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An Empirical Study On The Global Mindset Antecedents

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### Abstract

The forces of globalization are changing the skills and competences required by effective global leadership. Accordingly, Business Schools (BSs) must adapt curriculums to the new queries so they, in fact, do develop future leader able to meet the challenges ahead. Increasing attention is being placed on global mindset (GM). Yet, this concept lacks research support. To help fulfilling this gap this research analyzes the effect that cultural intelligence (CQ) and a set of both personal and psychological characteristics have on GM enhancement. Based on a sample of academic students ( $N=220$ ), findings suggested that CQ, vacations abroad and cosmopolitanism directly increase GM, while # language, PsyCap, TA and CSA do it indirectly. Practical implications for BSs and conclusions finalize this study.

*Keywords:* global leadership, global mindset, indicators of global mindset, business schools

### **Overview of Global Leadership**

Globalization is transforming the business competitive landscape and rendering traditional business systems to be irrelevant (Mendenhall et al., 2008). Organizational superiority must now be equated differently, demanding the search for talent to be done regardless of the individuals' cultural backgrounds (Perlmutter, 1969). As a result, interactions between people and ideas from different cultures, in and outside organizations (Adler, 1999), have become frequent giving rise to the global leadership paradigm. This paradigm refers to the ability of successfully operating in the global milieu and to, simultaneously, be respectful of cultural diversity (Moran, Harris, & Moran, 2004). This soft skill comprises universal qualities that allow leading outside one's organizational and national culture (Chen & Eadthongsai, 2011) and is, therefore, an imperative requisite for the attainment of organizational success (Jokinen, 2005).

Conclusions of previous studies such as the ones carried out by Gregersen, Morrison and Black (1998)<sup>1</sup> suggested that organizations visibly lack the quantity and quality of global leaders they need, both in the present and in the future. It is a Business Schools' (BSs) responsibility to effectively instill in students the business skills and intellectual rigor global leadership demands (Gitsham, 2009). This duty becomes even more important given the current emphasis organizations place on recruitment processes. Yet, overall supply is falling short of demand (Gitsham, 2009) highlighting the need for better and more adequate management education and leadership development (Gitsham, 2009). In this sense, BSs must adjust their programs so they can catch up and meet the macro environment's ever-changing demands. However, even though global leadership is open to development (Hollenbeck, 2001; Cseh, Davis, & Khilji, 2010), there is not yet an agreement on the competencies it requires as little research has been done in this field (Smith & Peterson, 2002). To date, research has mainly focused on behaviors and knowledge, but mindsets are increasingly receiving more attention. As a

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<sup>1</sup> Such studies have been recently reinforced by the ones of World Economic Forum (2011) and the Manpower Group (2013).

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result, global mindset (GM) is assumed to be a solution that enables individuals to achieve the new thinking (Pfeffer, 2005) that this new era requires (Baruch, 2002; Cohen, 2010; Chen & Eadthongsai, 2011; Kedia & Mukherji, 1999; among other authors). However, this concept does not have a clearly stated definition<sup>2</sup> in literature and, given the lack of research support, its indicators are still mere speculations. Thus, this research aims to help fill this gap by empirically testing the relationship between the level of cultural intelligence (CQ), Portuguese academic students' personal and psychological characteristics and GM (N=220). Moreover, to date studies have mainly focused on samples of expatriates or international business people. However, the development of GM should not be limited to individuals who already have international experience, therefore emphasizing the relevance of this research considering that it analyzes a sample of students.

Taken as a whole, this research proposes to address the following questions: (1) Which variables contribute to the development of students' GM?; (2) Are there any relevant relationships between the variables that help to develop students' GM?. After reviewing the literature about GM and deriving the theory-driven hypotheses, the proposed relationships are analyzed, and are followed by the presentation of the results and practical implications for BSs.

### **Global Mindset**

Perlmutter (1969) has outlined three macro orientations to manage multinational corporations: ethnocentric (home country orientation), polycentric (host country orientation), and geocentric (world orientation). The latter then corresponds to GM definition.

Rhinesmith (1992) has later defined GM at a micro level. The author describes it as the individuals' way of being that allows them to have a holistic perspective of the world, as well as to value differences, deal with complexity and scan the global set looking for unexpected business trends. Also from a micro-perspective, Kedia and Mukherji (1999) divided GM into two pillars: (1) knowledge, an

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<sup>2</sup> GM has already taken the form of skills, attitudes, competencies, behaviors, strategies and practices (Levy, Beechler, Taylor, & Boyacigiller, 2007); and has been associated to both individuals and organizations (Kottolli, 2007 In Cseh et al., 2010).

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appreciation of differences; (2) skills, an aptitude that puts knowledge in action. Subsequently, Gupta and Govindarajan (2002) focused on knowledge to define the GM concept. They assume it to be a knowledge framework that requires differentiation (breadth of knowledge brought to organizations) and integration (high degree of integration of knowledge elements) in the context of cultures and markets.

Later, Boyacigiller, Beechler, Taylor and Levy (2004) broke GM down into two other dimensions. The first is the cosmopolitan orientation, the willingness to engage with the other, and the second is the cognitive complexity, the ability to think in multifaceted ways about the world and to develop quick and analytical thinking. Beechler and Javidan's (2007) used the same dimensions to explain the concept, but named them differently: respectively, psychological capital and intellectual capital. Furthermore, these authors added a third element, the social capital, which regards the individuals' participation in social networks, the nature of the relationships developed in such networks and the collective meanings retrieved from them.

All in all, GM regards the ability to act in diverse cultural settings and to influence individuals, groups, organizations and systems with disparate knowledge structures (Cohen, 2010). Despite the multitude of indicators proposed to antecede it, literature seems to agree that its development requires close attention to cognitive and intellectual dimensions, individual needs (Story, 2011) and personal differences (Chen & Eadthongsai, 2011).

### **Global Mindset Antecedents and Study Hypotheses**

In the same way that global leaders are continuous learners (Davis et al., 2013; Terrell & Rosenbusch, 2012), also GM can be cultivated over time and through experience (Boyacigiller et al., 2004; Clapp-Smith, 2009; Cohen, 2010; Gupta & Govindarajan, 2002)<sup>3</sup>. For that reason, as previously cited, this study analyzes the variables that based on literature appear to be pertinent

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<sup>3</sup> One can perceive the development of GM to be ceaseless and often an uncertain journey without upper limits (Gupta & Govindarajan, 2002)

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candidates to predict GM. The selected antecedents are: cultural intelligence (CQ), personal characteristics (formal education, language skills (# languages) and informal learning) and psychological traits (PsyCap, tolerance for ambiguity (TA), cosmopolitanism and cultural self-awareness (CSA)).

### **Cultural Intelligence**

Chen and Eadthongsai (2011) support the view that CQ is an essential aptitude when leading groups of individuals with different backgrounds; therefore it is a compulsory quality for effective global leadership. CQ is defined as the ability to adapt to different cultural contexts, to appreciate the diversity of experiences and to originate fast, accurate and adapted responses. Earley and Ang (2003) conceptualized it in three multidimensional facets: cognitive, motivational and behavioral.

The cognitive facet is based on: self-knowledge that demands openness to continuously work with and learn from people worldwide (Adler & Bartholomew, 1992); resilience to reformulate one's self-image regarding environmental stimulus and strong reasoning skills. The self-awareness and strong reasoning skills brought out a fourth facet - metacognitive (Ang et al., 2007).

