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# Testing the Impact of Global Mindset on Positive Organizational Outcomes: A Multi-Level Analysis

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TESTING THE IMPACT OF GLOBAL MINDSET ON POSITIVE OUTCOMES:  
A MULTI-LEVEL ANALYSIS

by

Joana S. Story

A DISSERTATION

Presented to the Faculty of  
The Graduate College at the University of Nebraska  
In Partial Fulfillment of Requirements  
For the Degree of Doctor of Philosophy

Major: Human Sciences (Leadership Studies)

Under the Supervision of Professor John E. Barbuto, Jr.

Lincoln, Nebraska

April, 2010

TESTING THE IMPACT OF GLOBAL MINDSET ON POSITIVE OUTCOMES:  
A MULTI-LEVEL ANALYSIS

Joana S. Story, Ph.D.

University of Nebraska, 2010

Advisor: John E. Barbuto, Jr.

This multi-level study examined the relationship between leaders' global mindset with followers' rating of trust in leader, quality of the leader-member relationship (LMX), and organizational commitment. Complexity of global role and leader distance were also examined as moderating variables.

Data were collected from 78 leader participants and 240 raters from one Fortune 100 multinational organization. A multilevel data analysis was conducted using Hierarchical Linear Modeling. No significant relationships were found between global mindset and ratings of follower trust in leader and quality of the leader-member-relationship. A significant negative relationship was found between global mindset of leaders and follower organizational commitment.

Global roles and physical distance between the leader and the follower did not moderate the relationship between global leadership and outcome variables, however the frequency of interaction between leaders and followers did. Specifically, the involvement of frequency of interaction between leaders and followers increased and strengthened the relationship between global mindset and followers' ratings of organizational commitment. This supported the notion that without a high amount of interaction, global mindset would not significantly impact ratings of organizational commitment. The relationship between the frequency of leader- follower interaction when a single follower

interacted on average with more frequency than others in the group (within), significantly moderated the relationship between global mindset and affect-based trust in leader, LMX, and organizational commitment. Specifically, the involvement of frequency of leader-follower interactions within weakened the relationship between global mindset and affect-based trust, LMX, and organizational commitment as rated by followers. These results indicate that followers who interact on average more frequently with the leader than the rest of the group and the leader who has a global mindset, report lower scores of trust in leader, LMX, and organizational commitment. Because most participants were from a collectivistic culture, these findings are indicative that followers would rather be a part of the group than separate from the group even if that means less interaction with the leader.

## Dedication

To Sean: my love, my friend, and the “rock”. Without you, I wouldn’t have done it.

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When I started this dissertation, I had no idea that it would take a community to make it possible. Well, without the help and support of very special people, I know I wouldn't have been able to do it.

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## CHAPTER I

*“Financial resources are not the problem. We have the money, products, and position to be a dominant global player. What we lack are human resources. We just don’t have enough people with the needed global leadership capabilities.”*  
*Jacke Riechert (Gregersen, Morrison, & Black, 1998).*

### Introduction and Statement of Problem

The globalized economy has brought many challenges and opportunities to organizations and communities. While few leaders have succeeded in global settings, those that have, share distinct characteristics from leaders in domestic settings. Adler and Bartholomew (1995) described this distinction by observing that successful leaders have a global perspective and they have gained experiences from people from many cultures simultaneously.

CEOs of multinational organizations report a dire need for more globally developed talent (Gregersen et al, 1998). The global leadership development gap is considered to be a constraint on growth and effectiveness of multinational organizations (Zahra, 1998). According to Sloan, Hazucha, and Van Katwyk (2003), there is a shortage of globally developed talent. Accordingly, Graen and Hui (1999) argued that there are many difficulties in developing global leaders, but it is a necessary endeavor if organizations are to succeed in the global environment. McCall (2001) stated, “developing global perspective is a decidedly unnatural act. You have to be forced” (p.304) and it should be part of the organization’s business strategy.

Several conceptualizations of global leadership have emerged over the past 15 years (Adler & Bartholomew, 1992; Bartlett & Ghoshal, 1992). A series of books on global leadership (i.e. *Advances in Global Leadership*, *The Quest for Global Dominance*)

have surfaced to aid the understanding and scholarship in this area. However, the literature on global leadership is overwhelmingly based on non-tested competency models and therefore has no clear or concise definition of what a global leader really is or does. Thus, there is a lack of clarity when defining the traits, skills, competencies, and behaviors of a global leader.

Managers report the challenges of finding and developing a globally capable leader, which mirrors the void of empirical research testing the major tenants of global leadership theory. The need to study and understand global leadership has never been stronger than it is now, which is alarming because the field has shockingly few generalizable practical interpretations. The majority of the literature on global leadership has been based on anecdotal and shared experiences. Substantive contribution to the field's understanding of global leadership can only occur with rigorous empirical examination of the global leadership phenomena. Global mindset has been proposed to be a key construct for global leadership development and success (Kedia & Mukherji, 1999; Pucik & Saba, 1998; Black & Gregersen, 2000; Oddou, Mendenhall, & Richie, 2000).

Many frameworks of global mindset have been proposed in the literature but no clear consensus has emerged. Many articles and books have continuously claimed the importance of having a global mindset for global leadership effectiveness. However, when it comes to empirical research, very few authors have examined this construct. Those who have attempted to study global mindset have looked at its antecedents, such as age, education, job tenure, international management training, nationality, and willingness to work abroad (Arora, Jaju, Kefalas & Perenich, 2004). Other variables have also been considered as antecedents of global mindset such as curiosity, language skills,

personal history, authenticity (Clapp-Smith & Hughes, 2007), and global strategy of the organization (Murtha, Lenway, & Bagozzi, 1998). Fewer scholars yet, have also looked at the role of global mindset in organizational outcomes, for example, percent of sales and employees abroad, number of countries with manufacturing operations were related to the organizational leader global mindset (Kobrin, 1994). However, the relationship between global mindset of the leader and a multinational or global strategy yielded mixed results (Kobrin, 1994; Levy, 2005; Harverston, Kedia, & Davis, 2000; Nummela, Saarenketo & Puumalainen, 2004). Thus, most of the research on global mindset has examined the antecedents and development of global mindset, but the importance of global mindset has not been empirically determined in the field. Before testing the antecedents of global mindset, the field needs to ascertain the true impact or value of global mindset -specifically, as it impacts organizational behavior or performance.

The consensus view of global mindset assumes that leaders in global settings will be equipped to guide organizations and develop the necessary relationships for positive organizational outcomes. Among the most salient variables, trust in leader, quality of relationship between leader and follower, and organizational commitment have been examined extensively in the literature and can be considered one of the most important organizational behavior variables. Research of these variables in the global context is lacking, however, their role in the global environment may be just as important.

Trust in leader is necessary in a highly competitive, fast-paced, and diverse environment. Without trust, global leaders are unable to execute their goals fully since followers may be doubtful of their actions and not support or challenge the leader's assumptions (Gillespie & Mann, 2004). With the market changes occurring almost daily,

a global leader must act fast and have precise support from team members. Trust becomes even more challenging when leaders are working with members from different cultures, but is no less essential for effective global leadership success.

The quality of the relationship between leaders and followers determines many organizational and personal outcomes. A global leader must be able to establish good relationships with followers and team members in order to be able to advance the organization's agenda (Beechler & Baltzley, 2008). Furthermore, without good relationships, the global leader will most likely become overwhelmed and not be able to do the job efficiently. This is particularly important for global leaders who are working in a country in which they are not familiar with the culture, customs, and rituals. Having a strong relationship with team members will truly be beneficial for global leaders to be effective in their roles, especially when different cultures are involved, as cultural diversity can hinder the development of social cohesion between employees (Buckley & Casson, 1998).

Another important variable, which has been studied in domestic settings, is organizational commitment. Followers who are committed to the organization goals are more effective in doing their jobs (Riketa, 2002). In a global economy, many key team members who are necessary for organizations to succeed may have opportunities to work for other organizations and possibly leave the company for a chance at a better salary (Mathieu & Zajac, 1990). Multinational organizations have more difficulty in fostering committed employees as cultural differences lead to differences in expectations and perceptions of treatment (Taylor, Levy, Boyacigiller, & Beechler, 2008). Furthermore, the rapid changes in the environment may lead to many organizational changes that

employees may not necessarily feel are important (Taylor et al, 2008). Global leaders need committed followers in order to act in the best interest of the organization and their agenda.

### *Purpose Statement*

The purpose of this research is to examine the relationship between a global leader's global mindset and the individual level outcomes trust in leader, leader-member-exchange, and organizational commitment as rated by followers. In addition, the complexity of the global role and leader distance are tested to see if they moderate the relationship between a global leader's global mindset and the outcome variables. Results of this study will aid the field of global leadership and international management by understanding the nuances of global mindset, and how a global leader's global mindset impacts follower trust in leader, quality of their relationship, and organizational commitment. If global mindset demonstrates to have an impact on these positive outcomes, global leadership development must focus on global mindset development. Thus, global leadership development efforts can focus on selecting and training individuals who may have either a global mindset or the characteristics necessary to develop one. Scholars should also examine the antecedents of global mindset along with the benefits of having a global mindset.

### *Research Questions*

This study emanates from three primary research questions:

1. Is a global leader's global mindset positively related to follower ratings of trust in leader, leader-member-exchange, and organizational commitment?



2. Does the complexity of the global role moderate the relationship between a global leader's mindset on follower ratings of trust in leader, leader-member-exchange, and organizational commitment?
3. Does leader distance moderate the relationships between a global leader's mindset on follower ratings of trust in leader, leader-member-exchange, and organizational commitment?

#### *Delimitations and Limitations of the Study*

This study does not intend to examine global mindset of leaders who work for domestic organizations. Nor does it attempt to create any type of intervention for leaders in terms of their global mindset. Additionally, the information presented here should not be generalized to contexts in which the term “global” is not relevant. Since a specific framework for global mindset is proposed, this study is not intended to suggest that results reported here would be applicable to other global mindset frameworks or models.

#### *Significance of the Study*

This is an important area of study. The global leadership field is filled with rich dialogue; however, to truly advance the conversation, empirical inquiry is necessary. Until propositions and “common sense” statements are tested and generalizability of results can be assessed, the field understanding will be limited to dialogue and arm-chair philosophy. This study will be the first to test individual level outcome variables such as trust in leader, leader-member-exchange, and organizational commitment as a consequence of a global leader's global mindset. In addition, this study provides a workable and operationalizable framework of global mindset, which can lead to more research on the impact of global mindset on organizational level outcomes as well as

other individual level outcomes and global mindset antecedents. The results of this study will be significant to human resources management and leadership development.

## CHAPTER II

### Review of the Literature

This chapter examines the existing literature that establishes the foundation for this study. An overview of global leadership literature is provided to introduce the context for this study. A literature review on outcome variables of this study (trust, leader-member-exchange, and organizational commitment) will be presented next. Finally, the concept of global mindset is reviewed. Hypotheses will be developed between the outcome variables and global mindset and the moderating variables will be also be presented.

#### *Creating the Context*

Global leadership is defined as involving “people in business settings whose job or role is to influence the thoughts and actions of others to achieve some finite set of business goals ... usually displayed in large, multicultural contexts” (Gessner, Arnold, & Mobley, 1999: xv). The literature on global leadership focuses on three primary areas: global leadership competencies, global leadership development, and global leadership roles. While much has been written about global leadership, there is no clear consensus in the literature of what a global leader must be able to do or what a global leader must learn to do their job effectively. Furthermore, very few scholars have actually adopted a clear and concise definition of global leadership and the vast majority of articles or book chapters on this topic are not empirically grounded.

Gregersen, Morrison, and Black (1998) stated that global leadership is essential for organizations to succeed in the global environment. Furthermore, their research revealed the apparent need for organizations to have global leaders and how to develop

them. They proposed that global leaders must be inquisitive, have character, be able to manage uncertainty and ambiguity, and have business and organizational savvy. They also proposed that for organizations to develop global leaders they need to find talented individuals, develop them by sending them abroad, and provide them with effectively team working skills. In a similar vein, Morrison, Gregersen and Black (1999) reported that having globally competent leaders is the most important factor in achieving success. They argued that leaders must think outside the box and learn how to effectively lead in any country with as many differing values from home country as possible. Based on interviews with top leaders, the authors reported that the most important characteristic for a global leader to achieve success is to have both a global business and global organizational savvy.

Kets de Vries and Florent-Treacy (2002) proposed that global leaders must have a cosmopolitan mindset that is not rooted in their own culture. They stated that leaders must also be able to express cultural relativity, be curious, and have emotional intelligence. Leaders must also be excellent communicators both verbally and non-verbally and in many languages. They should be resilient, have high tolerance for uncertainty, be adaptable, and be adventurous. Like Gregersen et al (1998) and Zahra (1998), they believe that you need to carefully select these individuals and develop them.

Caligiuri (2006) identified through focus groups and interviews unique functions that global leaders must be able to effectively carry out. Global leaders must work effectively and influence people from different countries and nationalities (colleagues, subordinates, internal and external clients), may need to speak many languages, need to develop a global strategic business plan for their unit, need to maintain the budget for

their unit, and need to manage risks for their unit. Based on these functions, she proposed that global leaders who effectively carry out their function have culture-general knowledge, culture-specific knowledge, international business knowledge, intercultural interactional skills, foreign language skills, and cognitive ability. She also proposed that these leaders should be extroverts, agreeable, conscientiousness, emotionally stable, and open to experiences. Also, in accordance with most global leadership scholars she stated that global leaders must be selected effectively and then developed. Caligiuri and Di Santo (2001) tested if global competence could be developed by global assignments. They reported that knowledge and ability may be developed through global assignments. Their findings yielded an interesting result: those individuals who had not been on a global assignment rated themselves higher with regards to having the skills necessary to succeed than those who had been in global assignments. They concluded that individuals who have been exposed to the challenges of the assignment changed their perceptions about their skills. Thus, the leader's cognition became more complex when the leader was exposed to transnational issue.

Bueno and Tubbs (2004) interviewed international leaders and identified global leadership competencies: communication skills, motivation to learn, flexibility, open-mindedness, respect for others, and sensitivity. However, they failed to address specifically how these skills are unique to global leaders.

Bingham, Felin, and Black (2000) interviewed the former CEO of Procter and Gamble about which global leadership competencies are needed to be an effective leader in the global market. It was reported that managing uncertainty, knowing customers, balancing tensions, and valuing diversity were key for effectiveness. It was also attributed

that international assignments were the biggest contributor to global leadership development.

Birchall, Hee, and Gay (1996) tested a model of international managers' competencies and reported international negotiation, global awareness, international strategy, international marketing, and cultural empathy are the most important competencies for international management success.

Conner (2000) interviewed senior managers about global leadership development and the competencies needed by global leaders. She reported that executives believed that hiring the right people and providing them with challenging assignments was the way to develop global leaders. The characteristics needed by global leaders were described as: business savvy, having strong personal influence, having a global perspective, having strong character, knowing how to motivate individuals, and being able to act like entrepreneurs.

Chin, Gu, and Tubbs (2001) proposed a model for developing global leadership competencies by moving experiences from the cognitive level (ignorance and awareness) to attitudinal and values level (appreciation and understanding) to the behavioral level (internalization and transformational level).

Bartlett and Ghoshal (1992) proposed that there is no such thing as an universal global leader because a global leader executes different functions. Thus, a global leader could be the business manager, for which they are responsible for the strategy, the designing of the global plan, and the coordination of the plan. A global leader could also be the country manager, in which the manager would have to connect local intelligence with global strategy. Another option was to be the functional manager in which they

would act as a scanner, with expertise to collect and disseminate knowledge across boundaries that could be transformed into a great strategic plan. A global leader could also be the transnational manager that has diverse skills and can lead, recruit, develop future leaders, balance negotiation between countries and functions, and have a global mindset. The transactional leader described by Bartlett and Ghoshal (1992) have those characteristics that have been identified by other authors as global leader characteristics.

