of the surrounding world and select actions in interacting with their environment. Mindset is a way that the given subject is perceived and evaluated (Fisher, 1988). Rhinesmith (1992:63) defines mindset as "a predisposition to see the world in a particular way that sets boundaries and provides explanations for why things are the way they are, while at the same time establishing guidance for ways in which we should behave". Research in cognitive psychology has established that

- The human cognitive system has a limited capacity to absorb and process information (Baron, 1998);

- Mindset delineates a person's set of cognitive filters that guide what information is absorbed and how it is processed (Gupta and Govindaran, 2002);

- Differences in mindsets explain why some people see what others do not see (Rhinesmith, 1992);

- Mindset exists in a form of structured knowledge or schemas that emerge from real-life experiences (Glaser, 1984);

- Cognitive schemas develop through either assimilation or accommodation (Furth, 1970). Assimilation allows for absorbing new information that is consistent with a current schema and can either leave the schema unchanged or refine it. Accommodation, in contrast, is about absorbing information that does not fit into the existing schema and leads to a change in this current cognitive structure. Hence, mindset is a dynamic construct because cognitive schemas can develop and evolve while learning from experience (Paul, 2000).

- Change in a mindset is possible provided the current cognitive schema is clearly articulated and its limits are identified (Maznevski and Lane, 2004).

The notion of *global mindset* emerged in the field of international management as part of research on cultural aspects of international environment and internationalization of the firm (e.g. Perlmutter, 1969). Since then, as explained in the two comprehensive reviews of the global mindset concept by Levy and colleagues (Levy et al., 2007a; 2007b), three distinct streams of research on global mindset emerged: (1) the cultural perspective; (2) the strategic perspective; and (3) the multidimensional perspective. The cultural perspective on global mindset, developed by Adler and Bartholomew (1992) and Estienne (1997), among others, looks at global mindset as a capability that allows for (a) understanding diverse cultures and cultural effects on ways of doing business and

(b) adapting oneself to generate behavioral responses to effectively conduct global business. The strategic perspective focuses on strategic complexity, often with a heavy cognitive slant. This research stream (e.g., Bartlett and Ghoshal, 1989; Gupta and Govindarajan, 2002; Kefalas, 1998) sees global mindset as a capability to manage global environmental complexity through developing cognitive properties, such as conceptualization and contextualization. For example, Gupta and Govindarajan (2002: 177) define global mindset as "openness to and awareness of diversity across cultures and markets with a propensity and ability to synthesize across this diversity". Both the cultural and the strategic perspectives suffer from a relatively narrow focused view on the phenomenon. The former looks at behavioural adaptation driven by understanding one contextual variable – culture. The latter explores generation of adequate cognitive responses to environmental complexity driven by cultural as well as economic diversity but limits this exploration to the areas of strategy formulation.

The third, multidimensional perspective (e.g., Rhinesmith, 1992, 1995; Paul, 2000; Maznevski and Lane, 2004; Levy et al. 2007a, 2007b), further advances our understanding of global mindset using both cultural and strategic terms as well as a set of other characteristics. In his foundational work, Rhinesmith (1992) argues that global mindset is about scanning and interpreting the world from a broader perspective with a purpose of discovering unexpected trends and opportunities to achieve one's personal, professional and organizational objectives. According to Maznevski and Lane (2004:172), global mindset is "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". These authors highlight the dynamic nature of what they consider a meta-capability. Levy et al. (2007a: 244) provide a similar definition of 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". They maintain that global mindset shapes a person's cognitive structures so that information is acquired from a variety of sources, evaluated without regards to its cultural or national origin, synthesized and then incorporated into the decision making. The multidimensional view makes a significant contribution to the literature conceptualizing broader understanding of antecedents and outcomes of the global mindset. For that reason we see this perspective as the most relevant to our paper as it clearly identifies areas for educational intervention (antecedents) and learning outcomes that are sought as a result of this intervention (outcome behaviours).