The motivational facet comprises: self-efficacy, the belief in the ability to succeed, willingness to re-engage and accomplish goals and commitment to face challenges (Earley & Ang, 2003). This facet is at the core of successful changes, so its development is fundamental given the instability felt in the current macro environment (Kotter & Cohen, 2002).

The behavioral facet refers to the capacity of being flexible and to perform accordingly to each specific cultural environment. This facet is influenced by (Earley & Ang, 2003) and related to (Ang, 2007) the motivational one. Clapp-Smith (2009) corroborates with this view, adding that a positive relationship between them will trigger GM development. Literature also stresses that there is an important relation between the behavioral facet and the cognitive one. On one hand, the adaptation of behaviors alone, by responding to cues or using mimicry, can, in certain cases, seem insincere

(Thomas, 2006). On the other hand, knowledge itself is not enough to guarantee effective performances (Kedia & Mukherji, 1999). As a result, behavioral adaptations require knowledge about the other culture, the understanding of both people's expectations and individual's own objectives (Thomas, 2006).

CQ is perceived to increase GM (Earley & Ang, 2003; Keung & Rockinson-Szapkiw, 2013; Story, Barbuto, Luthans & Bovaird, 2013) and to facilitate the relationships between GM and other variables (Lovvorn & Chen, 2011). In this regard, the first hypothesis of this study is as follows:

*Hypothesis 1: CQ predicts the development of GM.*

### **Personal Characteristics**

“Global leaders are born and *then* made” (Gregersen, et al., 1998, p. 28). In accordance with it, Clapp-Smith and Hughes (2007) suggested that the leaders' personal history, i.e., the personal characteristics and competencies acquired throughout their lives may predispose individuals and significantly influence the development of their GM. In this view, formal education not only enhances literacy but also help to build the essential knowledge about diverse cultures and markets at the individual level (Caligiuri, 2006; Lovvorn & Jiun-Shiu, 2011). In this view, this variable is conveyed to trigger GM development (Gupta & Govindarajan, 2002), but, to effectively achieve this end, it must entail cross-disciplinary activities and address tangible topics with international content<sup>4</sup> (Kedia & Englis, 2011; Gregersen, et al., 1998; Caligiuri, 2006). Solely relying on the globalization of individual mindsets “would be woefully inadequate vis-a-vis industry and competitive imperatives”<sup>5</sup> (Gupta & Govindarajan, 2002, p.121), nevertheless higher education is still being perceived to be a crucial indicator of GM. As a result, the second hypothesis is formulated:

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<sup>4</sup> Examples of tangible topics are international finance, project management software, cultural dimensions, global or cross-cultural matters, international marketing, languages (Caligiuri, 2006); information systems networks (Ananthram and Pick, 2012; Kedia & Mukherji, 1999); and soft skills as change management, cross-cultural communication, multi-cultural team leadership (Gregersen et al., 1998).

<sup>5</sup> Gupta, A. K. & Govindarajan, V. (2002). Cultivating a global mindset. *Academy of Management Executive*, 16(1), 116-126.

*Hypothesis 2: Formal education predicts the development of GM.*

Another variable empirically proved to develop GM is language skills (Clapp-Smith & Hughes, 2007; Huff, 2013; Story et al., 2013). Further studies (Triandis, 2008; Alon & Higgins, 2005) suggested that this variable also helps predicting CQ enhancement. The third hypothesis is then formulated:

*Hypothesis 3: # languages predict the development of GM.*

Moreover, Terrell and Rosenbusch (2012) demonstrated that experiencing phenomena also enhance GM. In the same line of thought, authors as Adler and Bartholomew (1992), Ananthram and Pick (2012), Boyacigiller et al. (2004), Gregersen et al. (1998) and Gupta and Govindarajan (2002) agree on the idea that experiences trigger contrasting perspectives and force individuals to think globally, thus they add value that must be integrated during the process of GM development. To study the impact of such experiences in GM enhancement, this research explores the variable of informal learning, dividing it into three sub-variables: (1) multicultural circles of friends and networks; (2) the use of global scope media, as the reading of internationally focused publications (Cohen, 2010; Davis et al., 2013, Javidan et al., 2010; Terrell & Rosenbusch, 2013); (3) working within multicultural teams (Gregersen et al., 1998).

*Hypothesis 4: Informal learning predicts the development of GM.*

Keeping the focus on experiences, authors such as Ananthram & Pick (2012), Davis, Kedia, Ben, & Harveston (2010), Caligiuri & Tarique (2009); Boyacigiller et al. (2004); Kedia & Englis (2011); Kitsantas (2004) defended the idea that international experiences increase global competences and reflect the global mindset, knowledge and skills needed to succeed in the worldwide marketplace. Black et al. (1999) contributed to this view by empirically demonstrating that wider amounts of time spent abroad provide means to develop skills that otherwise would not be easily developed. Even though first-hand cross-cultural experiences are key contributors for GM development (Ananthram &

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Pick (2012), an emphasis is placed on the fact that per se they are insufficient. Enriching and challenging experiences (Story et al., 2013) must go hand-in-hand with willingness to learn (Terrell, & Rosenbusch, 2013), genuine contact with locals, immersion into the host country's customs, traditions and cultures, and least but not last, detours from the traditional paths (Ananthram & Pick, 2012; Caligiuri, 2006; Cohen, 2010; Gregersen et al., 1998; Levy et al., 2007; Story et al., 2013). This way, hypothesis 5 is formed:

*Hypothesis 5: International experiences predict the development of GM.*

### **Psychological Characteristics**

Concerning the psychological antecedents, the positive psychological capital (PsyCap) was demonstrated by Luthans, Avolio, Avey and Norman (2007) to be a higher-order core construct. Luthans and Youssef (2004) operationalized PsyCap into four components: (1) Hope is referred to the will and internalized determination to achieve goals and the capability to find alternative pathways when the original one is blocked. (2) Self-efficacy is the capacity to mobilize motivation, cognitive skills and actions to execute a specific course of action given the context. It encourages individuals to choose challenging tasks and endeavors, extend motivation and effort to successfully accomplish goals and persevere when facing difficulties. (3) Resilience is the ability to sustain and bounce back when experiencing stress, problems or even positive events. (4) Optimism regards an explanatory style that associates positive events to internal, permanent, and pervasive causes, whereas negative events are associated to external, temporary, and situational causes. It triggers individuals' self-esteem and morale and holds them off from unfavorable life events, depression, guilt, self-blame and despair.

Taken as a whole, PsyCap represents who individuals are, i.e., the psychological self and what one can become (Luthans, Avey, Clapp-Smith, & Li, 2008). This variable aids individuals to lead in diverse cultural settings (Beechler & Javidan, 2007) and to effectively cultivate global leaders, since

hope, efficacy, resilience, and optimism help coping with challenging developmental characteristics as the case of GM (Story, 2011). Hence, hypothesis six is presented:

*Hypothesis 6: PsyCap is directly related to the development of GM.*

Turbulence and uncertainty mark today's business settings as changes are systematic and risk assumes an ever-present and transformative influence (Ananthram & Pick, 2012; Rhinesmith, 1992). Global leaders may allocate time for research before decision-making, but they will not allow such search for clarity to jeopardize first-mover advantages (Gregerson et al., 1998). Consequently, openness towards change and tolerance for ambiguity (TA) are vital features for managerial potentialities (Sherrill, 2001), for organizational success (Hagen & Park, 2013) and for GM development (Ananthram & Pick, 2012; Gregerson et al., 1998; Lovvorn & Chen, 2011; Rhinesmith, 1992; Sherrill, 2001). TA was defined by Budner (1962) as "the tendency to perceive ambiguous situations as desirable" (p. 29). An ambiguous situation is one that cannot be adequately structured or categorized by the individual due to the absence of sufficient cues, being explained by one of the following attributions: novelty; complexity; and insolubility (Budner, 1962). Hence, the seventh hypothesis is:

*Hypothesis 7: Tolerance for ambiguity predicts GM.*

A well developed GM enables people to be incessantly open to themselves and to others and to constantly seek excellence in their own lives and in the other people's lives. These people do not therefore attempt to prepare themselves against surprises but for surprises. Cosmopolitanism is, as a matter of fact, the psychological trait that greater alludes to such profile since it comprises the features of openness<sup>6</sup>, sensitivity and flexibility (Boyacigiller et al., 2004; Caligiuri, 2006; Davis et al., 2013), imagination and creativity (Costa & McCrae, 1987) and intellectual curiosity about the world and the way it works. In this regard, cosmopolitanism is a vital variable for GM enhancement (Ananthram &

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<sup>6</sup> As also described by Clapp-Smith, Rachel (2009), it is referred to a state of mind that is free from judgment.