Adler and Bartholomew (1992) argued that strategic thinking has surpassed human resources capabilities and there is a need to develop global leaders in order to be able to execute the organizational strategy effectively across borders. They compared the traditional expatriate manager with a global manager and stated that a global leader understands business from a global perspective, learns about various cultures, works with people from differing cultural backgrounds at the same time, creates a synergistic organizational culture, is adaptable by living in many countries, uses cross-cultural interactions skills every day, interacts with foreign colleagues as equals, and lives abroad for individual and organizational development.

Sloan et al (2003) argued that the gap between global strategy and effective individuals to execute them would most likely continue in the future. Thus, global leadership is an important competitive advantage for most global organizations. The authors reviewed the literature on global leadership and reported the roles and competencies of global leaders. With regards to global leadership roles, global leaders must efficiently lead across global operations by coordinating people and processes in different places, must facilitate worldwide learning and sharing of information, and must balance multiple markets and business products. The authors stated that these roles might

not be exhaustive. With regards to global leadership competencies, they identified the most critical competencies for global leaders as managing execution, improving processes, financial acumen, and organizational and global business knowledge.

Petrick, Scherer, Brodzinski, Quinn, and Ainina (1999) proposed that successful global leaders contribute to the competitive advantage of an organization and achieve a reputation of trustworthiness among employees. They proposed that excellent global leaders are capable of balancing profitability and productivity with continuity and efficiency through commitment, morale, adaptability, and innovation. Thus, global leaders understand complex issues and act in complex cognitive ways, while valuing a diverse workforce. Finally, the authors concluded that developing these skills can be accomplished by providing leadership, education, and training at all levels; creating new executive responsibilities for oversight and coordination of all stakeholder relations that affect global reputational capital; conducting an annual global reputational audit; and competing for selected product, process, social performance, environment, and leadership awards, as well as reputational rankings.

Graen and Hui (1999) argued that global leaders must be able to transcend cultural differences and bring different cultural groups together. They must be able to work effectively through the diversity of their organizations and the diverse global world. To develop this capability, the authors proposed that leaders should receive training and experience in cross-cultural leadership skills, transcultural competence, third-culture building capability, and cross-cultural creative problem solving.



Zahra (1998) stated that global organizational success could be associated with the quality of global leadership in the future. Thus, global leadership development and research should not be taken lightly in any organization that wants to succeed globally.

Jokinen (2004) proposed two ways of looking at the competencies of global leaders. One is to assume that global leaders have unique skills and the other is to assume that all leaders are essentially similar, but global managers develop their competencies to a global level. She reviewed the global leadership competency literature and observed three distinct ways it has been studied: one looks at the core of global leadership competencies (self-awareness, engagement in personal transformation, and inquisitiveness), another looks at the desired mental characteristics of global leaders (optimism, self-regulation, social judgment skills, empathy, motivation, cognitive skills, and acceptance of complexity), and the third looks at the desired behavioral competencies of global leaders (social skills, networking skills, and knowledge).

Clark and Matze (1999) proposed that a key characteristic global leaders must have is relational competence. They proposed that relational competence is a way of looking at the world in which individuals' personal and business life is seen as a highly interconnected relationship with others. Thus, global leaders must focus on relationship building in order to be effective.

Deal, Leslie, Dalton and Ernst (2003) proposed that the work of a global manager is similar to that of a domestic manager, however, they need to adapt to the global context. In order to do that, global leaders must be culturally adaptable. They tested if cultural adaptability was related to personality constructs, leadership, international experience, and performance. Results indicated that leaders who scored high in cultural

adaptability were identified as high performers and skillful leaders. The personality characteristics associated with cultural adaptability were emotional stability and conscientiousness. The authors attribute these personality characteristics to emotional resilience. Finally, results indicated that individuals who speak more languages and have lived in different countries are also more culturally adaptable than those who have not had the experience or language skills.

Hitt, Keats, and Yucel (2003) proposed that leaders in the global environment must instill trust and social capital in its constituencies. According to the authors, once global leaders build trust and social capital, they should expect alliance successes, knowledge generation, and innovation, which lead to strategic flexibility. Strategic flexibility was proposed to be essential to being competitive in the global market.

While some scholars have focused on skills and competencies a global leader must have, others dispute the effectiveness of having a laundry list of competencies and skills because they are hard to develop and operationalize. For example, Baruch (2002) stated that with the immense lists of competencies that a global leader must have, it seems that there are no distinct sets of characteristics to describe what a global manager is. Baruch (2002) proposed that global mindset might be the only unique characteristic of a global manager. He stated that scholars should focus on a global frame of mind instead of looking for competencies, demographics, skills, and qualifications that characterize successful global leaders. Similarly, Fulkerson (1999) stated that while competency models might be effective in knowing what leaders can bring to the organization, with the complex environment in which we are operating, scholars need to look at the mental systems and processes that guide leader behaviors.

Pucik and Saba (1998) compared global and expatriate managers and concluded that the main difference between them is their mindset. While expatriate managers were described by their location, global managers were described by their mental model. Thus, they defined a global manager as an executive who fully understands international business, is able to work across national, organizational, and functional boundaries, and can manage short term profitability and growth. While global leaders must be able to do what expatriate managers do, they also must go further by being able to be culturally adaptable in any environment and operate in a highly complex environment. The authors also stated that determining characteristics of successful global managers is highly important and we know very little about it. Global mindset was reviewed as necessary for a global manager to succeed.

Black and Gregersen (2000) proposed that global leaders can be developed, however, the development approach must be different. They articulated that the primary difference between global leaders and domestic leaders is the degree of complexity. A global leader's mindset must encompass the whole world, with the various cultures, and business intricacies. Thus, global leader development must focus on new mind-set development (Black & Gregersen, 2000).

Dachler (1999) argues that global leadership should be not viewed as an extension of domestic leadership, but it should focus on the complexity of the context, its ambiguities, difficulties, confusions, and other unpredictable situations. Thus, global leadership should be examined with a different paradigm than traditional management and leadership theories.

Similarly, Oddou et al, (2000) proposed that for a domestic leader to become a global leader, their mindset needs to change. Furthermore, they argued that learning competencies through traditional training might be inadequate to train leaders for global roles. He proposed that short-term travel experiences may lead leaders to understand different viewpoints, manage uncertainty, be curious, stretch their mental model, and be sensitive to cultural differences. Thus, short-term travel may be beneficial for developing some global leadership competencies.

In a recent review of the global leadership literature, Hollenbeck (2001) argued that there are six perspectives on global leadership. The first looks at a strategic perspective that views global leaders in terms of working across cultural and national boundaries to achieve the corporate strategy of a multinational. He also proposed that rather than focusing on a single country and culture, global leaders have a global outlook and work with people from many cultures at the same time. The second angle looks at the cross-cultural leadership literature, which primarily focus on the cultural dimensions of leading, communicating, socializing, and adapting into another culture. The third perspective looks at the expatriate literature, how to manage expats and how to be an effective expat. The fourth perspective is competency. This approach looks at traits, motivators, attitudes, skills, and personal background to build a profile of what an ideal global leader looks like. The fifth perspective looks into leadership literature, which he reported has a narrow focus and does not necessarily differentiate between a domestic or global leader. The final perspective looks into the adult learning literature, which is extremely relevant to this article as it describes the complexity of understanding and process expatriates experience without conscious effort. He also mentions that this area

has a lot of potential for contribution into the global leadership literature. Hollenbeck (2001) clearly states that there are no universal sets of global leadership competencies and that global mindset research may provide fruitful information for characteristics of global leadership.

Morrison (2000) also reviewed the literature on global leadership and stated that there are not agreed upon characteristics of global leadership because of the lack of conceptually and empirically valid studies. He proposed that any competency model of global leadership must be mutually exclusive, internally homogeneous, collectively exhaustive, stable, and relevantly named. Thus, according to Morrison (2000) most of the competency models proposed have not met the criteria for good competency models.

Hall, Zhu and Yan (2001) argued that global leadership entails more personal characteristics than technical skills. Having an ability to learn to adapt are necessary characteristics for a global leader. The authors also stated that one couldn't become a global leader without international experience.

Hollenbeck and McCall (2003) stated that competency models should not be used as a model for global leadership development. Global leadership development should focus on real leadership challenges that are essential for carrying out the strategy of the organization.

It is clear that the global leadership literature has many proposed competencies, models, roles, and definitions for a global leader. Global mindset has been proposed as the only truly unique and necessary characteristic for a global leader to be effective. This study agrees with this perspective. While global mindset has been proposed to be extremely important for global leadership, there are clearly two groups of functions that

global leaders must be able execute. One is related to the organization. Global leaders must be profitable, must be able effectively manage a global strategy, and expand to new markets, while keeping the focus on the local environment. The other type of function that a global leader must be able carry out is at the individual level. They must be able to develop and sustain strong relationships with individuals from different cultures in order to influence them to achieve organizational goals. The focus of this study is on the latter. While studying organizational outcomes will provide a fruitful line of inquiry, relationships need to be established first in order for global leaders to be able to carry out a global strategy and business. This research focuses on three extremely important relational outcome variables: trust in leader, quality of relationship, and organizational commitment. The literature on each will be briefly reviewed next.

#### *Research on Trust*

Trust has been proposed and researched in the literature of organizational behavior and leadership for a few decades now (Dirks & Ferrin, 2002). Numerous scholars have looked at the role of trust in leadership and the outcomes of this relationship (Dirks & Ferrin, 2001). The impact of trust in leader in a highly complex and volatile situation such as the global economy and market becomes even more relevant considering that lack of trust can lead to negative outcomes. The research on trust has primarily focused on the outcomes of trust and the moderating effects of trust. However, the antecedents of trust have also made their mark in the literature.

Trust has been defined as a trait, a process, and as a state (Burke, Sims, Lazzara & Salas, 2007). As a trait, trust was defined as a propensity to trust, which describes an individual ability to trust others (Rotter, 1967). As a process, trust is described as the

moderating process between behaviors, attitudes, and relationship characteristics (Khodyakov, 2007). As a state, trust has been described as the attitude that develops over time based on contextual facts and need (Rousseau, Sitkin, Burt, & Camerer, 1998). McAllister (1995) described two types of trust: affect-based and cognition-based trust. Affect-based trust assessed trust based on reciprocated interpersonal care and concern. Cognition-based trust assessed trust based on individual belief about the individual reliability and dependability (McAllister, 1995).

#### *Outcomes of trust*

In a meta-analysis review of trust and leadership, Dirks and Ferrin (2002) examined 106 empirical studies of trust and leadership and determined that trust in the leader had a positive relationship with all organizational citizenship behaviors such as altruism ( $r = .19$ ), civic virtue ( $r = .11$ ), contentiousness ( $r = .22$ ), courtesy ( $r = .22$ ), and sportsmanship ( $r = .20$ ). With regards to job performance, trust in leader had a positive but small relationship ( $r = .16$ ), however, it had a strong relationship with job satisfaction ( $r = .51$ ), organizational commitment ( $r = .49$ ), satisfaction with the leader ( $r = .73$ ), and leader-member-exchange ( $r = .69$ ). Trust also had a negative relationship with turnover intentions ( $r = -.40$ ), belief in the information provided by the leader ( $r = .35$ ), and commitment to decisions ( $r = .24$ ).

While not included in the meta-analysis, trust in leader has also been correlated significantly with communication (Boss, 1978), cooperation (Rempel, Holmes, & Zanna, 1985), information sharing (Dirks, 1999), perceived effectiveness of the leader (Gillespie & Mann, 2004), increased upwards communication (O'Reilly, 1978), improved team performance (Dirks, 1999), and perceived legitimacy of changes (Rousseau & Tijoriwala,

1999). Clearly, trust in leader is extremely important for effective leadership in organizations and what brings about trust in leader should be studied.

#### *Antecedents of trust*

In their meta-analysis of trust and leadership, Dirks and Ferrin (2002) also examined the relationships between antecedents of trust in leader and reported that transformational leadership had the strongest relationship ( $r = .72$ ), while transactional leadership had a lower but positive relationship ( $r = .59$ ) and perceived organizational support was highly correlated ( $r = .69$ ) with trust in leader. Interactional, procedural, and distributive justice had strong relationships with trust in leader as well ( $rs = .65, .61$ , and  $.50$  respectively). Participative decision-making and unmet expectations also had strong relationships with trust in leader ( $rs = .46$  and  $-.40$  respectively). The trait propensity to trust had a small but positive relationship with trust in leader ( $r = .16$ ) and length of the relationship did not show any statistically significant relationship.

#### *Research on Leader-member-exchange*

The Leader-member exchange (LMX) theory started with the Vertical Dyad Linkage model. The model addressed emergent properties of the leader-member dyad and provided a more dynamic, flexible approach to understanding organizational processes (Dansereau, Graen & Haga, 1975). Leadership was treated as a dyadic phenomenon where effects on behavior depend partly on the behavior characteristics of the individual members of the dyad (Dansereau et al, 1975). Thus, LMX focuses on dyadic relationships, or exchanges, between supervisors and their subordinates.

LMX theory describes the role-making processes between a leader and each individual subordinate within the work unit. Leaders and subordinates develop an



exchange relationship over time. This relationship can be classified by the quality of the exchange as high LMX (mutual trust, respect, liking, and reciprocal influence) or low LMX (downward influence and role- defined relations) (Liden, Wayne & Stilwell, 1993). High LMX is usually seen in individuals that are in the in-group and low LMX is seen in individuals that are in the out-group. According to LMX, the quality of the relationship that develops between a leader and a follower is predictive of outcomes at the individual, group, and organizational level of analysis (Gerstner & Day, 1997).

Graen and Uhl-Bien (1995) classified the evolution of the LMX theory into four stages: (a) work socialization and vertical dyad linkage where the focus was on the discovery of differentiated dyads (i.e. in-groups and out-groups), (b) LMX where the focus was on the relationship quality and its outcomes, (c) a prescriptive approach to dyadic partnership building, and (d) LMX as a systems-level perspective (i.e., moving beyond the dyad to group and network levels). Thus, the LMX theory and research has been growing over the past 30 years.

#### *Outcomes of LMX*

In their meta-analysis Gerstner and Day (1997) reported that LMX was positively related to overall satisfaction ( $r = .46$ ), satisfaction with supervisor ( $r = .62$ ), commitment ( $r = .35$ ), job performance ( $r = .41$ ), role clarity ( $r = .34$ ), objective performance ( $r = .10$ ), and member competence ( $r = .26$ ). LMX was negatively correlated with role conflict ( $r = -.26$ ) and turnover intentions ( $r = -.28$ ). Leader-member relationship status offers an explanation for employee reactions to the work situation; their levels of performance, their attitudes, organizational attrition, and job difficulties have been linked to supervisor-

employee interactions. Given the effects described above, it is important to identify and understand factors that influence LMX.

### *Antecedents of LMX*

According to Gerstner and Day (1997), researchers only recently began to devote attention to the development of LMX, therefore there is very little known regarding the antecedents of LMX. Of those relationships, only member competence was examined in their meta-analysis as an antecedent of LMX. Gerstner and Day (1997) stated that some studies have examined demographic variables as antecedents of LMX, but there appears to be little theoretical or empirical justification for the development of LMX based on simple demographics. Deluga (1998) stated that this has been surprising due to the fact that so little research has been done on leader-member similarity.