3. Dimensions, Antecedents, and Outcomes of Global Mindset

Two multidimensional frameworks – by Rhinesmith (1992) and Beechler and Javidan (2007) – stand out due to their comprehensive nature in shedding light on global mindset antecedents and outcomes and, hence, merit a detailed discussion in light of the objectives of this paper.

According to Rhinesmith (1992: 68) there is exists a set of personal cognitive characteristics that facilitate global mindset, which can be grouped into six dimensions – knowledge, conceptualization, flexibility, sensitivity, judgement and reflection. If one develops a global mindset capability it will be demonstrated through behaviors that illustrate competence in achieving pertinent outcomes. The antecedents and outcomes of global mindset, arranged into these six dimensions, are presented in Table 1 below. The table also includes findings from other studies that are in line with Rhinesmith's (1992) ideas.

While Rinesmith (1992) presents a well structured view of cognitive properties of the global mindset, this framework does not provide sufficient insight into the mechanism behind the conversion of the cognitive capability into behavioral outcomes. Beechler and Javidan (2007) fill in this gap by delineating dimensions of global mindset as (1) *global intellectual capital*, (2) *global psychological capital* and (3) *global social capital*. *Global intellectual capital* is as cognitive dimension comprised of three clusters, namely knowledge (of global industry; global value networks, and the global organization); cognitive complexity; and cultural acumen. *Global psychological capital* represents a motivational mechanism behind converting knowledge and cognitive attributes into successful outcomes, and is defined as an individual's positive psychological state generated and maintained due to self-efficacy, optimism, hope, and resiliency (Luthans and Youssef, 2004) as well as cosmopolitanism; and passion for cross-cultural and cross-national encounters (Beechler and Javidan, 2007). *Global social capital* reflects that outcomes are achieved while interacting with others due to the exponential rise in importance of relationships and networks. It consists of structural assets based on the position of the individual in a network; relational assets such as trust derived from interaction with others in the network; and cognitive resources due to sharing representations, interpretations and systems of meanings (Beechler and Javidan, 2007). In the next section we link these three capitals to pre-requisites for an effective performance by international entrepreneurs and highlight the relevant IE competencies.

Table 1: Six dimensions of personal characteristics facilitating global mindset

Personal characteristics (Antecedents)	**Competencies (Outcomes)**
Technical, business and industry knowledge on a global scale	Management of competition due to constant global scanning for knowledge and information
Conceptualization at both specialized and holistic levels; intuitive right-brain combined with analytical left-brain skills; Openness to and awareness of diversity across businesses, countries, cultures and markets (Govindarajan and Gupta, 2001); Dualistic perspective (Pucik, 2006) that allows to balance competing dimensions rather than prioritizing any of the dimensions at the expense of the others (Murtha et al, 1998); Ability to notice and integrate diverse elements in the external environment (Beechler and Javidan, 2007)	Management of complexity due to looking at adversity as opportunity. Contradictory forces and ideas are appreciated as a source of creative potential contained in reconciling the opposites; Balancing contradictions, ambiguities and trade-offs (Tetlock, 1983); Managing dualities and paradoxes (Levy et al, 2007a)
Flexibility in adapting to rapid changes in the environment	Management of adaptability due to creating an organizational culture responsive to constant change
Sensitivity to cultural diversity	Management of teams due to valuing diversity and interdependence of team members and being sensitive and flexible in understanding and meeting needs of diverse team members
Making judgement intuitively when inadequate information is available	Management of uncertainty due to perceiving change as opportunity
Reflection; Seeking constant improvement through lifelong learning; Openness to - outsiders, ideas and experiences; - exploring alternative systems of meanings; - learning from these systems (Govindarajan and Gupta, 2001; Levy et al, 2007)	Management of learning due to being open to rethinking boundaries, finding and accepting new meanings, and changing behaviors; Learning from everywhere and embracing best practices from all over the world (Morrison, 2000).