Pick, 2012; Javidan et al., 2010; Rhinesmith, 1992) and especially among the younger generations (Gupta & Govindarajan, 2002).

*Hypothesis 8: Cosmopolitanism predicts the development of GM.*

Finally, global leaders must understand that their view is just one of many alternative interpretations of reality and must be capable to comprehend distinct situations and why people may react differently towards them. In other words, Wermesing and Clapp-Smith (2014) articulates that global leaders must have a keen sense of intercultural understanding, a quality that is expressed by the psychological trait of cultural self-awareness (CSA) (Ananthram & Pick, 2012; Caligiuri, 2006; Cohen, 2010; Gupta & Govindarajan, 2002; Chen & Eadthongsai, 2011). Levy et al. (2007) defended CSA to be an essential element for individuals to be able to deviate from the ethnocentric mindsets (suggested by Perlmutter (1969)) and to develop global ones. Subsequently, Clapp-Smith (2009) proposed that CSA is itself a component of the GM construct. Following this line of thought, the last hypothesis is formulated:

*Hypothesis 9: Cultural self-awareness predicts the development of GM.*

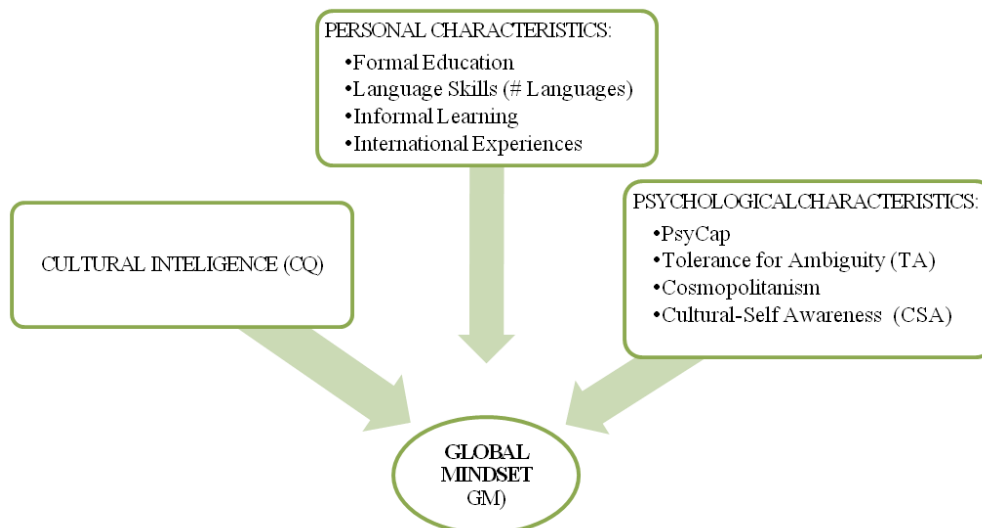


Figure 1 – Antecedents of GM

## Methodology

In order to test the validity of the above mentioned hypotheses it was conducted a survey targeted at academic students attending BSs. Participation, both online and face-to-face, was voluntary done in a voluntary basis and students were firstly provided a succinct explanation about the topic and the

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research's main goals. For confidentiality purposes each participant was assigned a code, therefore so no identification elements were collected.

### **Sample Description**

A statistically significant sample was accomplished with a totality of 220 participants ( $N=220$ ). It was constituted by 62% of females and 38% of males. Only one student was under 18 years old; 89% was between 18 to 24 years old; 9% between 25 and 30 years old; and 2% above 30 years old. Regarding the academic degrees, 72% were attending the bachelor and 28% were attending the master programs. Multiculturalism was low as merely 9% of the sample was non-Portuguese students.

### **Measurements**

**CQ** was measured by a 20 item-scale, 5 for each of its facets (cognitive, metacognitive, behavioral and motivational). Responses were ranked on a 6-point Likert-type scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). The cronbach alphas ( $\alpha$ ), computed to assess the internal reliability coefficients, were as follows: metacognitive CQ  $\alpha=0,809$ ; cognitive CQ  $\alpha=0.826$ ; behavioral CQ  $\alpha=0.834$ ; and motivational CQ  $\alpha=0,83$  if item "I am confident that I can get accustomed to the shopping conditions in a different culture." was deleted<sup>7</sup>. Lastly, the  $\alpha$  for the CQ variable, computed using the 19-items, was 0,90.

**# Languages** was measured by an ordinal scale by the question: "How many languages do you speak besides your native one?".

**Education** was assessed by asking the students' current situation (attending bachelor/master degree); and by the following two questions: (1) "I attend or have already attended courses, seminars, modules, self-study programs or projects with global and cross-cultural scope?"; and (2) "I attend or have already attended courses, seminars, modules, self-study programs or projects related to "soft skills?". Both questions provided a range of optional answers from which students chose the many

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<sup>7</sup> This item was the discarded as suggested by Tavakol & Dennick (2011) and the motivational CQ variable was built only with a 4-item scale.

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ones applicable to their case. Correlations between each of these options and GM were individually assessed.

The **informal learning** variable was divided into three components that were assessed separately from each other: multicultural teams; friends and networks; and media and reading. Answers used a 6-point Likert scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). Multicultural teams comprised a 3-item scale taken from the study of Davis et al. (2010) and had an  $\alpha$  of 0,65. Friends and networks comprised an 8-item scale, which was adapted from the studies of Thunderbird<sup>8</sup>, excepting item 6 and 7<sup>9</sup> that were developed especially for this study. However, this sub-variable  $\alpha$  was not acceptable. As a result, instead of building a variable “friends and networks” in order to assess its correlation with GM, correlations will be computed between each item of the scale and GM. Media and reading was assessed through a 3-items scale that was created specifically for this research, registering an  $\alpha$  of 0,87.

**International experience** was assessed through four sub-divisions. (1) Assess if students have ever had an abroad experience. (2) In case of an affirmative answer, the length of time spent abroad, scored in months, was measured<sup>10</sup>. (3) Ask students to rank the following questions: “I travel internationally for work and study purposes” and “I go on international vacations” in a scale of “*once a year*”, “*twice a year*”, “*from 3 to 6 times a year*”, “*more than 7 times a year*” or “*not applicable*” (treated as missing values). (4) Ask students to rank 4 items that were developed with the purpose of evaluating if they dive into the host culture when travelling and/or going on vacations abroad. Answers were anchored on a 6-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). If the answer was “Not applicable” in section 3, then answers in this section were treated as missing values. It must also be noted that the  $\alpha$  was not computed for this 4 items as they were correlated individually with the dependent variable GM.