Besides demographic similarity, other types of similarity were linked to LMX but did not have sufficient studies to be included on the Gerstner and Day (1997) meta-analysis. Steiner (1988) concluded that perceived value similarity might itself influence the nature of the exchange relationship. Turban and Jones (1988) reported that mutual perceived leader-member similarity related to a pattern of outcomes consistent with those associated with LMX: lower role ambiguity, confidence and trust in the supervisor, and greater influence over the supervisor. Further, supervisors' perceived similarity with members was associated with members' rated performance. Liden et al, (1993) reported that leader-member interaction characteristics, including similarity, influenced LMX. Phillips and Bedeian (1994) found that leader-perceived member attitudinal similarity correlated positively with subordinate-reported exchange quality. They reported that leaders who perceive their followers to be similar to themselves in attitudes toward

family, money, career strategies, goals in life, and education had more positive ratings of LMX quality than did leaders who saw their followers as less similar. Engle and Lord (1997) reported that leader and member perceived attitudinal similarity predicted LMX quality mediated by liking. Leader-member cognitive similarity has also been associated with LMX. Engle and Lord (1997) reported that similarity of implicit performance theories predicted liking and LMX. Bauer and Green (1996) reported that supervisor-subordinate positive affectivity similarity influenced LMX development. Positive affectivity similarity was related to developmental processes, which were related to LMX quality and time-based relationship changes. Dose (1999) reported that perceived similarity in moral values were positively related to LMX. Suazo, Turnley and Mair-Dalton (2005) connected LMX and cognitive similarity. Chen, Aryee, Lee and Hui (2005) reported that perceived leader-subordinate goal similarity was related to LMX. In summary, these results suggest that leader-member compatibility, defined by similarity of attitudes and perceptions may influence leader-member relationship.

Member personality characteristics may also influence LMX development. Phillips and Bedeian (1994) reported member extroversion to be positively related to LMX quality. Kinicki and Vecchio (1994) reported that member locus of control correlated positively with subordinate-reported LMX. Perceptions of subordinates' characteristics have been strongly related to high LMX and positive ratings of subordinate performance (Liden et al, 1993).

Supervisor characteristics may influence LMX. Turban, Jones, and Rozelle (1990) reported that supervisor liking of a subordinate influenced the expected leader-member exchange, treatment, and the rated performance of the subordinate. Similarly, Wayne,

Shore, and Liden (1997) reported that supervisor liking and expectations for the subordinate and dyad tenure determined the quality of the exchange.

### *Research on Organizational Commitment*

Organizational commitment (OC) has been extensively studied in organizational psychology and behavior. However, measurement issues and lack of concise definitions have been the reason for various scholars to call for a more precise definition and operationalization of OC (Reichers, 1985). The literature on OC has been primarily divided between the antecedents and outcomes of OC. Some studies have also examined OC as a moderating variable.

Organizational commitment has been defined as either an affective bond between the individual with the organization or a bond caused by some kind of external reward or transaction between the organization and the individual (Mathieu & Zajac, 1990). In this research, organizational commitment is viewed as affective commitment because this type of commitment is viewed largely as the result of work experiences (Meyer & Allen, 1991). Affective commitment is defined as “the relative strength of an individual’s identification with and involvement in a particular organization” (Mowday, Steers, & Porter, 1979, p.226).

### *Outcomes of Organizational Commitment*

Mathieu and Zajac (1990) conducted a meta-analysis of organizational commitment and several organizational outcomes. They reported the relationship between organizational commitment and performance as very small ( $r = .13$ ). Other small outcome relationships were reported such as attendance ( $r = .10$ ), lateness ( $r = -.12$ ), and turnover ( $r = -.28$ ). However, organizational commitment revealed strong relationships

with intention to search for another job and turnover intention ( $r_s = -.60$  and  $-.46$  respectively). Other correlates were examined such as motivation ( $r = .56$ ), job involvement ( $r = .43$ ), stress ( $r = -.30$ ), occupational commitment ( $r = .45$ ), and job satisfaction ( $r = .59$ ).

Riketa (2002) conducted a meta-analysis on job performance and attitudinal commitment. Results indicated that affective commitment and performance shared a small but significant relationship of ( $r = .20$ ). Some variables increased this relationship: extra-role performance, white-collar workers, and self-rating assessments of performance. Demographic variables did not moderate the relationship between performance and OC.

#### *Antecedents of Organizational Commitment*

Mathieu and Zajac (1990)'s meta-analysis also examined the role of antecedents of organizational commitment. They reported that demographic variables yield very small relationships with organizational commitment. Tenure in the organization also was reported to have a small positive relationship with organizational commitment ( $r = .17$ ). Perceived competence and ability were also examined and yielded positive relationships ( $r_s = .63$  and  $.14$  respectively). Salary, protestant work ethic, and job level also yielded small but significant relationships ( $r_s = .18$ ,  $.29$ , and  $.18$  respectively). With regards to job characteristics, skill variety, autonomy, job challenge, and job scope variety yielded positive relationships ( $r_s = .21$ ,  $.08$ ,  $.35$ , and  $.50$  respectively). With regards to leadership, group cohesiveness ( $r = .15$ ), and task interdependence ( $r = .23$ ) had small significant relationships with OC. Initiating structure and consideration had moderate significant relationships with OC ( $r_s = .29$  and  $.34$  respectively). Leader communication and

participatory leadership yielded stronger positive relationships with OC ( $r_s = .45$  and  $.39$ ). Role conflict ( $r = -.27$ ), role ambiguity ( $r = -.22$ ), and role overload ( $r = -.21$ ) had negative small significant relationships with OC.

### *Research on Global Mindset*

Over the past decade, global mindset has emerged as a necessary attribute for effective global leadership (Kedia & Mukherji, 1999; Pucik & Saba, 1998; Black & Gregersen, 2000; Oddou, Mendenhall, & Richie, 2000). In the global leadership literature, global mindset has been used to describe many things from skills, attitudes, and competencies, to behaviors, strategies, and practices (Levy, Beechler, Taylor & Boyacigiller, 2007).

### *Global mindset frameworks and outcomes*

The seminal work on global mindset is the work of Perlmutter (1969), who defined three orientations that managers have used in managing a multinational corporation: ethnocentric (home country orientation), polycentric (host country orientation), and geocentric (world orientation). His work on geocentrism became the foundation of the construct of global mindset. According to Perlmutter (1969), global organizations or geocentric organizations are increasingly complex and interdependent, aim for a collaborative approach between headquarters and subsidiaries, have standards which are universal and local, have executives which are rewarded for reaching local and global objectives, and develop the best individuals in the world for key positions around the globe.

Rhinesmith (1992) described global mindset at the individual level noting that global mindset was an identity or paradigm for viewing the world holistically. Leaders

described as having a global mindset scan the world from a broad perspective and observe unexpected trends and opportunities. He indicated that people with global mindsets drive for the broader picture, accept the complexity of the world, trust process more than structure, value diversity and cultural differences, are comfortable with change, surprise, and ambiguities, and constantly re-examine themselves and their boundaries. Thus, he indicated that based on personal experience individuals with global mindset are knowledgeable about their business and industry in both domestic and foreign contexts, they have high conceptual ability, are flexible, are sensitive to cultural differences, they must be able to tackle uncertainty well, and they seek ways to learn and develop themselves. Rhinesmith (1992) also indicated that global managers must be able to manage competitiveness, complexity, adaptability, teams, uncertainty, and learning.

Gupta and Govindarajan (2002) described a conceptual framework of global mindset in terms of market and cultural awareness and openness, and the ability to integrate differing perspectives. Their framework included two variables, integration and differentiation. Integration was described as the ability to integrate diversity across cultures and markets. Differentiation was described as openness to diversity across cultures and markets. The authors proposed that scores high in integration and differentiation mean that an organization or a person has a global mindset. Gupta and Govindarajan (2002) proposed that global mindset can be developed in four distinct ways: cultivating curiosity about the world along with commitment to learn about how things around the world work, by having a clear understanding and articulation of their current mindset, by having exposure to diversity and complexity, and attempting to integrate knowledge about diverse culture and markets.

Kedia and Mukherji (1999) concurred that global managers should change their paradigms and mindsets to think more globally. They proposed four managerial mindsets: *defender* (managers that are focused on domestic market and its needs), *explorer* (managers that are focused on domestic market but are aware of international market and opportunities to increase sales or distribution), *controller* (ethnocentric mindset with a focus on domestic and international markets), and *integrator* (managers with a global perspective who create multiple diverse relationships).

Kefalas (1998) advocated that globally minded people with strong local results were the best candidates for global leadership positions. Kefalas' (1998) conceptualized two variables- *conceptualization* and *contextualization*. Conceptualization described people with a global view of the world. Contextualization described people's capacity to adapt to their local environments. High scores in both dimensions were optimally described *most global* and low scores on both dimensions were considered *least global*.

Arora, Jaju, Kefalas, and Perenich (2004) tested this framework in the textile industry and reported significant relationship between age and global mindset (-), as well as significant relationships between level of education and global mindset (+). Additionally, international management training was related to global mindset (+). American managers scored significantly lower on global mindset than foreign managers. Managers with a family member living abroad scored significantly higher than those who have no family abroad. Managers who were willing to work abroad scored higher on global mindset than those who were not willing. Managers who took the questionnaire via computer were more globally minded than those who took it on paper. They



concluded that two different skills seem to be the most relevant for developing a global mindset: intercultural sensitivity and global business knowledge.

Bleechler and Javidan (2007) described global mindset as a person's knowledge, cognitive ability, and psychological attributes that allowed them to lead in diverse cultural environments. They proposed that global mindset has three major components: intellectual capital (global leader's intellectual and cognitive capabilities), psychological capital (psychological makeup that enables global leaders to put their knowledge into use), and social capital (relationships inside and outside the organization).

Murtha, Lenway, and Bagozzi (1998) operationalized global mindset in terms of managers' cognition of international strategy and organization. They developed a questionnaire, which measured global mindset at the individual level in terms of integration, responsiveness, and coordination. They reported that when the company adopted a global strategy, the managers' mindset shifted towards a more global as opposed to domestic focus.

Bouquet (2005) studied global mindset and reported three overarching behaviors related to it - the capacity to process and analyze global business information, the capacity to develop relationships with key stakeholders around the world, and the capacity to use globally relevant information while making decisions for the organization. This research also indicated the approaches organizations were taking to effectively build global mindset in its managers: having a job identity that requires a global mindset, having the right infrastructure in place for global leaders to execute their job, having the right incentives that motivate the managers, and finally, having a leadership development program which includes training, international assignments, and mentoring.

*Proposed antecedents of global mindset*

While there has been much talk about global mindset and many untested relationships have been proposed, some articles attempt to describe how leaders can develop global mindset. International experience (Black, Gregersen, Mendenhall, & Stroh, 1999), international management development, and cross-cultural training programs (Stahl, 2001) play a role in the development of global mindset. However, Black et. al (1999) argued that international assignment by itself may not lead to global mindset development. Boyacigiller, Beechler, Taylor, and Levy (2004) stated that expatriate assignments must be carefully managed, with tasks or assignments that build on the difficulty of the job to impact the global mindset. They also proposed that international business trips at the beginning of manager's career could potentially help them develop a global mindset. Trigger events also contribute to the development of a global mindset (Clapp-Smith, Luthans, & Avolio, 2007). Cultivating curiosity has also been proposed to be a part of the development of global mindset (Gupta & Govindarajan, 2002). Estienne (1997) proposed that cross-cultural training has not achieved the desirable results because of the lack of focus on the mindset. Cultivating a global mindset is much more relevant and challenging than a simple set of skills, as it has to do with how individuals make sense of the world. It was proposed that development should focus on changing from a domestic to a global mindset, working through a model of cross-cultural reconciliation (understanding similarity and difference), and emphasizing strong relational skills. Without this, cross-cultural training will continue to disappoint. Clapp-Smith and Hughes (2007) set-out to investigate how global mindset is developed by using a grounded theory approach. Boundary testing, cognitive shifts, curiosity, relationship building,

organizational mindset, language skills, personal history, and authenticity have been proposed to be determinants of a global mindset.

*Proposed Global Mindset Framework*

Levy, Taylor, Boyacigiller and Beechler (2007) described global mindset from three different perspectives – cultural, strategic, and a combination of the two. The cultural perspective believes that managers are constantly faced with the challenge of prevailing over the ethnocentric mindset by managing culturally divergent interorganizational relationships. This perspective believes that managers need to overcome the ethnocentric mindset in order to adopt a global mindset – one that allows managers to be self-aware of cultural differences, has an openness and understanding of other cultures, and selective incorporation of foreign values and practices (Levy, Taylor, et al, 2007). The strategic perspective frames global mindset in terms of the increased complexity created by the globalization (Levy, Taylor, et al, 2007). The foundation of this perspective lies in literature on international strategy – that asserts that complexity, heterogeneity, and indeterminacy of multinational corporations, creates a need for managers to change their styles of thinking and adopt a global mindset. Cognitive complexity has been proposed as an important construct of global mindset (Boyacigiller et al, 2004). Cognitive complexity represents the degree of differentiation, articulation, and integration within a cognitive structure (Weick & Bougon, 1986). The multidimensional perspective integrates the two perspectives listed above. The foundation of this perspective lies with the work of Rhinesmith (1992). Levy, Taylor, et al, (2007) defined global mindset as the ability to be open to and to articulate various

cultural and strategic realities at the local and global levels, while encompassing these multiple perspectives. This is the operational definition used in this research.

Scholars have developed frameworks of global mindset, but most of these have not been researched. Based on the literature and empirical evidence of global mindset, it is evident that global mindset has two important but yet distinct characteristics. An individual with a global mindset must have an acute sense of the global business world but should also be able to be culturally adaptable. In this article, global mindset is conceptualized as having two dimensions: global business orientation and cultural intelligence.

### *Cultural Intelligence*

Earley and Ang (2003) proposed that culturally intelligent individuals are capable of developing a common mindset derived from available information even in the absence of an understanding of local practices and norms. Thus, a culturally intelligent person has the capability to acquire behaviors that are needed in a completely different environment. Furthermore, culturally intelligent individuals are not only required to think about or understand their new environment, but they must act in appropriate ways. Earley and Ang (2003) argued that cultural intelligence required an interaction of three important elements: *cognitive*, *motivational*, and *behavioral*. The cognitive component of cultural intelligence describes how individuals use the knowledge available to them. Specifically, individuals are more self-aware and in-tune with their social environment and the information available to them. Other characteristics necessary for the cognitive component of cultural intelligent individuals are: cognitive flexibility, inductive and analogical reasoning, and a high degree of adaptability (Earley & Ang, 2003). Another

component of cultural intelligence is the motivational facet, which describes the motivation of a person to adapt their behaviors according to a new cultural context. Individuals must be open, confident, and consistent in order to be motivated to act in culturally appropriate ways (Earley & Ang, 2003). The behavioral component of cultural intelligence described a big behavioral repertoire, which is flexible, broad, and easily adaptable (Earley & Ang, 2003). Another important characteristic has to do with the capacity to acquire new behaviors that are appropriate for a new culture, which describes the *metacognitive* component of cultural intelligence (Earley & Ang, 2003).

Earley and Ang (2003) reasoned that culturally intelligent individuals had both the wisdom to choose the best path and the perseverance to succeed in global settings. A person with high cultural intelligence has a greater capability to “store” and categorize their experiences, than a person with low cultural intelligence. Thus, their mindsets are different. Alon and Higgins (2005) proposed that cultural intelligence moderates the relationships between emotional intelligence, analytical intelligence, leadership behaviors, and global leadership success.