Source: Based on Rhinesmith (1992), unless a reference is made to another source

4. Three Global Capitals, IE Competencies and Effective Task Performance

While the field of mainstream entrepreneurship has made significant progress in connecting entrepreneurial tasks, competencies and performance (see, for example, Man et al., 2002; Murphy et al., 1996), to date there is rather limited empirical evidence that sheds light on the behaviors of international entrepreneurs – more specifically, how they recognize opportunities internationally; identify, assess and manage involved risks; and access resources, skills, knowledge and ideas available globally (Mathews and Zander, 2007). Unprecedented international opportunities exist in a very complex environment characterized by multiplicity, interdependence and ambiguity (Lane et al, 2004). Hence, international entrepreneurs need to develop competencies that go beyond the home environment in order to adopt a global perspective, embrace similarities or transcend differences in cultural values, business practices and political and economic infrastructure (Eyre and Smallman, 1998).

As stated in the introduction, what competencies an individual entrepreneur develops is, to a large extent, determined by his / her mindset. One of the central premises of the paper is that global mindset will help create global intellectual, psychological and social capitals. These three types of capital underpin the acquisition and further development of competencies pertinent to successful accomplishment of entrepreneurial tasks and actions (i.e., behaviors) and, ultimately, an international venture success.

Intellectual capital in the form of *knowledge and cognitive properties* plays a significant role across the entire spectrum of entrepreneurial tasks. For example, starting with search for opportunities, entrepreneurs' knowledge and idiosyncratic information on specialized product types and usages may make search for and pursuit of worldwide opportunities relatively simple and straightforward because of information asymmetries between individuals (Dimitratos and Jones, 2005). Oviatt and McDougall (2005a) argue that knowledge novelty, intensity and complexity is not only a reliable predictor of accelerated internationalization by new ventures, but also a unique source of sustainable competitive advantage in international markets. The types of knowledge embedded in a firm may influence how quickly an entrepreneurial opportunity is identified and exploited. Entrepreneurs' knowledge, often a product of prior knowledge about markets, customers, and the ways to serve these markets (see Shane, 2000), as well as exposure to a foreign environment, is instrumental in the entrepreneur's decision to establish a venture and marshall the required resources of the nascent firm (Kuemmerle, 2002). Based on the assessment of these resource requirements, the entrepreneur further expands her network of relationships with capital providers, potential customers and suppliers (Kuemmerle, 2002: 103). Other cognitive competencies conducive to international venture success are:

- ability to exert global vision by detaching oneself from business thinking delineated by a single country or culture (Oviatt and McDougall, 1995; Johnson, 2004);

- creativity and trial-and-error learning, rather than relying on previous international business experience in a given sector or "tried and true" solutions (George et al., 2004); and

- ability to create wealth by reconciling conflicting cultural values (Hampden-Turner and Trompenaars, 2000) and through "intellectual internationalization" (Geursen and Dana, 2001).

As Mueller and Thomas (2000: 52) put it, "potential entrepreneurs must perceive themselves as capable and psychologically equipped to face the challenges of a global, competitive marketplace". *Psychological capital* and its constituent positive state-like capacities of hope, optimism, resiliency and self-efficacy have been shown to be a strong predictor of individual performance and an individual's ability to flourish in different cultural contexts (Clapp-Smith et al., 2007), by means of widening 'the array of thoughts' (i.e., cognitive capabilities) as well as behavioral repertoires (Fredrickson and Losada, 2005; Fredrickson and Branigan, 2005). Specifically, e*ntrepreneurial self-efficacy* (ESE), defined as "the strength of a person's belief that he or she is capable of successfully performing the various roles and tasks of entrepreneurship" (Chen et al., 1998: 295), may, to some extent, explain the motivational mechanism behind the decision to pursue international opportunities (Muzychenko, 2008) and success in cross-border entrepreneurial activity (Andersson, 2000). High levels of ESE are likely to impact the willingness of individuals to learn new ways of thinking and behaving in a host country and contribute to individuals' motivation to understand and adapt to a new environment (Black and Mendenhall, 1991; Early and Ang, 2003). For example, Luthans and Ibrayeva (2006) demonstrate empirically that ESE mediates the relationship between dynamic, hostile environments, and the venture performance outcomes. The evidence on the specific psychological competencies related to successful entrepreneurial task performance and venture success in a cross-border context is, however, lacking. Extrapolating from mainstream entrepreneurship literature, we argue that the pertinent competencies include (Clapp-Smith et al., 2007; Luthans and Ibrayeva, 2006):