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<sup>8</sup> Available in <http://globalmindset.thunderbird.edu>

<sup>9</sup> Taking into consideration the work developed by Javidan, Teagarden & Bowen (2010)

<sup>10</sup> Periods superior to 12 months scored 13 and if the answer was “no” in section 1, then this section scored zero.

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**PsyCap** comprised a 12-item scale developed by Luthans, Avolio, Avey and Norman (2007). Answers were assessed on a 6-point Likert scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). Efficacy comprised 3-items with a  $\alpha$  of 0,846; hope comprised 4-items and  $\alpha=0,816$ ; resilience comprised 3-item and  $\alpha=0,739$ ; and optimism comprised 2-items and  $\alpha=0,719$ . Finally, the overall variable PsyCap registered an  $\alpha$  of 0, 89.

**TA** was assessed by a 7-item scale retrieved from Davis et al. (2010) and Sherril (2001), who had adapted it from Budner (1962). Answers were anchored on a 6-point Likert scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). By eliminating the item “I prefer clear organizational structures, goals and boundaries” an acceptable  $\alpha$  (0,54) was reached. The general cut-off point is 0,7 (Kline,1999), but when dealing with psychological traits a lower  $\alpha$  is realistically expected. The use of a smaller number of items (Field, 2005) and the presence of reverse score items, that even though measuring the same construct, require opposite answers (Field, 2006) are both factors that further justify this lower value of  $\alpha$ .

**Cosmopolitanism** was measured by a 7-items scale adapted from Clapp-Smith, Rachel (2009). Answers were assessed in a 6-point Likert scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). Only if the item “I don't think about different possibilities when making decisions.” was deleted it was possible to reach an acceptable  $\alpha$  of 0,6. The explanations provided concerning the  $\alpha$  below 0,7 are therefore applicable in this situation too.

**CSA** was measured with a 4-item scale retrieved from Clapp-Smith, Rachel, 2009. Answers were assessed by a 6-point Likert scale ranging from (*strongly disagree*) to 6 (*strongly agree*) and the resulting  $\alpha$  was of 0,8.

**GM** was measured by a 6-item scale adapted from Gupta & Govindarajan (2002). Answers were assessed with a 6-point Likert scale ranging from (*strongly disagree*) to 6 (*strongly agree*) and the resulting  $\alpha$  was of 0,99. (See Appendix A to see the full survey)

## Results

Relevant correlations are presented in Table 1 and hierarchical linear regression models results are presented in Table 2. To analyze the predictive effect of the proposed variables on the dependent variable GM it was done a seven model hierarchical linear regression, which were all statistically significant (See appendix). The first model comprised the control variables of: age, gender and nationality. Despite its significance ( $sig. = 0,037$ ), only age was proved to increase GM, which has demonstrated to have an inverse relation with it ( $B=-33,01$ ;  $sig.=0,005$ ).

The second model added CQ and increased the  $R^2$  from 0,039 to 0,088. Hence, results suggest that this variable directly leverages GM levels ( $B=22,6$ ), empirically supporting hypothesis 1.

The third model added the students' current situation (attending bachelor/master). Although the model was significant ( $sig=0,002$ ), there were no augments is the  $R^2$  and this variable had a  $sig.=0,956$  so it was proved not to predict GM development. Simple linear regressions also demonstrated that any of the suggested courses that address global issues or soft skills was correlated with the dependent variable. Consequently, the hypothesis 2 is discarded.

The fourth model introduced the # languages. The  $R^2$  rose to 0,097, yet this variable was only marginally relevant for GM improvement ( $sig.=0,075$ ). A moderated regression<sup>11</sup> with CQ as the moderator indicated the # languages indirectly predicts GM ( $B=3,86$ ). Figure 2 shows that as CQ increases also the relation between # languages and GM increases. This latter relationship is always positive, as depicted in figure 1, and is slightly more so for students with greater CQ levels. Hence, hypothesis 3 is marginally supported,

The subscales of informal learning<sup>12</sup> working in multicultural teams and using global media, constituted the fifth model. These were not statistically significant indicators of GM, discarding

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<sup>11</sup> All the moderated regressions in this research were computed only after centering the independent variables in order to avoid multicollinearity effects.

<sup>12</sup> Only the ones with with good cronbach alphas were considered for statistical analyses.

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Table 1  
Correlation Matrix

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
1 CQ																				
2 Metacognitive CQ	,810**	1																		
3 Cognitive CQ	,781**	,546**	1																	
4 Behavioral CQ	,737**	,418**	,379**	1																
5 Motivational CQ	,789**	,544**	,462**	,516**	1															
6 #Languages	,151*	,131	,178**	,035	,124	1														
7 VA	,233**	,237**	,212*	,078	,193*	,285**	1													
8 Travels	,207	,157	,238	,087	,168	,237	,632**	1												
9 Time living abroad	,060	,011	-,013	,052	,154*	,090	,178	,294*	1											
10 Psycap	,537**	,450**	,374**	,404**	,452**	,132	,162	,153	,143*	1										
11 Efficacy	,403**	,357**	,291**	,262**	,352**	,173*	,167	-,015	,118	,793**	1									
12 Hope	,524**	,457**	,349**	,409**	,426**	,142*	,110	,254	,090	,855**	,595**	1								
13 Resilience	,383**	,322**	,288**	,296**	,288**	,029	,069	,107	,110	,805**	,441**	,584**	1							
14 Optimism	,378**	,263**	,249**	,311**	,371**	,054	,203*	,166	,151*	,726**	,455**	,438**	,568**	1						
15 CSA	,463**	,386**	,301**	,343**	,426**	-,014	-,018	-,119	,148*	,443**	,324**	,406**	,354**	,320**	1					
16 Cosmopolitanism	,474**	,376**	,409**	,372**	,311**	,049	,123	,057	,088	,473**	,397**	,479**	,321**	,271**	,360**	1				
17 TA	,324**	,272**	,223**	,257**	,262**	,029	,198*	,003	,062	,347**	,313**	,323**	,258**	,189**	,384**	,508**	1			
18 GM	,207**	,158*	,204**	,159*	,115	,111	,330**	,211	-,022	,164*	,125	,152*	,128	,112	,120	,236**	,190**	1		
19 Age	-,002	,031	-,058	-,001	,028	,127	-,027	,000	,110	,133*	,087	,100	,142*	,096	-,030	,077	,071	-,195**	1	

Note. \*Indicates statistical significance at the  $p < .05$  level; \*\*Indicates marginal significance at the  $p < .05$  level.

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Table 2 Simple regression table - Unstandardized (B) and Standardized ( $\beta$ ) Parameter Estimates, Standard Errors (SE)			
	B	$\beta$	SEB
Age – Global Mindset	-33,1	-0,2	11,7*
Formal Education – Global Mindset	0,5	0,0	10,3
Cultural Intelligence – Global Mindset	22,6	0,2	7,0*
# Languages – Global Mindset	10,1	0,1	5,7 <sup>†</sup>
Informal Learning (Work in teams) – Global Mindset	-0,5	0,0	4,2
Informal Learning (Global scope media) – Global Mindset	-3,8	-0,1	4,6
Participation in experience(s) abroad – Global Mindset	5,7	0,03	12,1
Vacations Abroad – Global Mindset	80,8	0,5	33,3*
Cosmopolitanism – Global Mindset	26,3	0,2	9,5*
# Languages – Cultural Intelligence – Global Mindset	3,9	0,04	5,4*
Tolerance for Ambiguity – Cultural Intelligence – Global Mindset	63,6	4,1	9,4*
PsyCap – Cultural Intelligence – Global Mindset	40,0	3,0	8,3*
Cultural-Self Awareness - Cultural Intelligence – Global Mindset	35,9	2,7	9,3*

Note. \*Indicates statistical significance at the  $p < .05$  level; <sup>†</sup>Indicates marginal significance at the  $p < .05$  level.