Ang, Van Dyne, Koh, & Ng (2004) developed an instrument to measure cultural intelligence, which included cognitive, motivational, behavioral, and metacognitive. Ang, Van Dyne, and Koh (2006) correlated the Big Five personality constructs with cultural intelligence and they reported that openness to experience correlated positively among all components of cultural intelligence. Earley, Murnieks, and Mosakowski (2007) compared global mindset and cultural intelligence. They categorized cultural intelligence as “a person’s capability to adapt effectively to new cultural contexts and it has both process and content features” (p.83). They reported that since cultural intelligence focuses only

on cultural differences and interactions the construct is narrower than that of global mindset, however, they are interrelated. Global mindset is a broader construct as it takes into consideration the complexity of the interaction that may or may not be related to cultural differences.

Thomas (2006) described cultural intelligence and global mindset as the capacity of individuals to thrive in cross-cultural situations. Similarly, Levy, Beechler et al (2007) stated that the construct of global mindset and cultural intelligence are not as differentiated as scholars may propose. The one main difference stated in the literature is that individuals with a global mindset also have a global business orientation (Levy, Beechler et al, 2007). This implies that for an individual to have a global mindset they must be culturally intelligent and also have a global business perspective to not only integrate the complexity of the global business environment, but also to act in culturally appropriate ways. This notion is not new to the literature, as it was presented in the work of Kefalas (1998) and Kedia and Mukherji (1999).

#### *Global Business Orientation*

Global business orientation describes individuals' attitudes towards internationalization as well as the ability to adapt to new business environments (van Bulck, 1979). This is characterized by an awareness and knowledge of global markets and processes with a structure and process to mediate the very volatile environment. Individuals with a global orientation make decisions based outside one culture and embrace diverse perspectives (Taylor et al, 2008).

Taylor et al, (2008) used global business orientation to operationalize global mindset and reported that top management orientation mediated the relationship between

organizational culture and HRM practices with organizational commitment. Specifically, global orientation impacts employee commitment. They concluded that top management orientation shapes employees' attitudes towards the organization.

Kobrin (1994) operationalized global mindset as geocentrism and reported that a global mindset was related to percentage of sales, total number of employees abroad, and the total number of countries with manufacturing operations. Organizations with a global mindset tend to make more use of transpatriates in managing global operations and have a higher number of non- U. S. born directors (Kobrin, 1994). International assignments and developmental activities abroad were correlated with a global mindset. Organizations with a global mindset emphasize cultural adaptability and diversity. However, global mindset had no relationship with multinational strategy and organizational structure (Kobrin).

Levy (2005) studied the relationship between top management teams' attention patterns and global strategy and reported that top management teams' attention pattern to the external environment was related to the global strategy of the organization. Similarly, top management's attention patterns to the internal environment were negatively related to a global strategy. He also reported that top management teams that focused on a wider spectrum of elements in the external environment were more likely to develop a global strategy.

Nadkarni and Perez (2007) studied the role of domestic mindsets in organizational internalization and reported that the complexity of a domestic mindset makes a difference while internationalizing, as leaders are more able to use the knowledge acquired in the domestic market in the global market.

Harverston, Kedia and Davis (2000) studied the relationship between managerial mindset and an organization's engagement in international activity and reported that global orientation of managers had a significant relationship with born global firms. Furthermore, managers of born global firms had more international experience than gradual global firms' managers. Finally, managers of born global firms were reported to have higher risk tolerance than managers of gradual globalizing organizations.

Nummela et al, (2004) studied the relationship between global mindset and effective internationalization of small and medium sized companies. They measured global mindset by looking at global orientation – with elements of proactiveness, commitment, and international vision. Findings indicated that international work experience had a positive relationship with global mindset. Market characteristics also had a positive relationship with a global mindset. This means that a firm's global market has a relationship with a manager's global mindset. Global mindset also had a positive relationship with financial indicators of international performance.

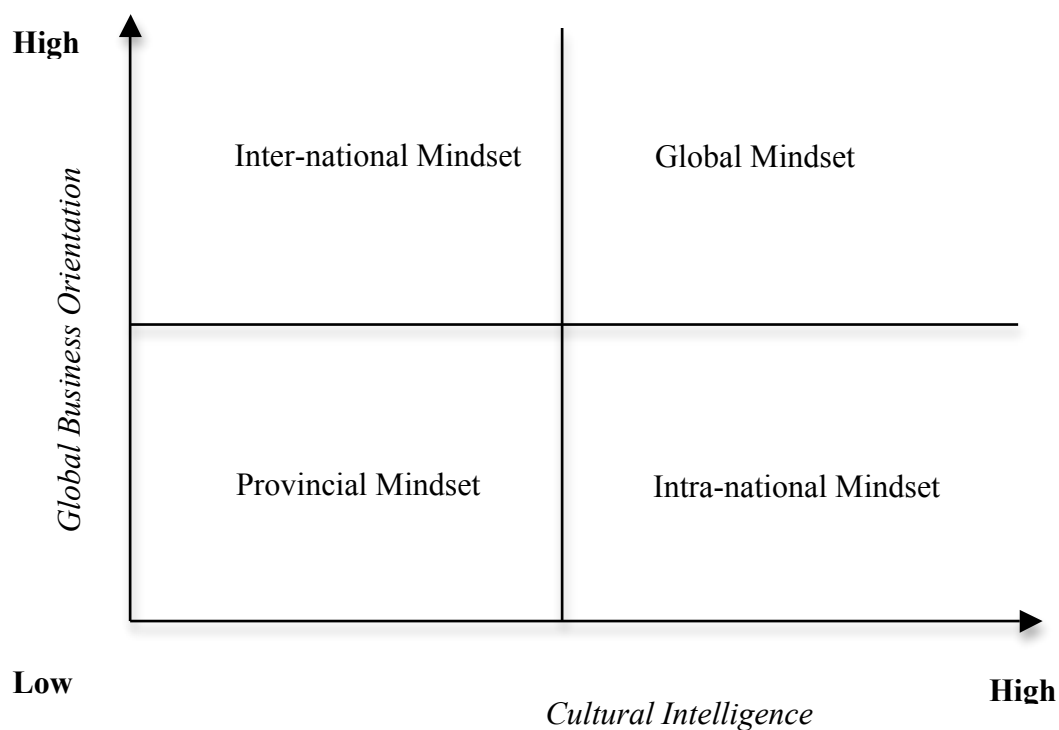
As evidenced from the reported studies many liberties and generalizations have been used to operationalize global mindset in research. Short of using other complementary constructs to represent global mindset, a more precise framework of global mindset and its complexities is necessary to set the stage for empirical research. A global mindset framework is proposed that combines the two constructs of global business orientation and cultural intelligence (see Figure 1). The behavioral component of cultural intelligence was left out of the construct of global mindset because global mindset is an internal-level construct that measures cognitive and developmental



capacities as opposed to observed behavior. The framework is illustrative of the concept and the quadrants do not necessarily represent a cut-off score of the mindsets.

A *provincial mindset* is that of individuals who are more ethnocentric and have a domestic business orientation. These individual managers would most likely be effective in homogeneous organizations and markets with a focus solely on the local operation. This is similar to the work of Kedia and Mukherji's (1999) defender managerial mindset and Perlmutter's (1969) ethnocentric mindset.

*Figure 1.* Mindsets according to Global Business Orientation and Cultural Intelligence



A *inter-national mindset* reflects an individual leader who is ethnocentric but has an orientation for global business. Leaders with this mindset would be most likely to start up business abroad but not adapt to the local culture. This concept is similar to the

controller mindset by Kedia and Mukherji (1999) and polycentric mindset by Perlmutter (1969)

A *intra-national mindset* reflects the state of mind of individuals who are focused on the local business but can act in culturally sensitive ways in a heterogeneous cultural environment. Thus, leaders with this intra-national mindset most likely would foster diversity in their organizations, but not focus on a global market.

A *global mindset* is that of individuals who have a global business orientation and are adaptable to the local environment and culture. Thus, leaders with a global mindset focus on the global market, while being sensitive to the needs and characteristics of the local environment and culture. This view is similar to the work of Kedia and Mukherji (1999) on integrator mindset, Perlmutter's (1969) geocentric mindset, and Kefalas' (1998) global mindset.

### Hypotheses

Very little empirical research has been conducted on global mindset. The majority of research has either tested the antecedents of global mindset or organizational level variables related to a leader's global mindset. The goal of this research is to test the relationship between global mindset and three relational individual outcomes: trust, leader-member-exchange, and organizational commitment.

Scholars have consistently listed characteristics, attitudes, and behaviors of leaders with a global mindset. Earley et al, (2007) stated that there are six characteristics that individuals who possess a global mindset have: knowledge, ability to deal with complexity, flexibility, sensitivity, judgment, and reflection. Rhinesmith (1992) stated that are six competencies that people with a global mindset demonstrate: they manage

competitiveness, complexity, adaptability, teams, uncertainty, and learning. Beechler and Javidan (2007) described an individual with global mindset as open to differences and aware of diversities across organizations, countries, cultures, and markets. Thus, having a global mindset is not only being able to understand cultural differences and how to act on them, but to also be capable of making meaning in a complex global environment. Finally, individuals with a global mindset are able to act in a business savvy way across various complex situations and locations.

Similarly, Beechler and Baltzley (2008) stated that there some key characteristics that differentiate a global mindset from a domestic mindset: deep understanding of cultural, political, historical, and socioeconomic conditions of home country and the world; complex behavioral repertoire, a high IQ combined with high cognitive complexity; self-awareness, open-mindedness, curiosity, tolerance for ambiguity, and being able to establish trust and build relationships with those who are culturally different.

Lahiri, Perez-Nordtvedt, and Renn (2008) have also expanded the original definition of global mindset to include characteristics of leaders who have a global mindset. According to the authors, leaders with a global mindset can think beyond geographic boundaries, they can view the firm as having a global strategy, they can understand the global business environment, they can complement local needs with local responsiveness, they value integration across borders, they possess tolerance in a complex environment, and they appreciate cultural diversity. The authors propose that leaders with a global mindset can transform globalization threats into opportunities.

By conceptualizing global mindset using global business orientation and cultural intelligence, a few important studies are used to guide the hypotheses. Taylor et al (2008) stated that top managers with a global orientation that are also culturally sensitive, welcome the challenges of globalization and are effective in dealing with the complexity of the environment. They proposed that employees would have confidence and trust in the leader to be capable of leading the organization to success. They also proposed that because of their global mindset, employees would feel more committed to the organizational success. Rockstuhl and Ng (2008) stated that trust between members with dissimilar cultures is hard to achieve, however, it is extremely important for the success of a global organization. They reported that cultural intelligence individuals are able to foster trust and trust other members of the organization when they are from different cultures. Similarly, Flaherty (2008) reported that cultural intelligence had a positive significant relationship with team member acceptance and integration. Individuals who are culturally intelligent are able to develop high quality relationships with those who are different from themselves.

While no research has been conducted between a leader's global mindset (as conceptualized above) and individual level outcomes, it is clear based on the research and the relationships proposed above that leaders with a global mindset will be able to instill trust in followers, develop a high quality of relationship with them, and make sure that followers stay committed to the organization. The following hypotheses are proposed:

Hypothesis 1a: Leaders' global mindset will be positively related to followers' ratings of trust in leaders.

Hypothesis 1b: Leaders' global mindset will be positively related to followers' ratings of leader-member-exchange.

Hypothesis 1c: Leaders' global mindset will be positively related to followers' ratings of organizational commitment.

*Moderating effects of complexity of the global role*

While the literature of global leadership reports several competencies and characteristics global leaders must have, it is unclear what the roles of a global leader are, and if these roles differ between leaders. Few authors have attempted to describe these roles and they were often mixed with competency models. Gregersen et al, (1998) stated that global leaders need to be able to manage uncertainty and ambiguity. Kets de Vries and Florent-Treacy (2002) proposed that global leaders must have a cosmopolitan mindset and should not be rooted in their own culture. According to them, global leaders must also be excellent communicators both verbally and non-verbally in many languages. Caligiuri (2006) identified through focus groups and interviews unique functions that global leaders must be able to effectively carry out. Global leaders must work effectively and influence people from different countries and nationalities (colleagues, subordinates, and internal and external clients), may need to speak many languages, need to develop a global strategic business plan for their unit, need to maintain the budget for their unit, need to manage risks for their unit. Pucik and Saba (1998) defined a global manager as an

executive who is able to work across national, organizational, and functional boundaries, and can manage short-term profitability and growth.

Bartlett and Ghoshal (1992) proposed that there is no such thing as a universal global leader, however, there are differing functions that a global leader executes. Thus, a global leader can be the business manager, in which they are responsible for the strategy, the designing of the global plan, and the coordination of this plan. A global leader can also be the country manager, in which the manager has to connect local intelligence with global strategy. Another option is to be the functional manager in which they act as a scanner, with expertise to collect and disseminate knowledge across boundaries that can be transformed into a great strategic plan. A global leader can also be the transnational manager that has diverse skills and can lead, recruit, develop future leaders, balance negotiation between countries and functions, and have a global mindset. The transactional leader described by Bartlett and Ghoshal (1992) has those characteristics that have been identified by other authors as global leader characteristics. Graen and Hui (1999) argued that leaders must be able to transcend cultural differences and bring different cultural groups together. They must be able to work effectively through the diversity of their organizations and the diverse global world.

Based on this review, it is clear that global leaders may execute some of these functions to different degrees. Thus, some global leaders may have a high complexity global role and some global leaders may have a low complexity global role. Global leaders with a high complexity global role will manage uncertainty and ambiguity more frequently than those with a low complexity global role. They will also lead teams with diverse values with more frequency than those with a low complexity global role. They

will use more than one language to execute their job functions and with more frequency than those with a low complexity global role. They will work to influence team members and stakeholders from different countries and nationalities more frequently than those with a low complexity global role. They will coordinate people and processes in different places more frequently than those with a low complexity global role. They will also work across national, organizational, and functional boundaries more frequently than those with a low complexity global role.

Thus, global leaders who have a high complexity global role will work in an environment which is more complex. These individuals will deal with challenges of the global environment and diversity with more frequency than those with a low global role. Thus, global mindset will be more important for leaders who have a high global role than for those who have a low global role.

Hypothesis 2a: Complexity of the global role will moderate the relationship between leaders' global mindset and trust in leader, such that global mindset will have a more positive impact on trust when the complexity is high rather than low.

Hypothesis 2b: Complexity of the global role will moderate the relationship between leaders' global mindset and leader-member-exchange, such that global mindset will have a more positive impact on the quality of the relationship when the complexity is high rather than low.

Hypothesis 2c: Complexity of the global role will moderate the relationship

between leaders' global mindset and followers' ratings of organizational commitment, such that global mindset will have a more positive impact on organizational commitment when the complexity is high rather than low.

### *Moderating effects of leader distance*

The global environment has promoted working relationships that span physical and temporal distance. The concept of distance between the supervisor and subordinate is not new in the leadership literature (Napier & Ferris, 1993). Three types of distance have been proposed: psychological distance, structural distance, and functional distance. Psychological distance refers to the perceived differences between the subordinate and leader. Structural distance refers to the physical distance, organizational structure, and supervisor structure. Functional distance refers to the degree of closeness of the relationship between the leader and subordinate as a result of psychological and structural distance (Napier & Ferris, 1993).

Global leaders lead across global operations by coordinating people and processes in different places (Sloan et al, 2003). Thus, global leaders may work in different cities or even countries of those that they lead. This is important because leadership effectiveness has been related to the degree of closeness or distance between the leader and the follower (Antonakis & Atwater, 2002). Kerr and Jermier (1978) argued that physical distance may hinder the ability of the leader to be effective. Podsakoff, MacKenzie, and Bommer (1996) reported that physical distance between leader and follower was positively related to perceptions of role conflict and negatively related to group altruism. In the same meta-analysis it was demonstrated that physical distance was negatively



related to follower performance, conscientiousness, and civic duty. Physical distance was also negatively correlated to follower satisfaction (Burrows, Munday, Tunnell, & Seay, 1996). Howell and Hall-Merenda (1999) studied the moderating effects of physical distance between leaders and followers with transformational leadership and performance. Results indicated that close relationships produced statistically significant higher performance than distance relationships. Similarly, Howell, Neufeld, and Avolio (2005) reported that transformational leadership had a higher impact on unit performance when the leader and follower were closely located. Contingent rewards however, had a higher impact on unit performance when the leader and follower were located in different places. Avolio, Zhu, Koh and Bhatia (2004) reported that structural distance moderated the relationship between transformational leadership and organizational commitment.