- capacity for greater levels of inquiry due to positivity and higher energy levels, which is essential in processing conflicting information than one would confront in vastly different national contexts;

- management of complexity in unfamiliar environments due to higher levels of cognitive complexity and cultural intelligence;

- learning due to enhanced reflection and self-regulating behaviors in unfamiliar settings; and

- coping abilities necessary to sustain effort even in light of uncertain outcomes afforded by international environments.

Social capital has a direct impact on the success of the entrepreneur (Baron and Markman, 2000) and the speed and probability of founding new ventures (Davidsson and Honig, 2003; Baron and Markman, 2003). Entrepreneurship is essentially a networking activity: entrepreneurs are embedded in social networks that play a critical role in the entrepreneurial process (Aldrich and Zimmer, 1986; Hansen, 1995; Hoang and Antoncic, 2003). Networks help founders of international new ventures to identify international business opportunities and appear to be more influential in foreign market selection and entry than entrepreneurs' psychic distance to these markets (Oviatt and McDougall, 2005a; Coviello and Munro, 1995). Networks are critical in establishing credibility and legitimacy in international markets, and often lead to cooperative strategies which enable entrepreneurs to overcome the paucity of resources and the liabilities of foreignness and newness, and promote mutual learning (Oviatt and McDougall, 1994; Gabrielsson and Kirpalani, 2004; Arenius, 2002). IE competencies developed through networks include:

- ability to use foreign investors in order to gain access to their networks and thus develop global vision by being exposed to international opportunities (Maula and Makela, 2003);

- understanding differences in networking behavior across cultures and the ability to build and develop a cross-border network (Muzychenko, 2008);

- awareness of cultural differences in the behaviors of investors (Oviatt and McDougall, 1995);

- awareness and understanding of dominant entrepreneurial cognitive archetypes across cultures in order to better manage stakeholder relationships in cross-border alliances and partnerships (Mitchell et al., 2002); and

- awareness of the culturally determined preference for organizational forms of an alliance, such as equity ties versus flexible arrangements (Steensma et al., 2000).

5. Entrepreneurial Global Mindset

Given the importance of the global mindset concept to the field of international management research and the practice of management in multinational corporations, it is somewhat surprising that entrepreneurial global mindset has received very scant attention from scholars of international entrepreneurship. The only study of global mindset in entrepreneurial firms known to us, by Numella, Saarenketo and Puumalainen (2004), somewhat vaguely defines global mindset as having both attitudinal and behavioral elements, stating that the concept "seems to include elements that are close to an international entrepreneurial orientation" (p. 54). It appears, therefore, that a definition of 'entrepreneurial global mindset' is in order.

We believe that the current definition and conceptualization of global mindset developed in international management research cannot be easily extrapolated to entrepreneurial firms. First, most researchers see global mindset as an individual- group- or organizational capability, often confusing the levels of analysis. Therefore, global mindset as represented in international management literature can tentatively be considered a multilevel construct (Levy et al., 2007b: 24). By contrast, the process of IE is centred on the individual, hence entrepreneurial global mindset should be considered an individual-level phenomenon. Second, the international entrepreneur acts in the challenging context of liability of smallness, newness, environmental dynamism and resource scarcity not characteristic of managers in large multinationals, and has to be resourceful in generating sustainable competitive advantage for a new organization. Oviatt and McDougall (2005b: 5-6) aptly summarize these challenges faced by international entrepreneurs. International new ventures usually suffer from a poverty of resources, which requires them to internalize a minimum proportion of their assets and focus on less costly governance mechanisms (such as network structures) to control a greater percentage of vital resources than mature organizations would. These ventures gain foreign location advantages from private knowledge which is made sustainable through one or more means of protection – imperfect imitability, licensing, networks and patents.