Figure 2 - Moderation effect: # languages – CQ – GM

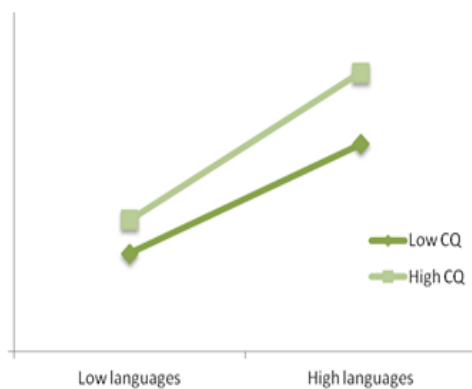


Figure 3 - Moderation effect: PsyCap – CQ – GM

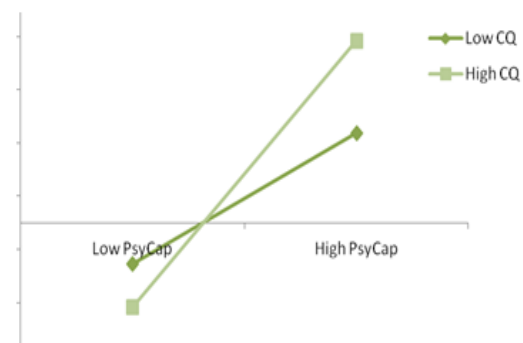


Figure 4 - Moderation effect: TA – CQ – GM

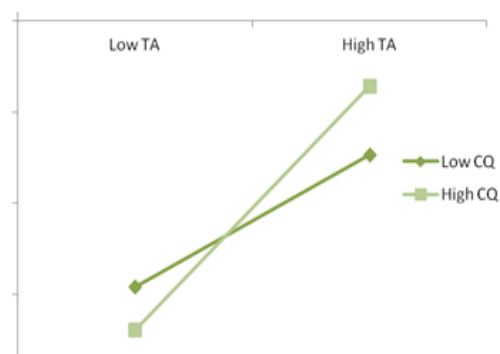
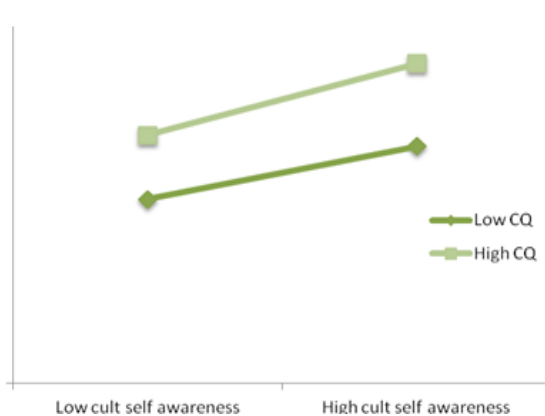


Figure 5 - Moderation effect: CSA – CQ – GM



hypothesis 4.

The sub-variable “have ever participated in an experience abroad” was incorporated in the sixth model. Despite the significance of this model, the  $R^2$  merely scaled up 0,001 and this variable was proved to not predict GM enhancement, discarding hypothesis 6. To further investigate the variable experience abroad<sup>13</sup> it was done simple linear regressions with time spent abroad, frequency of vacations abroad/travelling. In fact, just vacations abroad were found to significantly predict GM ( $B=80,8$ ). In addition, ANOVA tests demonstrated relevant differences between groups’ means. The post-hoc Gabriel test indicated going on vacations “more than 7 times a year” tends to greater enhance GM when in comparison the other groups (See Appendix C). Finally, the analysis of the 4-items scale suggested that when students travel or/and go on vacations abroad they pro-actively immerse into the host country’s culture and interact with locals.

The seventh and final model incorporated consisted in a stepwise procedure that incorporated PsyCap, TA, CSA and cosmopolitanism to the regression analysis. Even though the  $R^2$  rose from 0,101 to 0,133, just cosmopolitanism stood in the analysis, therefore it is the only psychological trait that directly predicts GM ( $B=26,3$ ). Moderation tests, with CQ as the moderator, indicated PsyCap, Ta and CSA indirectly enhance GM. Hence, hypotheses 6, 7 and 9 are marginally supported. The relation between each of these variable and GM is always positive, but turns to be far more positive for PsyCap and TA as CQ increases (See figures 3, 4 and 5).

### **Discussion and Practical Implications**

The most significant research results for effective adjustments in BSs’ curriculum regard the students’ age, CQ, # languages, vacations abroad and their psychological traits. In particular, age was shown to have a strongly negative relation with GM. These latter results cast light on the crucial

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<sup>13</sup> The HLR model did not include these items since it is only sense making to analyze such variables regarding the students that in fact have ever participated in experiences abroad. If included in the HLR the number of observations for the overall model would decrease to 53 instead of considering the 219 responses.

responsibility BSs have in the preparation of effective future global leaders as they directly interact with individuals in relatively early stages of life.

The second regression model evidenced the importance of CQ in leveraging GM. **Cognitive CQ** strategies must: foster global perspectives through the familiarization of students with global politics, economics, history, culture and commercial ecosystems (Jain & Stopford, 2011). Yet, although this attention to global issues is a primary manifestation of GM (Bouquet, Morrison, & Birkinshaw, 2003), results suggested that any specific course that addresses global issues<sup>14</sup> provided by formal education was found to increase GM. These results may be supporting the view of Bouquet, Morrison and Birkinshaw (2003) according to whom what really matters are the behaviors and not just what individuals think, i.e. the cognitive aspects. Consequently, BSs must strongly direct attention to structures, procedures and processes in order to channel attention and information and guide behaviors rather than only focus on the cognitive maps of students. Hence, BSs must not disregard the development of the **behavioral CQ**. Examples of approaches include dramaturgical trainings (Earley & Peterson, 2004) and the intersection of arts, such as theatre, with cross-disciplinary courses (Thies, 2005). By stimulating the left-brained thinking and analytic side with the right-brained and creative one this solution will simultaneously increase GM and develop both TA (Jain & Stopford, 2011; Krashen, 1981; *Livermore 2011*) and # languages (Brown, 2000; Krashen, 1981). The **motivational CQ** helps to cope with change and to act in culturally appropriate ways (Earley & Peterson, 2004; Story et al., 2013). A theory-driven approach is to pre-establish clear objectives, for instance, before international experiences. This practice will help activating responses and trigger the required emotions to energize action (Earley & Peterson, 2004).

The **# languages** were proved to significantly enhance GM, emphasizing the need for BSs to target its development. Freed (1995) stated that the learning process depends on personal attributes and for

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<sup>14</sup> Among the several optional answers (See Appendix A)

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that reason the same strategy will be likely to produce different outcomes based on each individual. The author outlines that the disparities in the learning process due to personal traits turn to be even more pronounced when comparing individuals who have been abroad to those who have not. However, sojourns abroad are not clear-cut solutions. They oblige attention to various simultaneous cues, so, for instance, students with little tolerance for ambiguity would greater benefit from formal language classes, since these isolate the individual elements of language for study purposes (Chapelle & Roberts, 1986). Kinginger (2008) proposes that the individuals' disposition and commitment, the ideological, sociopolitical and historical dimensions are also other key factors in the learning process. All in all, BSs should be flexible enough to offer a certain range of pedagogical methods that allows students to choose the ones that match their own preferences and profiles at best.