The impact of the leader's global mindset on followers should also be affected by the physical distance between leader and follower. Close leaders may be able to demonstrate culturally appropriate behaviors and a global vision while distance leaders may have more difficulty in demonstrating this capacity. Thus, physical distance will impact the relationship between global leaders' global mindset and follower's trust in leader, quality of the relationship, and organizational commitment.

Hypothesis 3a: Physical distance between the leaders and the followers will moderate the relationship between leaders' global mindset and trust in leader, such that global mindset will have a more positive impact on trust when physical distance is low rather than high.

Hypothesis 3b: Physical distance between the leaders and the followers will moderate the relationship between leaders' global mindset and leader-member-exchange, such that global mindset will have a more positive impact on the quality of the relationship when physical distance is low rather than high.

Hypothesis 3c: Physical distance between the leaders and the followers will moderate the relationship between leaders' global mindset and followers' ratings of organizational commitment, such that global mindset will have a more positive impact on organizational commitment when physical distance is low rather than high.

Antonakis and Atwater (2002) proposed that leader-follower interaction frequency is another type of distance. They defined this dimension as "the perceived degree to which leaders interact with their followers" (p. 686). Technological advances may be able to assist with the barriers of physical distance by having followers and leaders who are physically distant having close relationships because of the frequency of their communication. Thus, the frequency of leader-follower interaction should also impact the relationship between leaders' global mindset and followers' ratings of trust, leader-member-exchange, and organizational commitment.

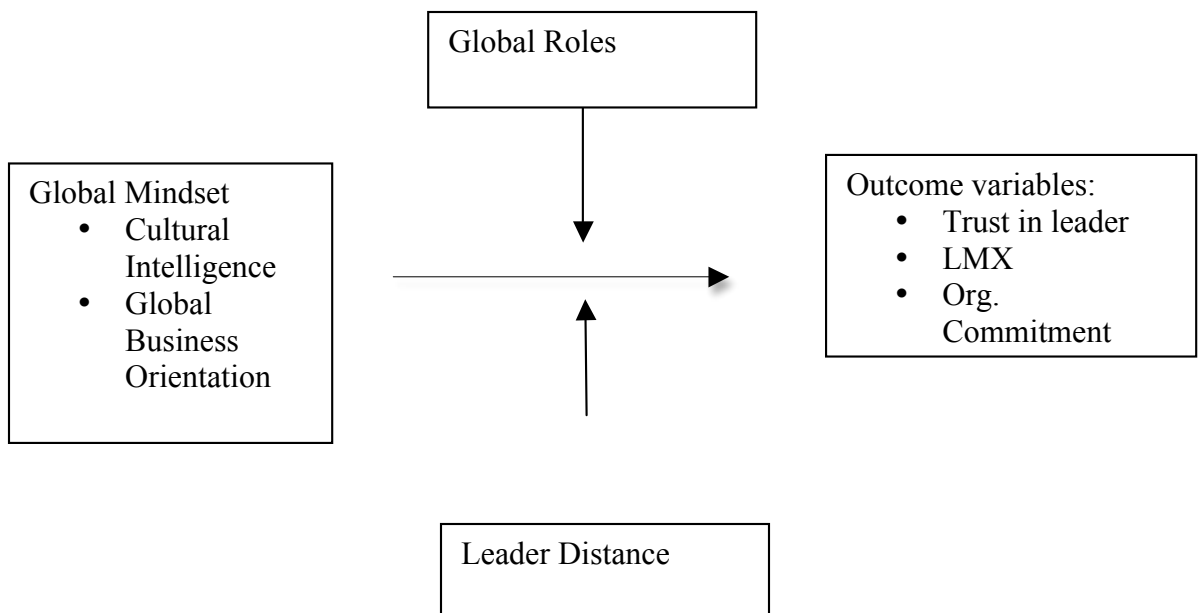
Hypothesis 4a: Perceived frequency between leader-follower interactions will moderate the relationship between leaders' global mindset and trust in leader, such that global mindset will have a more positive impact on trust when interaction is high rather than low.

Hypothesis 4b: Perceived frequency between leader-follower interactions will moderate the relationship between leaders' global mindset and leader-member-exchange, such that global mindset will have a more positive impact on the quality of the relationship when interaction is high rather than low.

Hypothesis 4c: Perceived frequency between leader-follower interactions will moderate the relationship between leaders' global mindset and followers' ratings of organizational commitment, such that global mindset will have a more positive impact on organizational commitment when interaction is high rather than low.

These hypotheses are represented in the proposed model (see Figure 2).

*Figure 2. Proposed Model for Hypotheses Testing*



## CHAPTER III

### Methodology

This chapter describes the methods used to study the relationships between leaders' global mindset (cultural intelligence and global business orientation) and followers' ratings of trust in leader, leader-member-exchange, and organizational commitment. The complexity of the global role and type of communication were used to moderate the relationship between the outcome variables and global mindset. The research design was a multilevel model consisting of employees from one Fortune 100 multinational organization (Level 1) nested within groups who report to the same leader (Level 2). A web-based survey was used for data collection. The sections immediately following describe the population, research design, and instrumentation.

#### *Population*

Participants in this study were participant-rater dyads from one Fortune 100 multinational organization. The data collection site was contacted by the researcher with an invitation to participate in the study. An attempt was made by the researcher to recruit from a multinational organization that has a strong presence globally. Participation was voluntary.

Prior to collecting data, Institutional Review Board approval was sought out through the University of Nebraska- Lincoln Office of Research, who regulates and monitors all research activities conducted in that institution. Approval was obtained and the IRB # 20091010214EP was given.

Global leaders were identified by the organization and were contacted via email by the HR manager and asked to participate in the study. A link was provided in the

email to the SurveyMonkey website along with a brief description of the research project. After leader participants completed the survey they were asked to email each of their direct reports another link to the SurveyMonkey website, where their direct reports completed another survey.

Return rates were calculated as the actual number of surveys completed by participant leaders. Of the 599 surveys distributed to the leaders, 161 were returned, a 27% return rate. Each leader was supposed to email directly their direct reports asking them to participate in the study, which yielded 282 direct-report surveys. Because data from leaders could only be used if it could be linked to at least 2 direct report responses, only 80 leaders and 243 direct report surveys were deemed usable.

To encourage participation and anonymity, identifying information collected from either participants or raters was accessible only to the researcher. Identifiers were removed once data was collected.

Leaders were 30% female and 70% male with an average age of 44 years. Twenty-two percent of leaders had obtained Bachelor's degrees, 6% did some graduate work, 56% obtained Master's degrees, and 5% Ph.D.'s. The remaining 9% had high school diplomas or Associates Degrees. Thirty-nine percent of leaders identified themselves as Asian, 9% Hispanic or Latino, 28% as White/Caucasian, while the remainder identified themselves as "other". Forty-one different nationalities were identified in the leader sample ranging from Chinese (6) to Syrian (1). Seven percent of leaders spend most of their work time in Africa, 44% in Asia, 28% in Europe, 10% in Latin America, 8% in North America, and 3% in Oceania.

Raters were 35% female and 65% male with an average age of 41 years. Thirty-eight percent had obtained Bachelor's degrees, 41% Master's degrees, and 5% Ph.D.'s. Six percent of raters did some graduate work, and the remaining 9% had high school diplomas or Associates Degrees. Forty-one percent identified themselves as Asian, 13% as Hispanic or Latino, 40% as White Caucasian, and 5 % as "other". Raters reported themselves to be from 47 nationalities ranging from Chinese (34) to Dutch (1). Two percent of raters spend most of their work time in Africa, 40% in Asia, 27% in Europe, 12.5% in Latin America, 13.5% in North America, and 5% in Oceania.

### *Research Design*

The developed framework of global mindset proposed in this study consists of two variables: cultural intelligence and global business orientation. Since these variables are internally-oriented constructs, only leaders were able to rate their global mindset. Raters were able to provide the data about the outcome variables in this study.

Data were collected and analyzed at participant and rater (dyad) level. All participants self-reported demographic variables. Leaders self-reported cultural intelligence, global business orientation, and complexity of the global role. Raters reported trust in leader, leader-member exchange, organizational commitment, and type of communication with the leader. All of the items described above were measured on a 7-point Likert-type scale with 1 representing "strongly disagree" and 7 representing "strongly agree" with the exception of global business orientation which was measured on a 5-point Likert-type scale and type of communication which was measured as a dichotomous variable. Copies of the instruments can be found in Appendix E (participant survey) and F (rater survey).

Because data were collected from both study participants and their raters, Hierarchical Linear Modeling (HLM) data analysis procedures were used. HLM allows researchers to examine data from two levels – the rater (level 1) and the leader (level 2). In this manner, raters are “nested” within each study leader, creating the ability to examine data from both an individual participant and their raters and also among participants. HLM analysis results in estimates of error and significance that traditional regression cannot. By utilizing HLM, researchers can analyze individual and group level variance and obtain higher statistical rigor than simple correlations and regression analysis, while avoiding assumptions of independence (Snijders & Bosker, 1999).

HLM analysis is conducted in two stages. First, level 1 is examined, creating individual regression equations for each participant and their raters. In level 2, level 1 results are utilized to examine between unit regression equations on outcome variables. Thus, through this process, it is possible to predict accurately the effects of level 1 variables on the outcome, and the effects of level 2 variables on the outcome. In addition, it predicts slopes as well as intercepts (means), model cross-level interactions, whereby it becomes possible to understand what explains differences in the relationship between level 1 variables and the outcome (Snijders & Bosker, 1999).

### Measures

#### *Trust*

McAllister (1995) developed an instrument that measures affect and cognition-based trust. Affect-based trust assessed trust based on reciprocated interpersonal care and concern. Cognition-based trust assessed trust based on individual belief about the individual reliability and dependability (McAllister, 1995). The affect-based trust scale is

a 5-item measured in a 7-point Likert-type scale ranging from 1 “strongly disagree” to 7 “strongly agree”. The cognition-based trust scale is a 6-item measure in a 7-point Likert-type scale ranging from 1 “strongly disagree” to 7 “strongly agree”. This measure of trust has shown to be reliable and valid with internal reliability of  $\alpha=.89$  for the affective-based trust and  $\alpha=.91$  for the cognition-based trust.

#### *Leader-member-exchange*

Scandura and Graen (1984) developed the LMX-7, an instrument that measures the quality of the leader-follower relationship based on rater’s perception of the relationship. The LMX-7 is a 7-item measured in a 7-point Likert-type scale ranging from 1 “strongly disagree” to 7 “strongly agree”. This measure of leader-member-exchange has shown to be reliable with internal reliability ranging from  $\alpha=.80$  to .90 (Gerstner & Day, 1997; Graen & Uhl-Bien, 1998).

#### *Organizational commitment*

Allen and Meyer (1990) developed the Affective Commitment Scale (ACS) that assesses employees’ attachment to, identification with, and involvement in the organization. The ACS is an 8-item measured in a 7-point Likert-type scale ranging from 1 “strongly disagree” to 7 “strongly agree”. A meta-analysis reported average N-weighted reliability for this scale to be  $\alpha=.82$  (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002).

#### *Cultural intelligence*

Ang et al (2004) developed an instrument to measure cultural intelligence. Cultural intelligence is reported to have four dimensions: metacognitive, knowledge, motivation, and behavior. The meta-cognitive CQ is measured with four items with internal reliability coefficient of .76. The knowledge CQ is measured with six items with



an internal reliability coefficient of .84. The motivation CQ is measured with 5-items that have achieved an internal reliability coefficient of .77. Behavioral CQ is measured by 5 items with internal reliability coefficient of .84 (Van Dyne, Ang, & Koh, 2008). All items are measured on a 7-point Likert-type scale ranging from 1 “strongly disagree” and 7 “strongly agree”.

#### *Global business orientation*

Nummela et al (2004) developed a measure of global mindset that consisted of proactiveness and commitment on internationalization, and international vision. Proactiveness is an anticipation of needs, problems, and changes related to international markets. This has been described as global business orientation. The scale consists of four items measured on a 5-point Likert-type scale ranging from 1 “strongly disagree” to 5 “strongly agree”. This scale produced acceptable reliability of .93.

#### *Complexity of global role*

Complexity of the global role was measured by six questions developed by the researcher based on the global leadership literature. Content validity was established by asking two experts in the field if the questions were assessing global roles. Confirmatory factor analysis showed that the items were indeed measuring one factor. The scale consisted of six questions measured by a 7-point Likert-type scale ranging from 1 “strongly disagree” to 7 “strongly agree”. High scores will determine a high complexity of global role and low scores a low complexity of global role.

#### *Leader Distance*

Type of communication was measured by two questions: how do you primarily interact with your supervisor and how often do you interact with your supervisor from a

list of options adapted from Klauss and Bass' (1982) measure of personal distance. Type of communication is either face-to-face, virtual, or both. Frequency was assessed by asking the frequency of interaction between rater and participant in a given week ranging from 1 "once in a while" to 5 "continually". Physical distance was assessed by an adaptation of Klauss and Bass' (1982) measure of physical distance between direct reports and their leader. Direct reports were asked to rate their physical proximity with the leader on a 5-point scale ranging from 1 "very close (same floor)" to 5 "very distant (different country)". Items were centered around the mean and divided between within scores (level 1) and between scores (level 2).

### *Demographics*

A series of demographic profile questions asked participants to select their sex, ethnicity, nationality, education, number of languages spoken, and length in the organization from a list of options.

### *Variables in the Study*

The dependent variables were trust, leader-member-exchange, and organizational commitment. The independent variable was global mindset (cultural intelligence and global business orientation). The moderating variables were complexity of global role and leader distance.

### *Data Analysis*

Surveys were distributed via an email invitation sent to potential participants. The email contained a link to the web-based survey. The invitation was first sent to leader participants. At the end of the leader survey, leaders were asked to email each of their subordinates a link with another web-based survey.

Survey return and rater participation were tracked in a spreadsheet. All online survey information was submitted to participants by SurveyMonkey.com. Surveys were only viewed by the principal investigator and were not accessed or utilized by Survey Monkey or any others. SurveyMonkey.com is a secure, password-protected electronic survey site. Survey Monkey servers are physically secured. All items were entered by the researcher into the Survey Monkey website using design templates. Data from the surveys were downloaded from the SurveyMonkey site and transferred to Excel. Data was analyzed by SAS.

#### Summary

This chapter has outlined the methods used in this study. Multiple surveys were distributed to leaders and their respective raters via a web-based survey interface. Data was then downloaded and analyzed to test the hypothesis proposed.

## CHAPTER IV

### Results

This chapter outlines the results of this study. Global mindset of leaders was analyzed to determine its impact on follower trust in leaders, quality of relationship between leaders and followers, and follower organizational commitment. Complexity of leader role and leader distance was examined as moderating variables between leaders' global mindset and followers' trust, organizational commitment, and leader-member-exchange. Hierarchical Linear Modeling analysis was used to identify relationships between the independent and dependent variables, and to test for moderating effects.

#### *Simple Statistics and Correlations*

Variables means, standard deviations and correlations appear in Table 1. A significance level of .05 ( $p < .05$ ) was used in the data analysis.