Acknowledging these differences between international entrepreneurs and managers of established MNCs, we propose to define entrepreneurial global mindset as

> an individual-level dynamic capability that consists of stocks of knowledge, and cognitive and psychological attributes that enable the entrepreneur to successfully perform entrepreneurial tasks in diverse socio-cultural contexts and create value generating advantages from socio-cultural and economic diversity.

Our conceptualization of 'global mindset' is grounded in prior research briefly reviewed in the previous sections and other research in international business and entrepreneurship. Specifically, following others (e.g., Govindarajan and Gupta, 2001; Bartlett and Ghoshal, 1989; 1997) we consider entrepreneurial global mindset a dynamic capability, stressing the entrepreneur's ability to develop, apply and enhance her knowledge and attributes in rapidly changing volatile international environments. Entrepreneurial competencies and attributes are linked to successful task performance and value creation, as posited in the literature on the role of competencies in venture competitiveness and success (e.g., Man et al., 2002). The notion that cognitive capabilities of managers, or global mindset, are important to organizational outcomes (firm performance) is central to much research on MNCs (e.g., Kobrin, 1994; Calori et al., 1994) since the early works on foreign direct investment by Aharoni (1966) and Kindleberger (1969) (see Levy et al., 2007a: 231). Our definition also emphasizes the socio-cultural and economic diversity of contexts in which entrepreneurs operate. Significant cross-border differences will continue to shape global opportunities and firm strategies for the foreseeable future (see Ghemawat, 2007), having a profound impact on the abilities of the entrepreneur to recognize opportunities, assemble and control the resources required to succeed, and generate and realize the value of the business (Isenberg, 2007).

The fit between the global mindset dimensions in the form of three capitals on the one hand and the factors behind effective performance/success in IE on the other hand leaves little doubt that global mindset is an important capability for aspiring and practicing international entrepreneurs. As such, global mindset development should be incorporated into the entrepreneurship education curriculum. In the next section we discuss how we might approach the question of education and training designed to develop competencies that support global mindset, starting with a discussion of the layers of competence.

6. Global Mindset Competence Training

6.1. Layers of Competence

Most models of competence recognize multiple components or 'layers'. For example, Boyatzis (1982) and Spencer and Spencer (1993), both reflecting the seminal work of McClelland (e.g., McClelland, 1965) identify three layers: skills/ knowledge; values/attitudes, self-concept; and traits/motives. Bartlett and Ghoshal (1997) divide competence into attitude/traits, knowledge/experience, and skills/abilities. Man, Lau and Chan (2000) also propose three elements: personality trait, skill and knowledge.

There is general recognition among scholars that the layers of competence exhibit varying degrees of propensity to change and are, in fact, more or less readily changed. For Spencer and Spencer (1993: 11), skills and knowledge are more superficial characteristics and more readily changed, while traits and motives are 'deeper', more difficult to assess and change. Likewise, Bartlett and Ghoshal (1997: 104) describe attitudes, traits and values as "deeply embedded personal characteristics…intrinsic parts of the individual's personality and character", whereas knowledge, experience and understanding can generally be "acquired". Lau et al. (2000) differentiate personality traits as "inborn characteristics", unlike skill and knowledge.

It follows that this range of changeability in competencies will be reflected in the views on competence training – one would expect training efforts to focus on competencies that are more accessible and amenable to change, and to avoid those that are seen as more entrenched and resistant to change. One exception is Bird (1995), who defines competencies in a way that generally renders them changeable and learnable. However, for the most part competencies are differentiated in relation to acquisition, based on what 'layer' they appear in.

Despite McClelland's insistence that certain core motives can be cultivated by intensive training (McClelland, 1965; McClelland and Winter, 1969; Miron and McClelland, 1979), he and his colleagues recognized that such embedded characteristics are relatively difficult to change so it is usually cost effective to *select* for them and to develop only the surface level skills and knowledge through training. Spencer and Spencer (1993: 12) quote a personnel director: "You can teach a turkey to climb a tree, but it is easier to hire a squirrel".