The only **international experiences** evidenced to predict GM were vacations abroad. According to the findings, students attempt to explore the host country culture when they participate in such experiences, supporting the present-to-day literature view that immersion into the host country culture is imperative for GM enhancement purposes. As a result, by establishing strategic alliances with other academic institutions, BSs must stimulate students to enroll in exchange initiatives, especially full-year programs as suggested by Dwyer (2004). At the same time, BSs must guarantee the students' engagement in the host cultures during their sojourns abroad. They must encourage them to participate in cultural and leisure activities that promote the discovery and involvement with traditions, values and customs.

To further facilitate GM development another practical approach is self-reflection (Beechler et al., 2010; Terrel & Rosenbusch, 2013). This includes reporting, sharing and analyzing own or others' previous experiences and helps students to learn from their mistakes, failures or adversities (Terrel & Rosenbusch, 2013). Self-reflection helps students to choose the activities and approaches that better suit their profile (Terrel & Rosenbusch, 2013). Furthermore, Boyacigiller et al. (2004) agree that the

conscious development of GM claims mindfulness and awareness of who we are<sup>15</sup> and uphold that self-assessments are especially needed retrospectively after international encounters.

Finally, theoretical recommendations concerning experiences abroad also underline the importance of recognizing the value and harvesting the knowledge students have acquired during the cross-cultural experiences. BSs must provide opportunities for students to practice the new skills and share the new knowledge (Adler& Bartholomew, 1992; Gregersen, et al., 1998). However, much of the novel knowledge is tacit, a fact that, besides making it harder to transfer it, might prevent students from being fully aware of the knowledge they obtained. In this sense, pre-settling the main understandings and goals from experiences prior to the start of the experience (Black, Gregersen, Mendenhall, & Stroh, 1998) - a solution already cited regarding the development of the motivational CQ - is of practical usefulness here too. In practice, this can be done by stimulating students to research before starting their experiences; or through the allocation of a mentor (a local student) for foreign students. Mentors must expose the host culture and environment to the mentees and instigate them to explore it. Most especially, mentors must incessantly insist and support their mentees to think and act in traditional ways (Beechler et al., 2010).

Results suggested that the psychological variables are the ones with highest impact on GM development<sup>16</sup>, indicating that these generally under-recognized and untapped positive psychological constructs (Luthans et al., 2010) claim a careful attentiveness. Such findings reinforce the importance of enhancing GM in the early life's stages since, in fact, the psychological characteristics become less permeable as individuals mature. In particular, **cosmopolitanism** was the only psychological trait that was directly correlated to GM. Terrell and Rosenbusch (2013) suggested that the training, assessment and development of cosmopolitanism must above all stress the value of understanding, appreciating, valuing and leveraging cultural differences. Hence, creating multicultural classes and engaging

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<sup>15</sup> In the same view, Gupta and Govindarajan (2002) and Jokinen (2005) believe that the better one understands his self image and role, the more likely it is for current mindsets to change.

<sup>16</sup> Concerning both direct and indirect relationships with the dependent variable of GM.

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students with different cultural backgrounds work together in teams or to participate in presentations, principally in courses with an international scope, are effective ways to foster TA enhancement (Terrell & Rosenbusch, 2013).

Following cosmopolitanism, **TA** was the psychological variable with the stronger indirect ability to develop GM. TA helps coping with high levels of risk taking (Roth, 1992) and is a vital element for leadership and management success (Cooper et al., 2005). In this sense, this trait is assuming a greater importance given the growing number of organizations that pursue global strategies nowadays. Consequently, BSs must ensure they equip students with the necessary tools to effectively deal with ambiguity in both business and personal contexts (Cooper et al., 2005; Oblinger and Verville, 1998; In Huber, 2003). A proposed strategy to assess and develop TA is to expose students to business ambiguous facts that require creative and critical thinking (Cooper et al., 2005) and as well as the confrontation with the world's complexities (DeRoma, Kanetra, & Kessler, 2003). Another advocated approaches are the self-directed learning projects, that, in fact, are assuming greater value within the organizational contexts (Huber, 2003). These projects consist in research exercises that focus on knowledge creation rather than on replication and verification and, therefore boost the ability to create changes and solve organizational issues (Huber, 2003).

**PsyCap** was evidenced to help expanding GM and to provide the necessary power to deal with arousal, psychological discomfort (Clapp-Smith, 2009) and to prosper in multiple cultural environments (Fredrickson & Losada, 2005). **Resilience** helps individuals to be at ease outside of their comfort zone and motivates them to challenge their own assumptions about the way they view the world (Luthans et al., 2007). Since cross-cultural interactions often raise stress, nurturing is vital to help individuals to confront the unknown, accept confusion more easily and to enable them to assess situations from a more integrated perspective (Brislin et al., 2006). **Hope** boosts motivation towards the attainment of goals and the delineation of multiple pathways to accomplish them (Luthans et al., 2007).

**Optimism** regards positive expectancies that a desirable outcome will follow given the effort put forth, even in the presence of adversities (Carver & Scheier, 2002). **Efficacy** concerns the ability to mobilize motivation, cognitive skills and actions to execute a course of action given the specific tasks/contexts (Luthans & Youssef, 2004; Stajkovic & Luthans, 1998). These four psychological elements effectively enhance work performance (Carver & Scheier, 2002; Luthans, Avolio et al., 2007; Stajkovic & Luthans, 1998). Once they are open to development (Carver & Scheier, 2002; Luthans et al., 2010; Luthans, Vogelgesang, & Lester, 2006), training interventions (Luthans et al., 2010) offered by BSs must foster their improvement.

Finally, the expressive indirect relation of **CSA** with GM stresses the importance to realize how one's own sociopolitical and ethnocentric biases impact the relationships and work with people from different cultures. Kitsantas and Meyers (2001) suggested that teachers should stimulate the share of opinions on values, traditions and beliefs through oral presentations of individual or group works when presenting the various courses' topics. Later, Wernesing and Clapp-Smith (2014) presented self-reflection, stepping out of one's comfort zone and pro-active immersions in other cultures as effective ways to develop CSA.

Bearing in mind that the most relevant results for effective BSs adjustments were the psychological variables, a suggestion is for these institutions, besides providing access to students' curricula vitae, to also provide organizations with the students' psychological evaluations. It would allow pre-scanning potential suitable candidates for the different job offers, saving time in organizational recruitment processes, and would reinforce BSs image as trustable and efficient institutions. Furthermore, this awareness of students' psychological profile would help organizations to plan training programs (Hagen et al., 2013) and to greater develop leaders to perform in demographically diverse situations (Chen & Hooijberg, 2000).

### Conclusion

The globalization of businesses is occurring quicker and more expansively than the internationalization of BSs creating a disconnection between the economic realities and the ability of these institutions to produce global leaders (Kedia &Englis, 2011). New leadership capabilities are being demanded and, in that view, GM is increasingly being taken as a response to meet the future challenges. Accordingly, BSs must revamp their curriculums and target GM development. This research studied the variables of CQ , personal characteristics and psychological traits. Findings are relevant since they provide evidence-based approaches for BSs to adjust their curriculums.