Scale items were divided into subscale for each variable. Leader report variables (level 2) were differentiated from rater report variables (level 1). Leader participants completed a cultural intelligence (CQ) measure, a global orientation measure, and a complexity of the global role measure. Raters completed a trust in leader measure, a leader-member-exchange measure, an organizational commitment measure, and a leader distance measure.

*Table 1. Descriptive Statistics and Correlation Matrix for Cultural Intelligence, Global Business Orientation, Complexity of Global Role, Leader Distance, Trust in Leader, Leader-Member-Exchange, and Organizational Commitment*

Variable	N	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. L Metacognitive CQ	137	23.6	2.65	(.79)													
2. L Cognitive CQ	135	27.77	5.84	.40**	(.89)												
3. L Behavioral CQ	131	27.26	4.46	.38**	.41**	(.89)											
4. L Motivational CQ	134	29.17	3.36	.42**	.35**	.44**	(.83)										
5. L CQTotal	127	108.14	11.99	.65**	.83**	.75**	.68**	(.90)									
6. L Global BO	135	17.17	2.8	.26**	.25**	.19*	.21*	.31**	(.89)								
7. L Global Mindset	127	125.31	13.15	.68**	.84**	.50**	.67**	.93**	.53**	(.88)							
8. L Complexity of GR	131	34.11	5.6	.25**	.32**	.05	.24**	.29**	.16	.36**	(.74)						
9. R Affect Trust	225	27.46	5	-.02	-.01	.06	-.08	-.01	-.10	-.08	-.17	(.88)					
10. R Cognition Trust	223	34.15	5.17	-.04	.01	.02	.01	-.01	-.18*	-.05	-.02	.59**	(.78)				
11. R LMX	223	39.88	6.39	-.06	-.08	-.04	-.09	-.08	-.11	-.17	-.12	.84**	.69**	(.91)			
12. R Org. Commitment	225	33.59	5.94	-.16	-.03	-.05	-.06	-.11	-.09	-.12	-.14	.38**	.44**	.41**	(.81)		
13. R Leader Distance	230	1.82	1.19	.03	.01	.02	.05	-.01	.09	.05	-.01	.03	.01	.01	.07	1.0	
14. R LFIInteraction	232	3.32	1.21	.01	-.01	-.06	-.05	-.02	-.22*	-.07	-.15	.35**	.15*	.38*	.09	-.26**	1.0

Note. Reliability coefficient estimates ( $\alpha$ ) are in parenthesis along diagonals. \* $p < .05$ ; \*\* $p < .01$  (two-tailed tests).

L Metacognitive CQ = Leaders' metacognitive cultural intelligence; L Cognitive CQ = Leader's cognitive cultural intelligence; L Behavioral CQ = Leader's behavioral cultural intelligence; L Motivational CQ = Leader's motivational cultural intelligence; L Global Mindset = Leader's global mindset; L Complexity of GR = Leader's complexity of global role; R Affect Trust = Rater's scores affect-based trust; R Cognition Trust = Rater's scores cognition-based trust; R LMX = Rater's ratings of leaders-member-exchange; R Org. Commitment = Rater's scores of organizational commitment; R Leader Distance = Rater's scores of physical distance; R LFIInteraction = Rater's scores of amount of interaction between leader and follower.

Scale reliabilities were acceptable per Nunnally and Bernstein's (1994) for the variables utilized in this study. Cultural intelligence had a reliability of .90 and its subscales reported acceptable reliabilities as well (metacognitive CQ ( $\alpha = .79$ ), cognitive CQ ( $\alpha = .89$ ), behavioral CQ ( $\alpha = .89$ ), and motivational CQ ( $\alpha = .83$ )). Global business orientation ( $\alpha = .89$ ), global mindset ( $\alpha = .88$ ), complexity of the global role ( $\alpha = .74$ ), affect-based trust ( $\alpha = .88$ ), cognition-based trust ( $\alpha = .78$ ), leader-member-exchange ( $\alpha = .91$ ), and organizational commitment ( $\alpha = .81$ ) also had acceptable reliability coefficients.

Several correlations were found when examining all the variables in the study. metacognitive CQ, cognitive CQ, behavioral CQ, motivational CQ, and CQ total were highly correlated ranging from  $r = .38$  to  $r = .83$ . Global business orientation was significantly correlated to all CQ scores ranging from  $r = .19$  to  $.31$  and it was negatively correlated to cognition-based trust ( $r = -.18$ ). The overall score of global mindset was highly correlated to all CQ scores and global business orientation ranging from  $r = .50$  to  $r = .92$ . Complexity of the global role was correlated to metacognitive CQ ( $r = .25$ ), cognitive CQ ( $r = .32$ ), motivational CQ ( $r = .24$ ), CQ total ( $r = .29$ ), and global mindset ( $r = .36$ ). The outcome variables were highly correlated to each other. Affect-based trust was significantly correlated to cognition-based trust ( $r = .59$ ), LMX ( $r = .84$ ), and organizational commitment ( $r = .38$ ). Cognition-based trust was correlated to LMX ( $r = .69$ ) and organizational commitment ( $r = .44$ ). Finally, LMX was significantly correlated to organizational commitment ( $r = .41$ ). Frequency of interaction between leader and follower was negatively correlated to global business orientation ( $r = -.22$ ) and leader distance ( $r = -.23$ ) and positively correlated with affect-based trust ( $r = .35$ ), cognition-based trust ( $r = .15$ ), and LMX ( $r = .38$ ).

*Data Analysis Using a Multilevel Model*

Data in this study was collected from leaders and their direct reports. Data collected from two sources is multilevel data as it is drawn from leaders (level two) and raters (level one). Hierarchical linear modeling (HLM) is a statistical technique that is able to analyze the relationships at the two levels (dyads) (Snijders & Bosker, 1999).

HLM adopts a two-level approach to cross-level investigations where the Level 1 model is estimated separately from each leader. Global mindset and the three outcome variables (trust, LMX, and organizational commitment) were examined separately, as global mindset is a level 2 variable (rated by leaders) and trust, LMX, and organizational commitment are level 1 variables (rated by direct reports). The moderating variables complexity of global role is a level 2 variable and leader distance (frequency of interaction and physical distance) were rated by raters and were divided between frequency of interaction within and frequency of interaction between and distance within and distance between. The between variables are level 2 variables and they represent the average score for each leader. The within variables are level 1 variables and they represent the raters scores minus the leader mean. The within model for level 1 (direct-reports) variables and their impact on the three outcome variables took the form of a regression-based model and is expressed as:

$$\gamma_{ij} = \beta_{0j} + \beta_{1j}\chi_{ij} + \beta_{2j}\chi_{ij} + \beta_{3j}\chi_{ij} + \beta_{4j}\chi_{ij} + e_{ij}$$

where  $\gamma_{ij}$  is the outcome measure for individual  $i$  in group  $j$ .  $X$  is the value of the predictor variables for individual  $i$  in group  $j$ .  $\beta_{0j}, \beta_{1j}, \beta_{2j}, \beta_{3j}, \beta_{4j}$  are the intercepts and slopes estimated separately for each group, and  $e_{ij}$  is the residual.

The level 2 equations are expressed as:

$$\beta_{0j} = \gamma_{00} + \gamma_{01}z_{1j} + \gamma_{02}z_{2j} + u_{0j}$$

$$\beta_{1j} = \gamma_{10} + \gamma_{11}z_{1j} + \gamma_{12}z_{2j} + u_{1j}$$

$$\beta_{2j} = \gamma_{20} + \gamma_{21}z_{1j} + \gamma_{22}z_{2j} + u_{2j}$$

$$\beta_{3j} = \gamma_{30} + \gamma_{31}z_{1j} + \gamma_{32}z_{2j} + u_{3j}$$

$$\beta_{4j} = \gamma_{40} + \gamma_{41}z_{1j} + \gamma_{42}z_{2j} + u_{4j}$$

where  $z_{1j}$  and  $z_{2j}$  are the main effects of the level 2 moderating variables

(frequency between and distance between) and  $\beta_{1j}, \beta_{2j}, \beta_{3j}, \beta_{4j}$  are first level predictor variables (global mindset, global roles, frequency within, and distance within).  $\beta_{0j}$  represent the intercept and the cross-level interactions.

Data was analyzed using hierarchical linear modeling procedures using SAS PROC MIXED. SAS PROC MIXED is a very flexible program for fitting HLM models (Singer, 1998). Global roles scores were added to create a summative score of complexity of global role. Trust in leader scores were added to create a summative score and divided into two subscales (affect and cognition- based trust). LMX scores were added to create a summative score of LMX; the same was done for the Organizational Commitment Scale. Leader distance was split into two variables with two scores each: frequency of interaction within and between and physical distance within and between. The “between” variables were computed by the "mean" variable average for each leader (level 2 variable). The "within" variables were computed from the followers score minus the leader mean (level 1 variable).

Metacognitive CQ, cognitive CQ, motivational CQ, and global business orientation were added to create a summative score of global mindset. Since the global mindset framework proposed (see Figure 1) has not been tested, a confirmatory factor analysis



(CFA) was used to test the factor loading structure for each of the four subscales of global mindset (Figure 3) and to confirm the overall model (Figure 4). DeVellis (2003) argued that CFA should be used to verify expected relationships that are predicted from a theoretical basis. Comparative fit index (CFI), Tucker-Lewis index (TLI), root mean square error of approximation (RMSEA), chi-square ( $\chi^2$ ) and the ratio of the difference in chi-square to the degrees of freedom difference were used to assess the fit of the model. The recommendation for model fit for CFI and TLI values should be .90 (Hu & Bentler, 1999) or greater for RMSEA values should be .80 or lower (Hu & Bentler, 1990). Chi-square/degrees of freedom ratios are recommended to be lower than 3.0 (Kline, 1998).

Amos 17.0 maximum likelihood confirmatory factor analysis was used to assess the goodness of fit for the 19 items of global mindset. Results of the overall goodness of fit test are reported on Table 2. The overall model fit produced a chi-square,  $\chi^2=254.330$  ( $df=146, p=0.00$ ). The chi-square/degrees of freedom ratio was 1.74 was lower than the recommended 3.0. The root mean square error of approximation (RMSEA) was .073, lower than the recommended .80 or lower. The comparative fit index (CFI) was .925 higher than the recommended .90 or greater. The Tucker-Lewis Index (TLI) was .902, equal to the recommended .90.

Since the measurement model met all acceptable fit standards, a second-order factor analysis was conducted to test the fit of the four subscales (metacognitive CQ, cognitive CQ, motivational CQ, and global business orientation) onto the latent variable global mindset. Results for the second-order factor structure are provided in Table 2. The resulting overall fit produced a chi-square,  $\chi^2=269.56$  ( $df=151, p=0.00$ ). The chi-

square/degrees of freedom ratio was 1.78, which was lower than the recommended 3.0.

The root mean square error of approximation (RMSEA) was .075, lower than the recommended .80. The comparative fit index (CFI) was .932, higher than the recommended .90 or greater. The Tucker-Lewis Index (TLI) was .915, higher than the recommended .90. The second-order factor analysis produced acceptable results for all fit scores tests. These results confirm that global mindset consists of four subscales - metacognitive CQ, cognitive CQ, motivational CQ, and global business orientation.

Thus, a single variable global mindset was created to be used as the independent variable.

*Table 2. Results of the first and second-order measurement analysis and structural model test for Global Mindset*

Model	<i>df</i>		<i>p</i>		RMSEA	TLI	CFI
Measurement model test of the items	254.33	146	1.74	.000	.073	.902	.925
2nd- order model test for the overall model	269.56	151	1.78	.000	.075	.915	.932

Note: RMSEA=root mean squared error of approximation; TLI=Tucker-Lewis Index; CFI=comparative fit index