Black and Mendenhall (1990), in their comprehensive review of training for cross-cultural competence, develop a theoretical framework based on Social Learning Theory. They focus on the critical role played by self-efficacy and outcome expectations and recommend training in skills and knowledge that increase those characteristics. Likewise, Bennett (2004: 158) bases her training framework on awareness and skills, and the assumption that "as one's experience of cultural difference becomes more complex and sophisticated, one's competence in cultural relations increases".

Although the layers of competence proposed by Bartlett and Ghoshal (1997: 106) differ from McClelland's, they report that many companies are coming to the view that "innate characteristics should dominate acquired experience as the key selection criteria". While focussing on developed skills and abilities as "the best indicators of job success", they recognize that the successful acquisition of such skills often relies on the interaction of embedded traits and accumulated experience. In their view, "the most effective role management can play is to coach and support those they have selected and prepared for the job by providing the resources, reinforcement, and guidance to encourage the self-development process" (p. 111).

Most researchers, then, do not believe that competence development can be fully addressed by training. While training may have a role to play, it is likely to be most effective when undertaken on the foundation of more deeply embedded characteristics that are better selected for, or brought out on the job, than trained for.

As we bring this perspective to bear on the field of entrepreneurship, it is worth noting that an unbending reliance on training as *the* answer to entrepreneurial development is limiting. Man (2005: 5-6), for example, recognizes that competencies associated with entrepreneurial learning present themselves in layers. Building on the processes developed by McClelland and his colleagues at Hay/McBer, Man identifies the factors that lead to superior entrepreneurial learning, categorized as skills, knowledge and attributes and the constituting learning behaviors in the context which facilitates the development of such behaviors. He concludes that "education and training for the entrepreneur should put an emphasis on behavioral modification of the entrepreneur's learning patterns, rather than skill acquisition, knowledge transfer and attitudinal change separately" (Man, 2005: 11). Although Man (2005) identifies these critical behaviors – such as "actively seeking learning opportunities", "learning continuously", "learning selectively and purposely" and "transferring what have been learned into current practices" – as prerequisites for the effective utilization of skills and knowledge, it could be argued that it is exactly these embedded behaviors that are, in practice, *least* amenable to training.

In considering how to support competence development through education and training, it may be important to distinguish the competencies that are prerequisites to effectiveness *but not easily changed*, from those competencies that are more readily developed. The existence of the 'layers' of competence and the tractability of the outer layers – skills, knowledge and, in part, self-concept (especially self-efficacy) – will lead us, then, to focus our attention on those particular elements of competence, rather than on the inner, relatively intractable traits, motives and attitudes of personality.

6.2. Developing Global Mindset

Cultivating a global mindset at a personal level is well discussed in the literature (Gupta and Govindarajan, 2002; Rhinesmith 1995; Estienne, 1997; Earley and Mosakowski, 2004; Maznevski and Lane, 2004). There seems to be an agreement that global mindset is underpinned by some personality traits and attitudes (Gupta and Govindarajan, 2002; Maznevski and Lane, 2004; Levy et al., 2007). These internalized (non-trainable) elements are curiosity and openness about the world (Gupta and Govindarajan, 2002; Maznevski and Lane, 2004), tolerance of ambiguity (Maznevski and Lane, 2004), and willingness to learn and to adapt (Estienne, 1997). Externalized (trainable) elements of a global mindset include:

- being self-conscious about one's current mindset / cultural values (Gupta and Govindarajan, 2002; Estienne, 1997);
- possessing knowledge about other countries' history and macroeconomics (Maznevski and Lane, 2004), other cultures (Gupta and Govindarajan, 2002) and assumptions that drive business practices and behaviors in these cultures (Estienne, 1997);
- understanding the international context of doing business (Estienne, 1997; Gupta and Govindarajan, 2002);

- international business and management skills (Maznevski and Lane, 2004; Gupta and Govindarajan, 2002); and

- interpersonal communication and team management skills (Maznevski and Lane, 2004).