Results evidenced that an emphasis must be placed on CQ improvement. This variable was revealed to strongly contribute to GM enhancement and to have important moderation effects in the relationship between the four other pertinent variables (# languages, PsyCap, TA and CSA) and GM.

Regarding the personal characteristics, only vacations abroad were suggested to be influential in GM enhancement. Furthermore, students confirmed they do pro-actively explore and immerse into the host country when they go on vacations abroad. Bearing that in mind, results may be supporting the view that experience per se is insufficient for GM development.

The psychological characteristics were proved to be the most powerful indicators of GM. Improving them is vital, but it must be taken into consideration that modifying them will be harder than modifying skills or competences and becomes even more difficult as age advances. As a matter of fact, age strongly inversely predicts GM, thus stressing the need to target GM improvement in the individuals' earliest life stages. As mentioned, the predictors of GM are numerous and complex but they put forward an indispensable help for BSs to meet the future challenges and new demands.

Finally, organizations must systematically adapt their human resources systems in order to ensure they cultivate the leadership abilities that the global complexity claims for (Beechler & Woodwardc, 2009). In this regard, research findings have a great theoretical and practical meaningfulness for

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organizational settings too. These provide them support to effectively plan developmental and training activities where the fundamental subjects to be responded are: “in what type of competencies development is needed, knowledge, skills and abilities, or other characteristics?” (Jokinen, 2004, p. 211).

### Study Limitations

Besides the practical usefulness of the present study, some limitations must be mentioned. First, due to time and budget constraints<sup>17</sup>, the sample just comprised students from two universities. This may then cap the representativeness of the study regarding the Portuguese universities universe. Also, the percentage of international participants was small, thus, limiting the results' heterogeneity. Finally, concerns appeared regarding the variables' cronbach alphas. GM registered an  $\alpha$  of 0,99 and the sub-variable friends and networks of the informal learning variable was too low and so it was not considered for statistical investigations.

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<sup>17</sup>Time and budget constrains have mainly occurred due to the fact that the rate of response online was low, therefore demanding its application face-to-face.

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## Appendix A

## Survey

The survey is being conducted by a Nova Business School's student for a work project (thesis) in the International Business area, particularly Global Leadership topic. This survey's central objective is to assess which variables are contributing the most for the development of "global mindset" in business schools' students, so that practical implications can be suggested.

I assure all the information provided is totally confidential and is only going to be used for this specific research purposes.

1. Gender: Female \_\_\_\_ Male \_\_\_\_
2. Age: Under 18 \_\_\_\_ 18-24 \_\_\_\_ 25-30 \_\_\_\_ More than 30 \_\_\_\_
3. Degree: Attending Bachelor \_\_\_\_ Attending Master \_\_\_\_
  - 3.1 Please specify which Bachelor/Master you are attending  
\_\_\_\_\_
4. Nationality \_\_\_\_\_
5. How many languages do you speak?  
1 \_\_\_\_ 2 \_\_\_\_ 3 \_\_\_\_ 4 or more \_\_\_\_

## CULTURAL INTELLIGENCE

Ang, S., Van Dyne, L., Koh, C., Ng, K.Y., Templer, K.J., Tay, C., & Chandrasekar, N.A. (2007), Cultural Intelligence: Its Measurement and Effects on Cultural Judgment and Decision Making, Cultural Adaptation and Task Performance, Vol. 3, Issue 3, P. 335-371

Below are statements about you with which you may agree or disagree. Using the following scales, indicate your level of agreement or disagreement. (1 = Strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree, 6 = strongly agree)

## Metacognitive CQ

1. I am conscious of the cultural knowledge I use when interacting with people with different cultural backgrounds.
2. I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me.
3. I am conscious of the cultural knowledge I apply to cross-cultural interactions.

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4. I check the accuracy of my cultural knowledge as I interact with people from different cultures.
5. I know the legal and economic systems of other cultures.

## Cognitive CQ

6. I know the rules (e.g., vocabulary, grammar) of other languages.
7. I know the cultural values and religious beliefs of other cultures.
8. I know the marriage systems of other cultures.
9. I know the arts and crafts of other cultures.
10. I know the rules for expressing nonverbal behaviors in other cultures.

## Motivational CQ

11. I enjoy interacting with people from different cultures.
12. I am confident that I can socialize with locals in a culture that is unfamiliar to me.
13. I am sure I can deal with the stresses of adjusting to a culture that is new to me.
14. I enjoy living in cultures that are unfamiliar to me.
15. I am confident that I can get accustomed to the shopping conditions in a different culture.

## Behavioral CQ

16. I change my verbal behavior (e.g., accent, tone) when a cross-cultural interaction requires it.
17. I use pause and silence differently to suit different cross-cultural situations.
18. I vary the rate of my speaking when a cross-cultural situation requires it.
19. I change my nonverbal behavior when a cross-cultural situation requires it.
20. I alter my facial expressions when a cross-cultural interaction requires it.

## PSYCAP

Luthans, F., Avolio, B., Avey, J. B. & Norman, S. M., 2007, Psychological capital: Measurement and relationship with performance and job satisfaction. *Personnel Psychology*, Vol. 60, P. 541-572.

Adapted from: Parker, 1998; Snyder et al., 1996; Wagnild & Young, 1993; Scheier & Carver, 1985.2

Using the following scales, indicate your level of agreement or disagreement with the following statements. (1 = Strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree, 6 = strongly agree)

Select the answer that best reflects what you currently are and not how you wish to be in the future.

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1. I feel confident in representing my work area or teams in meetings with management/teachers.(E)
2. I feel confident contributing to discussions about the company's/academic work strategies. (E)
3. I feel confident presenting information to a group of colleagues.(E)
4. If I should find myself in a jam at work, I could think of many ways to get out of it.(H)
5. Right now I see myself as being pretty successful at work.(H)
6. I can think of many ways to reach my current work goals.(H)
7. At this time, I am meeting the work goals that I have set for myself. (H)
8. I can be “on my own” at work if I have to.(R)
9. I usually take stressful things at work in stride. (9)
10. I can get through difficult times at work because I've experienced difficulty before.(O)
11. I always look on the bright side of things regarding my job.(O)
12. I'm optimistic about what will happen to me in the future regarding work. (O)

## PSYCHOLOGICAL

Using the following scales, indicate your level of agreement or disagreement with the following statements. (1 = Strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 =agree, 6 = strongly agree)

Select the answer that best reflect what you currently are and not how you wish to be in the future.

## SELF-AWARENESS/SENSITIVITY

Clapp-Smith, Rachel, 2009, Global Mindset Development During Cultural Transitions, University of Nebraska at Lincoln

1. I am conscious the influence my culture has in the way I see the world.
2. I am conscious of how my culture influences my understanding of normal behavior.
3. I have a good understanding about my own culture.
4. I agree culture influences the expectations I have of others.

## COSMOPOLITANISM: OPENNESS/FLEXIBILITY

Clapp-Smith, Rachel, 2009, Global Mindset Development During Cultural Transitions, University of Nebraska at Lincoln

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1. I try to identify possible justifications for my actions, especially regarding important decisions.
2. I only make decisions after I have all of the facts and figures.
3. Others recognize my objectivity and rational/logical thinking
4. I weigh the pro's and the con's.
5. I am valued by my friends for my good judgment.
6. I don't think about different possibilities when making decisions. (low rank mean group)
7. I don't tend to have critical thinking. (low rank mean group)

## TOLERANCE FOR AMBIGUITY

Adapted from Sherrill, Windsor W. (2001), Tolerance of Ambiguity among MD/MBA Students: Implications for Management Potential, The Journal of Continuing Education in the Health Professions, Volume 21, P. 117–122

1. I take decisions based on conservative and “regular” thinking
2. I am accountable for my decisions rather than blaming or put the responsibility on others.
3. I take chances on good ideas
4. I prefer clear, planned goals and objectives in academic courses or any othe formal education program, (like seminars, self study-programs, etc.)
5. I prefer clear organizational structures, goals and boundaries
6. I like to know exactly what my responsibilities are, in the work or academic context.
7. I feel there is a right and a wrong way in every situation.