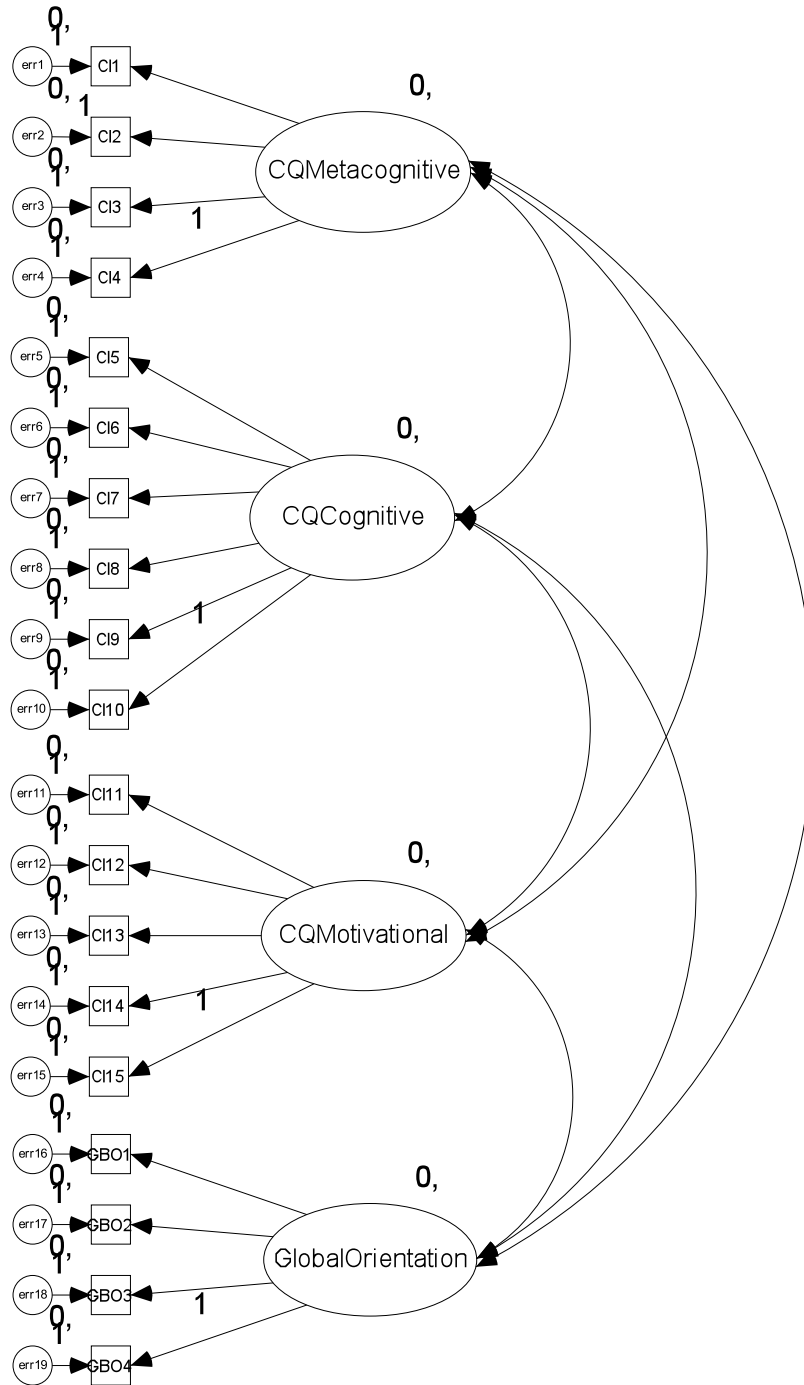


Figure 3. Measurement model

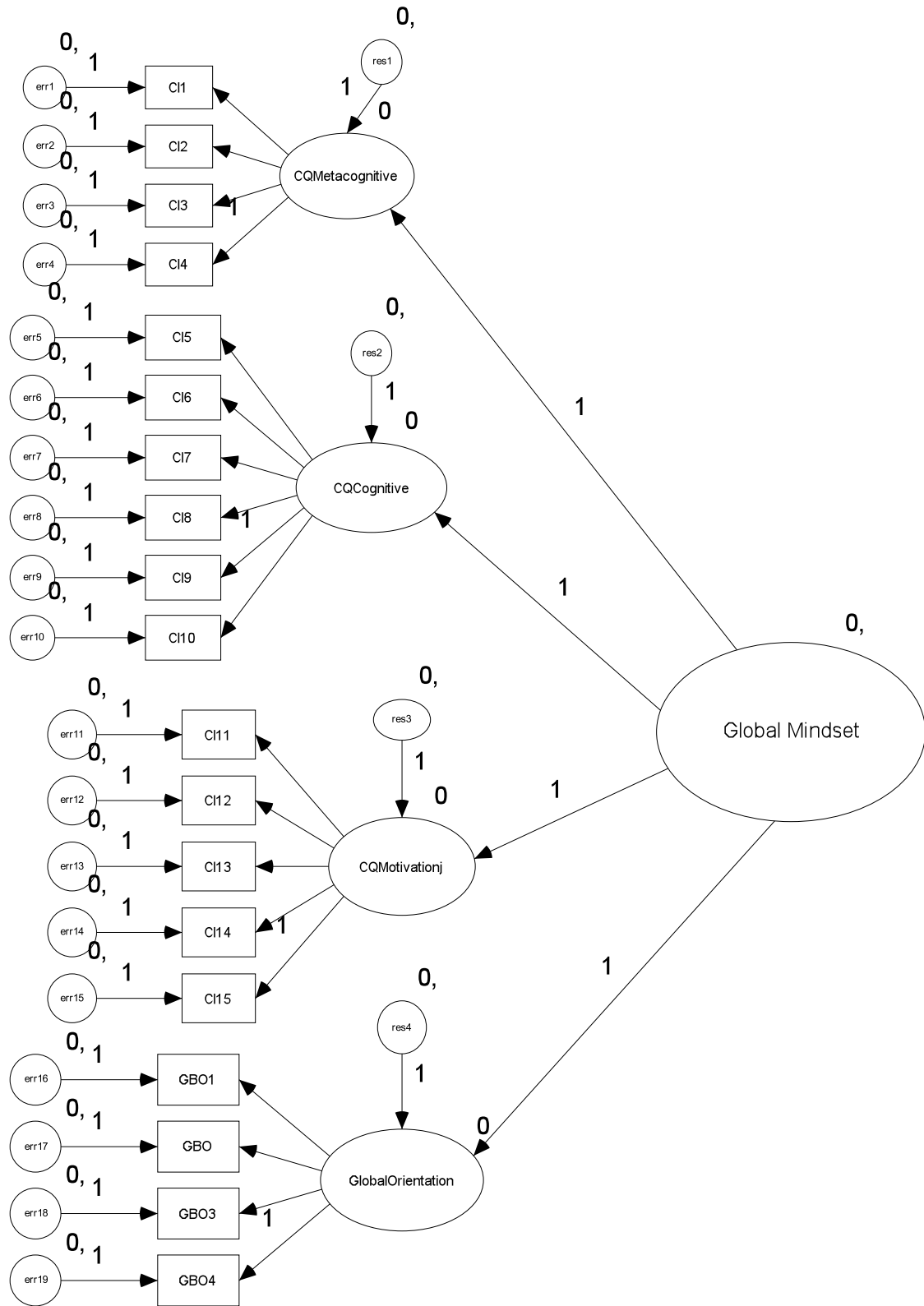


Figure 4. Second-order factor model

### *Hierarchical Linear Modeling Results*

Interclass correlation coefficients (ICC) were calculated for the four models studied. ICC scores describe the degree of correlation within individuals (level 1), which is the proportion of variance of an observation due to between-dyad variability. In HLM, ICC scores are used to test the appropriateness of the multi-level model. ICC scores range from 0 for complete independence of observations to 1 for complete dependence. The ICC score for the model using affect-based trust is .20. This indicated that 20% of the variability in the model occurred at the group level (level 2). The ICC score for the cognition-based trust model is .27. This indicated that 27% of the variability in the model occurred at the group level (level 2). The ICC score for the leader-member- exchange model is .21. This indicated that 21% of the variability in LMX occurred at the group level (level 2). The ICC score for the organizational commitment model is .12. This indicated that 12% of the variability in organizational commitment occurred at the group level (level 2). Because each of the outcome variables could be explained in part by the group level (level 2), there is a need for employing multilevel modeling in the study.

Four HLM analyses were conducted to test the hypothesized relationships between global mindset and moderating variables with affect trust (Table 3), cognition trust (Table 4), leader-member-exchange (Table 5), and organizational commitment (Table 6).

The results of the model for global mindset and moderating variables on affect-based trust indicated that as a main effect, frequency of interaction within and between had a direct impact on affect-based trust (see Table 3). As an interaction, frequency of interaction within and global mindset had a direct impact on affect-based trust. Pseudo

R-squared (McFadden, 1973) for the model was .04. This means that the model explains 4% of the variance in affect-based trust.

*Table 3. Model Result for Global Mindset and moderating variables on Affect Trust.*

	Coefficient	<i>S.E.</i>	<i>t</i>
Intercept	3.9098	0.7398	5.29**
<i>Leader</i>			
Global Mindset	0.008218	0.01118	0.74
Global Roles	-0.04021	0.08637	-0.47
Frequency Interaction Within	2.0355	0.4978	4.09**
Distance Within	0.05362	0.07799	0.69
<i>Rater</i>			
Frequency Interaction Between	0.3158	0.09697	3.26**
Distance Between	0.1337	0.08338	1.6
Global Mindset*Frequency Within	-0.02706	0.007933	-3.41**

\* $p < .05$ ; \*\* $p < .01$ . (One-tailed test)

The results of the model for global mindset and moderating variables on cognition-based trust indicated that as a main effect, both frequency of interaction within and distance between had an impact on cognition-based trust (see Table 4). Global mindset did not have an impact on cognition-based trust. Pseudo R-squared (McFadden, 1973) for the model was .06. This means that the model explains 6% of the variance in cognition-based trust.

Table 4. Model Result for Global Mindset and moderating variables on Cognition Trust.

	Coefficient	S.E.	t
Intercept	6.0519	0.7092	8.53**
<i>Leader</i>			
Global Mindset	-0.01272	0.01075	-1.18
Global Roles	-0.02332	0.08331	0.7804
Frequency Interaction			
Within	0.1852	0.05713	3.24**
Distance Within	-0.02265	0.07984	-0.33
<i>Rater</i>			
Frequency Interaction			
Between	0.07072	0.09272	0.76
Distance Between	0.1596	0.07984	2.00*

\*p<.05; \*\*p<.01. (One-tailed test)

The results of the model for global mindset and moderating variables on LMX

indicated that as a main effect, frequency of interaction between and within had an impact on LMX (see Table 5). As an interaction, global mindset and frequency within contributed to explaining LMX. Pseudo R-squared (McFadden, 1973) for the model was .06. This means that the model explains 6% of the variance in LMX.

Table 5. Model Result for Global Mindset and moderating variables on LMX.

	Coefficient	S.E.	t
Intercept	4.2937	0.6697	6.41**
<i>Leader</i>			
Global Mindset	0.01178	0.6697	1.16
Global Roles	-0.0851	0.0782	-1.09
Frequency Interaction			
Within	1.3865	0.4492	3.09**
Distance Within	0.1055	0.07038	0.1359
<i>Rater</i>			
Frequency Interaction			
Between	0.31	0.08777	3.53**
Distance Between	0.06864	0.07547	0.91
Global Mindset*Frequency Within	-0.01665	0.007159	-2.33**

\*p<.05; \*\*p<.01. (One-tailed test)

The results of the model for global mindset and moderating variables on organizational commitment indicated that global mindset had a direct impact on organizational commitment. As a main effect, frequency of interaction within and between had a positive impact on organizational commitment (see Table 6). As an interaction, global mindset and frequency interaction between and within contributed to explaining organizational commitment. Pseudo R-squared (McFadden, 1973) for the model was .04. This means that the model explains 4% of the variance in Organizational Commitment.

*Table 6.* Model Result for Global Mindset and moderating variables on Organizational Commitment

	Coefficient	S.E.	t
Intercept	11.11	2.4873	4.47
<i>Leader</i>			
Global Mindset	-0.09123	0.04024	-2.27*
Global Roles	0.02383	0.08306	0.29
Frequency Interaction Within	1.9953	0.5356	3.73**
Distance Within	0.09566	0.08391	1.14
<i>Rater</i>			
Frequency Interaction Between	-1.5091	0.06537	-2.31*
Distance Between	0.05348	0.07972	0.67
Global Mindset*Frequency Mean	0.02415	0.0102	2.37*
Global Mindset*Frequency Within	-0.02909	0.008536	-3.41**

\*p<.05; \*\*p<.01. (One-tailed test)

Since global mindset was combined into one single construct to explain the dependent variables, and some of the relationships were significant, it became important to understand what characteristics of global mindset were particularly relevant in explaining the four dependent variables. Metacognitive CQ, cognitive CQ, motivational



CQ, and global business orientation were entered in four step-wise HLM regressions along with the moderating variables for each of the outcome variables.

The model result for global mindset subscales and moderating variables on affect-based trust yielded significant results. As main effects, global business orientation, frequency of interaction between and within, and distance between significantly contributed to explaining affect-based trust. Metacognitive CQ contributed to the explanation of affect-based trust when combined with global roles, frequency of interaction between, distance mean. Cognitive CQ contributed to the explanation of affect-based trust when combined with global roles, frequency of interaction within and between, and distance between (see Table 7). Pseudo R-squared for the model was .04 indicating that this model was able to explain 4% of the variance in affect-based trust. While this model is more informative, it did not contributed beyond the global mindset model on affect-based trust.

The model result for global mindset subscales and moderating variables on cognition-based trust yielded significant results. As IVs, metacognitive CQ, cognitive CQ, and motivational CQ significantly contributed to explaining cognition-based trust. As main effects, frequency of interaction within and between, and distance between contributed to explaining cognition-based trust (see Table 8). Pseudo R-square for this model was .12. This indicated that 12% of the variance in cognition-based trust can be explained by this model. This model contributed another 6% of the variance in cognition-based trust, more than the model including global mindset as a single construct.

Table 7. Model Result for Global Mindset subscales and moderating variables on Trust Affect

	Coefficient	S.E.	t
Intercept	-1.3522	4.5017	-0.30
<i>Leader</i>			
MetacognitiveCQ	0.3441	0.1829	1.88
CognitiveCQ	-0.01884	0.08985	-0.21
MotivationalCQ	-0.1215	0.1436	-0.85
Global Business Orientation	-0.3026	0.1045	-2.89**
Global Roles	-1.0468	0.5432	-1.93
Frequency of Interaction Within	1.1963	0.2841	4.21**
Distance Within	0.03925	0.07866	0.50
<i>Rater</i>			
Frequency Interaction Between	3.0337	0.8662	3.50**
Distance Between	1.8659	0.8618	2.17*
MetaCognitive*Global Roles	0.07535	0.0281	2.68*
MetaCognitive*Frequency Between	-0.1544	0.03808	-4.05**
MetaCognitive*Distance Between	-0.1237	0.04851	-2.55*
Cognitive*Global Roles	-0.02741	0.01245	-2.20*
Cognitive*Frequency Between	0.03448	0.01484	2.32*
Cognitive*Frequency Within	-0.03047	0.009977	-3.05**
Cognitive*Distance Between	0.04230	0.01790	2.36*

\*p<.05; \*\*p<.01. (One-tailed test)

Table 8. Model Result for Global Mindset subscales and moderating variables on Trust Cognition

	Coefficient	S.E.	t
Intercept	5.8411	0.9574	6.10**
<i>Leader</i>			
MetacognitiveCQ	0.1231	0.03993	3.08**
CognitiveCQ	-0.03617	0.01332	-2.72**
MotivationalCQ	-0.03579	0.1417	-2.53*
Global Business Orientation	-0.03153	0.1035	-0.30
Global Roles	-0.05894	0.08264	-0.71
Frequency of Interaction			
Within	0.1851	0.05705	3.24**
Distance Within	-0.02268	0.06881	-0.33
<i>Rater</i>			
Frequency Interaction			
Between	0.03066	0.08953	3.24**
Distance Between	0.2214	0.0779	2.84**

\*p<.05; \*\*p<.01. (One-tailed test)

The model result for global mindset subscales and moderating variables on LMX yielded significant results. As an IV, metacognitive CQ significantly contributed to explaining LMX. As main effects, frequency of interaction within and between contributed to explaining LMX (see Table 9). As an interaction cognitive CQ and frequency of interaction within were also able to contribute to LMX. Pseudo R-squared for this model was .10. This indicated that 10% of the variance in LMX can be explained by the model. This also means that this model was able to explain 4% of the variance beyond what the global mindset single construct model explained.

Table 9. Model Result for Global Mindset subscales and moderating variables on LMX

	Coefficient	S.E.	t
Intercept	4.0737	0.92	4.43**
<i>Leader</i>			
MetacognitiveCQ	0.1219	0.03832	3.18**
CognitiveCQ	-0.00257	0.01273	-0.20
MotivationalCQ	-0.2141	0.1357	-1.58
Global Business Orientation	-0.1049	0.09854	-1.06
Global Roles	-0.1133	0.07896	-1.43
Frequency of Interaction			
Within	0.8714	0.2555	3.41**
Distance Within	0.09673	0.07076	1.37
<i>Rater</i>			
Frequency Interaction			
Between	0.2888	0.08624	3.35**
Distance Between	0.1159	0.07493	1.55
CognitiveCQ*Frequency			
Within	-0.01879	0.008974	-2.09*

\*p<.05; \*\*p<.01. (One-tailed test)

The model result for global mindset subscales and moderating variables on organizational commitment yielded significant results. As an IV, global business orientation significantly contributed to explaining organizational commitment. As main effects, frequency of interaction within and between contributed to explaining organizational commitment (see Table 10). As an interaction cognitive CQ and frequency of interaction within were also able to contribute to organizational commitment. Global business orientation and frequency of interaction between also contributed to explaining organizational commitment. Pseudo R-squared was .09 for the model. This means that the model can explain 9% of the variance in organizational commitment. This also means

that this model contributed another 5% to explaining organizational commitment than the model with the single construct of global mindset did.

*Table 10.* Model Result for Global Mindset subscales and moderating variables on Organizational Commitment

	Coefficient	<i>S.E.</i>	<i>t</i>
Intercept	8.7749	1.6987	5.17**
<i>Leader</i>			
MetacognitiveCQ	0.07567	0.0431	1.76
CognitiveCQ	-0.01694	0.01453	-1.17
MotivationalCQ	-0.02655	0.152	-1.75
Global Business Orientation	-0.7473	0.354	-2.11*
Global Roles	0.01994	0.08959	0.22
Frequency of Interaction Within	1.1023	0.3039	3.36**
Distance Within	0.08011	0.08416	0.95
<i>Rater</i>			
Frequency Interaction Between	-0.9795	0.4596	-2.13*
Distance Between	0.08286	0.08438	0.98
CognitiveCQ*Frequency Within	-0.03309	0.01067	-3.10**
GlobalBusOrien*FrequencyBetween	0.2305	0.1063	2.17*

\* $p < .05$ ; \*\* $p < .01$ . (One-tailed test)

### *Summary of hypotheses*

Hypotheses 1a, 1b, and 1c stated that leaders' global mindset would be positively related to followers' ratings of trust in leader, leader-member-exchange, and organizational commitment. These hypotheses were not supported for global mindset as a single predictor and were partially supported for global mindset subscales as predictors (see Table 11)

Hypotheses 2a, 2b, and 2c stated that the complexity of the global role would moderate the relationship between leaders' global mindset and trust in leader, LMX, and

organizational commitment such that global mindset will have a more positive impact on trust, LMX, and organizational commitment when the complexity is high rather than low. These hypotheses were only partially supported for affect trust with global mindset subscales as predictors. For all other variables, it was not supported (see Table 11).