Apart from knowledge and skills acquisition, development of a global mindset incorporates (a) building a comprehensive cognitive structure that guides the process of information selection and processing and (b) building a capability for constantly updating this cognitive structure once exposed to new experiences (Maznevski and Lane, 2004). Gupta and Govindarajan (2002) believe that cognitive diversity (schema change and development) is fostered through experience while knowledge and skill acquisition related to international business management, country specific history, culture, economy, and foreign languages occurs are developed through formal education. A different point of view is advocated by Lane and colleagues (2004) who suggest that a global mindset can be learned through formal education provided the right combination of methods and tactics is selected to reach learning objectives.

The most effective method in developing cognitive structures is experiential learning because it incorporates feedback (Kolb, 1983). Kolb (1976) suggests a learning cycle model that outlines the sequence and the role of different information perception and information processing activities in the overall experiential learning process. According to Kolb (1976), we move from concrete experience to reflective observation. This progression provides a foundation for abstract conceptualization, which then allows us to act and experiment. To complete one's learning one has to go though all four stages, hence different learning styles have to be adopted as we progress through the cycle. Every learner, however, has a personal preference for a particular learning style. A personal learning style is determined by one's inclination to a particular way of information perception (doing or watching) and processing (thinking or feeling). Therefore, the methodological approach conducive to developing a global mindset should include a variety of methods and materials to ensure that the learner goes through all stages of Kolb's cycle, and learning style preferences of all learners are catered for (Maznevski and Lane, 2004).

Drawing on our experience as entrepreneurship educators and the received literature on how a global mindset can be cultivated, we argue that educational objectives and pedagogical tactics developed for International Management curriculum can be successfully adapted for use in entrepreneurship education programs. In view of the critical importance of a global mindset to effective entrepreneurial behaviors, such as international opportunity identification, and ultimately to the venture success, our suggestion is to consider seriously the need for developing global mindset competencies. The approaches to curriculum design intended to cultivate these specific competencies can include either developing a specialized course within a degree program or infusing the relevant material into traditional courses (Cant, 2004).

Table 2: Teaching global mindset: Learning objectives and tactics

Learning objectives Maznevski and Lane (2004)	**Dimensions of global mindset** Rhinesmith (1992), Beechler and Javidan (2007)	**Tactics relevant to International Management** Maznevski and Lane (2004)	**Tactics relevant to Entrepreneurship**
Self-awareness: understand and describe one's own schema	Sensitivity	Exercises (including self-assessment) to articulate own values, cultural orientation and worldview.	What values and cultural orientations shape your entrepreneurial drive and attitude to risk and uncertainty?
Schema development through experience and feedback	Knowledge Flexibility Social capital	Understanding and appreciating diversity through experiencing the influence of different cultural context on one's behavior. Field trip abroad, immersion in another culture locally (interacting with cultural group different from one's own), role plays, case studies.	Concrete and vicarious experience that allows exposure to culture contingent entrepreneurial behaviors and any elements that surround the process of venture creation in different countries (Muzychenko, 2008). Examples may include networking and negotiating strategic alliances. Interaction with local ethnic entrepreneurs.
Develop ability to connect categories and exercise system (holistic) thinking	Conceptualization Judgement Intellectual capital	Exercises that force to connect various elements; to create a bigger picture. Example: How contingent behaviors are related to universal ones	Learning to discover cross-border entrepreneurial opportunities by embracing local cultural and market structures and seeing new combinations as a result (Geursen and Dana, 2001). Generating innovative ideas through combining opposing concepts (Ward, 2004) utilizing "dilemma theory" and techniques by Trompenaars and Hampden-Turner (2001). This technique is geared toward developing ability to create wealth through reconciliation of conflicting cultural values.
Ongoing development of one's cognitive properties	Reflection Psychological capital	Provide opportunities to apply learned competencies and continue development.	Activities stretched over a considerable period of time such as an action learning engagement or a field research project (e.g. business plan that involves a cross-border activity).