## FORMAL EDUCATION

1. Please select the many hypotheses that fit to your formal education until the present moment.
  - exchange programs \_\_\_\_\_
  - study trips\_\_\_\_
  - field based projects\_\_\_\_\_
  - internships\_\_\_\_\_
  - other international experience, please specify –\_\_\_\_\_
2. I attend or have already attended courses, seminars, modules, self-study programs or projects with global and cross-cultural scope? (Select the many answers that fit to your formal education)
  - International/global business \_\_\_\_\_

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- international finance\_\_\_\_\_
  - International marketing\_\_\_\_\_
  - Languages\_\_\_\_\_
  - information systems\_\_\_\_\_
  - Other (s), please specify – \_\_\_\_\_
3. I attend or have already attended courses, seminars, modules, self-study programs or projects related to “soft skills”?
- communication skills\_\_\_\_\_
  - interpersonal relationships\_\_\_\_\_
  - Leading teams\_\_\_\_
  - Other(s), please specify \_\_\_\_\_

## INTERNATIONAL EXPERIENCE

1. I have lived abroad

Yes \_\_\_ No\_\_\_

If yes, How long? \_\_\_\_\_

2. I travel abroad (for work or study purposes)

Once a year\_\_\_\_\_ Twice a year\_\_\_\_\_ From 3 to 6 times a year \_\_\_\_\_

More than 7 times a year\_\_\_\_\_ Not applicable \_\_\_\_\_

3. I take international vacations and holidays

Once a year\_\_\_\_\_ Twice a year\_\_\_\_\_ From 3 to 6 times a year \_\_\_\_\_

More than 7 times a year\_\_\_\_\_ Not applicable \_\_\_\_\_

4. Using the following scales, indicate your level of agreement or disagreement with the following statements.

(1 = Strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 =agree, 6 = strongly agree)

1. When I go on vacations abroad do dive into the country’s culture by establishing direct contact/interactions with local people (Vacations)
2. When I travel/go on vacations I experience the local costumes, habits, traditions and food? (Vacations and travels)

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3. When I go on vacations abroad I visit the local traditional places, like churches, traditional markets...? (Vacations)
4. I prepare myself before starting a trip/going on vacations by actively searching for information about the country, major curiosities, what are the costumes, what type of behaviors are culturally well accepted and recommended? (like wearing appropriately when visiting churches) (Vacations and travels)

## INTERNATIONAL EXPERIENCE

1. Have you ever had an international experience, such as: internship abroad, exchange program, international assignment for more than 2 months for work purposes, transfers, or work internationally?

Yes\_\_\_ No\_\_\_

If you have answered “no” you may please go straight to “informal learning” section of the survey.

## CROSS-CULTURAL ADJUSTMENT

Black, J.S., & Stephens, G.K. (1989). The influence of the spouse on American expatriate adjustment and intent to stay in Pacific Rim overseas assignments. *Journal of Management*, Vol.15, P. 529–544.

Please assess yourself regarding how did you adjusted during your international experiences, namely, exchange programs, work assignments abroad or internships. (1 = very unadjusted; 2= unadjusted; 3= somewhat unadjusted; 4= Somewhat adjusted; 5= adjusted; 6 = completely adjusted)

## 2.1..Work/study adjustment (two items):

- a. your current situation in terms of specific job responsibilities or student responsibilities/assignments;
- b. performance standards and expectations

## 2.2. interactional (two items):

- c. socializing daily with people from the host culture ;
- d. socializing with people from the host culture outside of work;

## 2.3. general adjustment (seven items):

- e. general living conditions;
- f. food;
- g. housing conditions;

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- h. shopping;
- i. cost of living;
- j. health care facilities
- k. entertainment/leisure facilities and activities

## INFORMAL LEARNING

1. Multicultural teams

- 1.1. I often work within multicultural teams (academically or professionally)
- 1.2. When I work with multicultural teams (academically or professionally) I am able to maintain effective communication and cooperation within the team
- 1.3. I have the willingness and the ability to engage people from other cultures to work together towards an objective.

2. Friends and networks

- 2.1. My friend's circle or network of contacts comprises different cultures – thunderbird example questions
- 2.2. I have the ability to work with people from different cultures
- 2.3. I have ease to start a dialog with a stranger
- 2.4. I have ease to start a dialog with a stranger from other culture
- 2.5. When I you meet people from diff cultures I you learn about their culture
- 2.6. The relationships I develop with people from other cultures last over time (instead of being just occasional/situational and ephemeral)
- 2.7. I use social networks to communicate with people worldwide to maintain my relationships over time
- 2.8. I understand the nonverbal expressions of people from other cultures.

3. Media and reading

- 3.1. I use international media to be updated of global news and issues
- 3.2. I proactively search for information about other cultures
- 3.3. I read publications with strong global, or/and search websites and watch television programs with international scope.

## GLOBAL MINDSET

Boyacigiller, N., Beechler, S., Taylor, S., & Levy, O. (2004); Gupta, A. K. & Govindarajan, V. (2002).

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Using the following scales, indicate your level of agreement or disagreement with the following statements.

(1 = Strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree, 6 = strongly agree)

1. When interacting with others, their nationality impacts the status/image I associate to them.
2. I consider myself equally open to opinions/ideas of people from other cultures as I consider from people from my country or culture.
3. I consider my values to a hybrid of values from my own culture and the ones I acquire while interacting and understanding other cultures
4. When I find myself in a new cultural context I feel fear and anxiety.
5. When I interact with other people from other cultures I believe it is more important to understand them as individuals rather than representatives of their national cultures.
6. I am sensitive to cultural differences when I visit or live in a different country without being a prisoner of such differences

## Appendix B

## Stepwise Hierarchical Regression Model

<b>Modelo</b>	<b>R</b>	<b>R cuadrado</b>	<b>R cuadrado</b>	<b>Sig.</b>
<b>1</b>	,197	,039	,025	0,037
<b>2</b>	,197	,039	,021	0,076
<b>3</b>	,288	,083	,062	0,002
<b>4</b>	,311	,097	,071	0,001
<b>5</b>	,316	,100	,066	0,004
<b>6</b>	,318	,101	,062	0,007
<b>7</b>	,365	,133	,091	0,001

## Appendix C

Post-Hoc Test - Mean Differences (I-J) for vacations abroad predicting GM

<b>(I) Vacations</b>	<b>(J) Vacations</b>	<b>Mean Difference (I-J)</b>
<b>Once a year</b>	Twice a year	,05612
	From 3-6 times a year	,10242
	More than 7 times a year	-332,13832*
<b>Twice a year</b>	Once a year	-,05612
	From 3-6 times a year	,04630
	More than 7 times a year	-332,19444*
<b>From 3-6 times a year</b>	Once a year	-,10242
	Twice a year	-,04630
	More than 7 times a year	-332,24074*
<b>More than 7 times a year</b>	Once a year	332,13832*
	Twice a year	332,19444*
	From 3-6 times a year	332,24074*

Note: \* $p < 0,005$