A representative example of how entrepreneurial global mindset can be taught, drawing on the experience of colleagues in international management and personal experience, is provided in Table 2 above. The left-hand column 'Learning Objectives' is informed by Maznevski and Lane's (2004) research-based educational objectives for developing a global mindset in managers of multinational corporations. In the next column, 'Dimensions of global mindset' are based on our previous discussion of the components of global mindset in terms of three 'capitals' (Beechler and Javidan, 2007) and personal characteristics and competencies in international entrepreneurs (Rhinesmith, 1992). Consistent with our argument above that pedagogical tactics for international management are relevant to the field of entrepreneurship, we cite some specific examples of pedagogies and tools. Finally, drawing on personal experience and somewhat scarce research in the area, we suggest how these tactics can be translated into a real classroom experience for aspiring international entrepreneurs.

As a concluding remark, we would like to emphasize the inherently dynamic, reciprocal nature of the relationship between entrepreneurial global mindset (with the entrepreneur's personal characteristics as antecedents) and competencies as outcomes – or, in other words, the 'being' side of IE with the 'doing' side (see Rhinesmith, 1992). The 'being side' drives the development of competencies, but the reverse is also true: competencies influence the mindset of the entrepreneur.

7. Conclusion

Developing a global mindset is an important issue for entrepreneurs, entrepreneurship scholars, educators and governments alike, because it has been argued that such mindset can become a key source of long-term competitive advantage in global markets and a critical factor influencing a number of organizational outcomes (see Levy et al., 2007a). Global mindset requires developing a set of specific competencies. While existing studies shed some light on the nature of entrepreneurial competencies and point to various practical solutions, researchers and educators are still faced with the challenge of understanding which specific competencies are needed for international entrepreneurs, including those that relate to a global mindset. In this paper we have started to address this important issue.

Drawing on the multidimensional conception of 'global mindset' (Rhinesmith 1992; Beechler and Javidan, 2007), and highlighting the differences between multinational corporations and young start-ups, we offer our own definition of global mindset in entrepreneurs. We demonstrate how the various dimensions of global mindset – specifically, global intellectual capital, global psychological capital and global social capital – are related to IE competencies and successful task performance. We suggest that, given the fit between global mindset competencies and the process of IE, global mindset is an important capability for prospective entrepreneurs. Finally, we differentiate between internalized (non-trainable) elements and externalized (trainable) elements of global mindset to show which pedagogical tactics could be employed to address the trainable antecedents of global mindset in entrepreneurs.

Following Levy and colleagues (2007a; 2007b) we note that there have been very few empirical studies of global mindset to date, and even fewer in the area of IE. Going back to our model presented in Fig. 1, and drawing on our discussion of the received literature, we suggest the following research agenda. To start with, we need a detailed understanding of global mindset in entrepreneurs in a variety of national contexts and industries, as well as how specifically such global mindset can be linked to an effective entrepreneurial task performance (e.g., international opportunity identification or risk management). In our definition of entrepreneurial global mindset we stressed the dynamic nature of such mindset, hence one of the possible research avenues would be to examine whether and how mindset evolves over time, and how this evolution impacts effective action and venture success in overseas markets. Research using cognitive mapping (see Calori et al., 1994) could focus on diagnosing global mindset development in entrepreneurs and hence facilitating individual learning and acquisition of competencies which may be found lacking. Further, to our knowledge, there is no empirical work that investigates how global mindset-associated competencies can be developed in entrepreneurs. Such studies could greatly assist entrepreneurship educators in designing a more effective curriculum and policy makers in funding appropriately designed entrepreneurship training programs.

Finally, we believe that the intersection of the three research paths which informed our research – global mindset, the process of IE and competence development – represent a useful avenue for further empirical work. This is consistent with the calls by Levy and colleagues (2007a: 230) who 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".

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