Hypotheses 3a, 3b, and 3c stated that physical distance between the leaders and the followers would moderate the relationship between leaders' global mindset and trust in leader, LMX, and organizational commitment such that global mindset will have a more positive impact on trust, LMX, and organizational commitment when physical distance is low rather than high. These hypotheses were only partially supported for affect trust with global mindset as predictors. For all other variables, it was not supported (see Table 11)

Hypotheses 4a, 4b, and 4c stated that perceived frequency between leader-follower interactions would moderate the relationship between leaders' global mindset and trust in leader, LMX, and organizational commitment such that global mindset will have a more positive impact on the quality of the relationship when interaction is high rather than low. These hypotheses were partially supported for all models, and for all dependent variables (see Table 11). Figures 5, 6, 7, and 8 depict significant findings though HLM analysis.

Table 11. Summary of hypothesized relationships findings

	<i>Model with Single Factor Global Mindset</i>	<i>Model with Multifactor Global Mindset subscales</i>
H1a	Not supported (not sig.)	Global Business Orientation (-) (affect) MetacognitiveCQ (+) (cognition) CognitiveCQ (-) (cognition) MotivationalCQ (-) (cognition)
H1b	Not supported (not sig.)	MetacognitiveCQ (+)
H1c	Not supported (-)	Global Business Orientation (-)
H2a	Not supported	Metacognitive (+) (affect) Cognitive (-) (affect)
H2b	Not supported	Not supported
H2c	Not supported	Not supported
H3a	Not supported	Metacognitive (-) (affect) Cognitive (+) (affect)
H3b	Not supported	Not supported
H3c	Not supported	Not supported
H4a	Partially supported (affect)	Metacognitive (-) (affect) Cognitive*within (-) (affect) Cognitive*between (+) (affect)
H4b	Partially supported	Cognitive*within (-)
H4c	Partially supported	Cognitive*between (-) Global Business Orientation* mean (+)

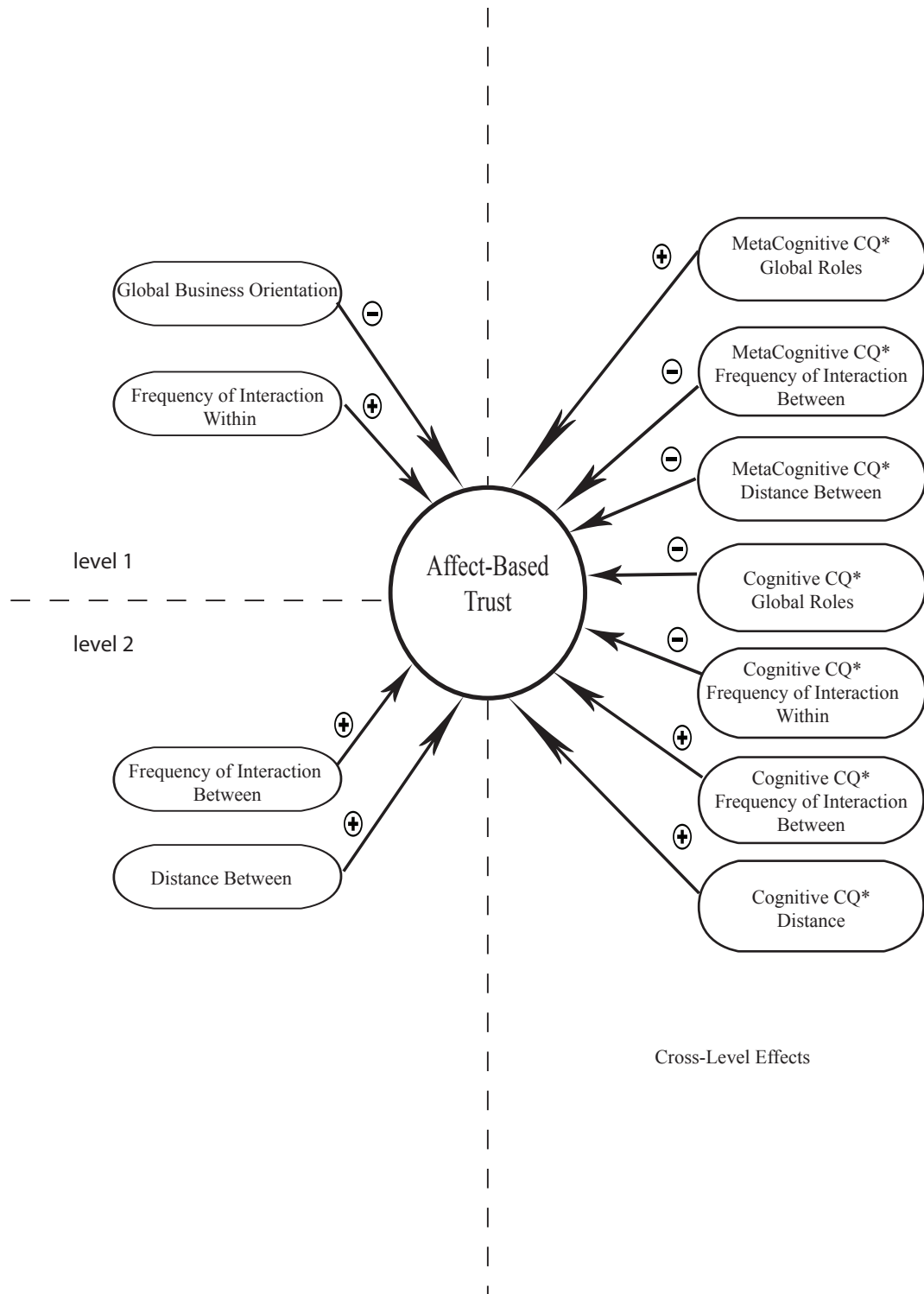


Figure 5. Summary of findings affect-based trust model



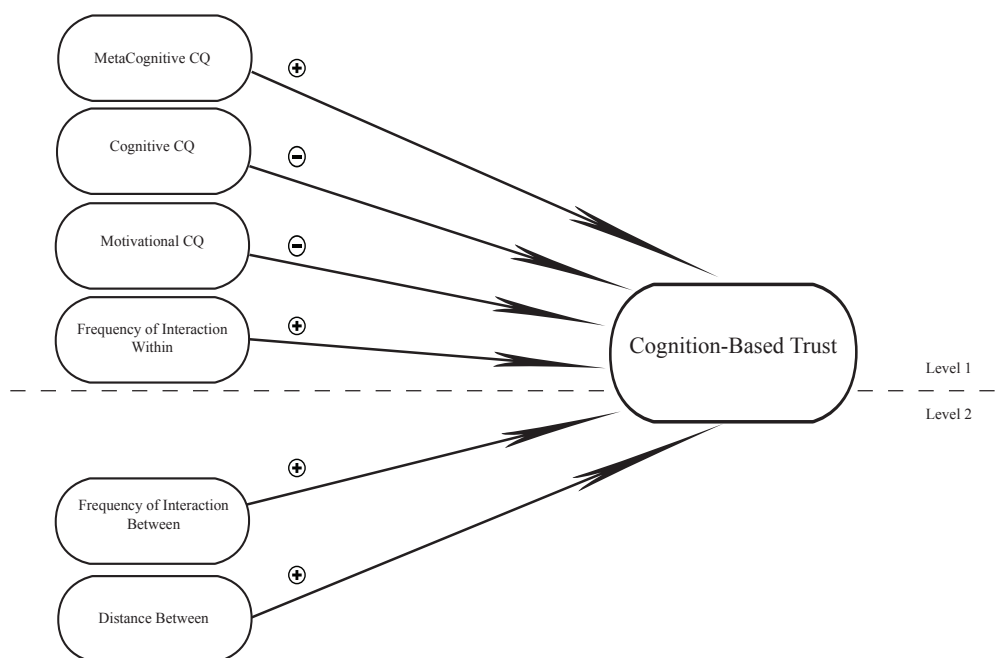


Figure 6. Summary of findings cognition-based trust model

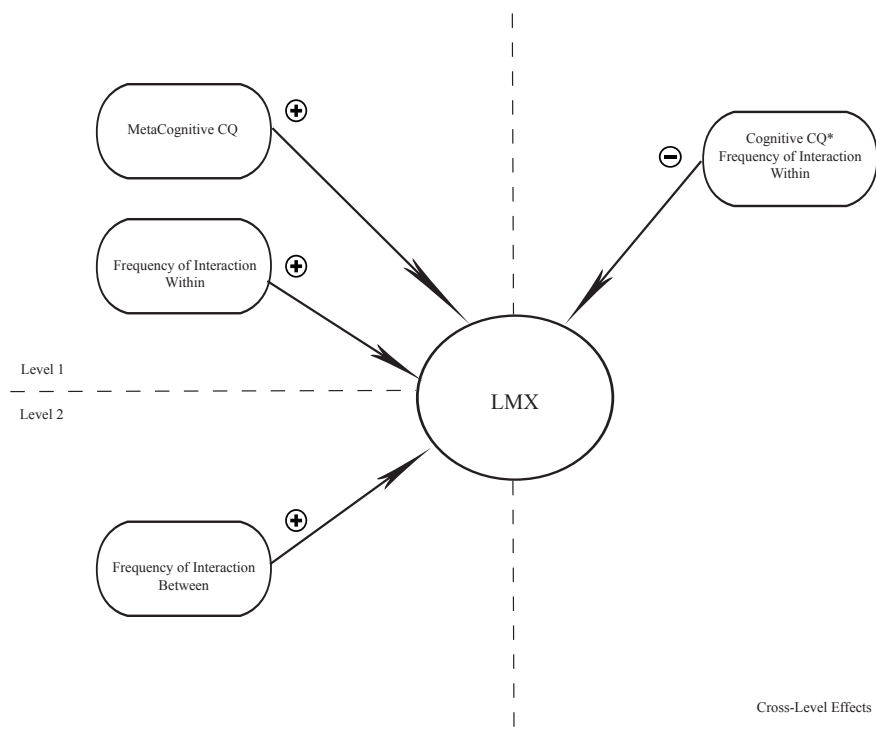
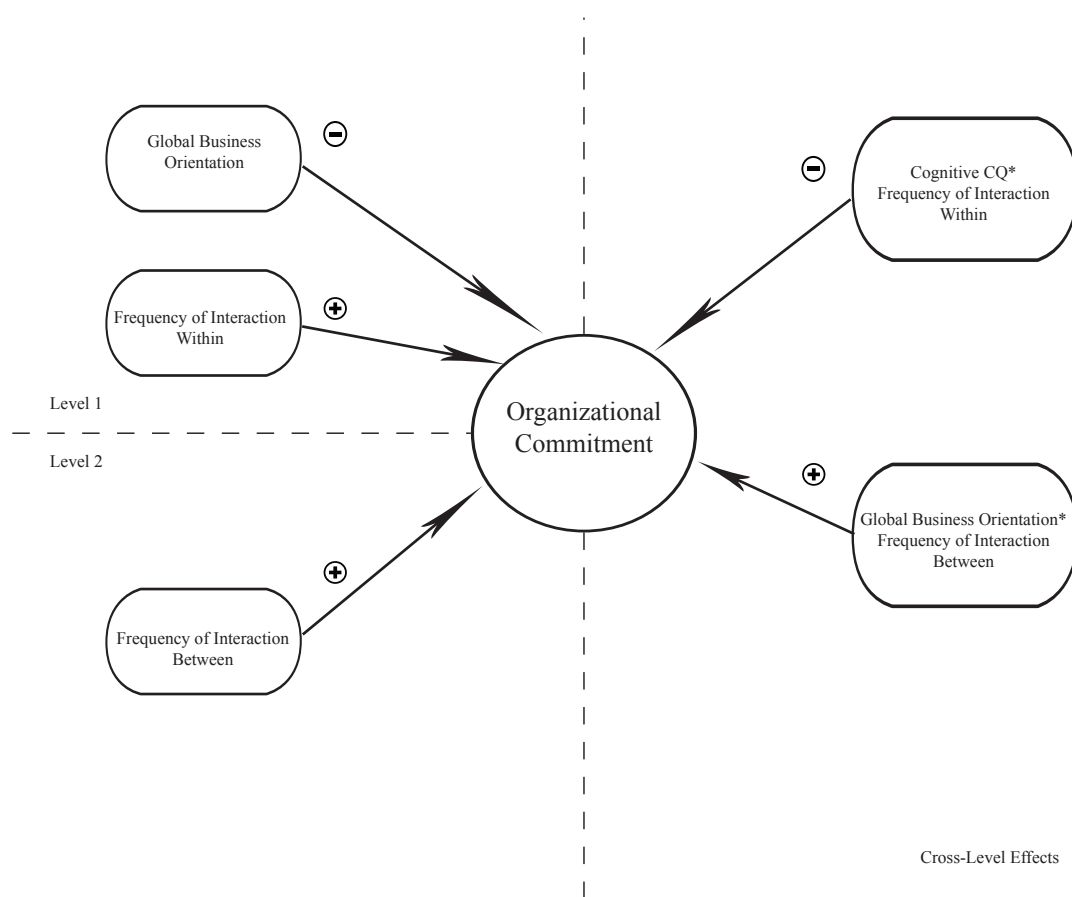


Figure 7. Summary of findings LMX model



*Figure 8.* Summary of findings organizational commitment model

## CHAPTER V

This study tested the relationship between global mindset and positive outcomes as moderated by several key variables. Sampling from a truly global organization, several relationships were found. An interpretation of all results follows in the upcoming section. Then the implications for practice are discussed. Limitations and future research directions are addressed, followed by some final conclusions.

### Interpretations of Results

#### *Affect-based Trust*

Affect-based trust refers to the trust from a bond that arises from one's emotions and sense of other's feelings and motives. Affect-based trust is demonstrated by care and concern for the welfare of their leaders (McAllister, 1995). The relationship between global mindset and affect-based trust was moderated by frequency of interaction within. This means that the involvement of frequency of interaction within in the intervention weakened the relationship between global mindset and affect-based trust. Leaders who have a global mindset and interact with a single follower more frequently than average, have that follower experience a weaker level of personal or emotional trust in that leader.

To understand more about the relationship above, another HLM analysis was conducted utilizing the subscales of global mindset. Global business orientation negatively impacted affect-based trust. This means that as leaders develop higher levels of global business orientation, followers experience a weaker level of personal or emotional trust in that leader.

These results were not expected. Since the sampled population was very diverse, with the majority of raters in collectivistic cultures (Hofstede, 1991), these finding can be

explained. Huff and Kelley (2003) reported that individualistic cultures demonstrate a higher level of propensity to trust than collectivistic cultures. This means it is more challenging for individuals in collective cultures to trust leaders. Another important construct that helps explain the unexpected relationships is power distance (Hofstede, 1991). Individuals in power distance cultures are more likely to not engage in personal interaction with the leader, making it considerably harder to trust the leader based on their personal or emotional contact.

The relationship between metacognitive CQ and affect-based trust was moderated by global roles. This means that the involvement of global roles in the intervention increased the strength of the relationship between metacognitive CQ and affect-based trust. Leaders who are able to acquire new behaviors that are appropriate for a new culture and have a global role have followers who experience a stronger level of personal or emotional trust in the leader. This result was consistent with the work of Rockstuhl and Ng (2008) who reported that cultural intelligent leaders are able to foster trust in followers.

The relationship between metacognitive CQ and affect-based trust was moderated by the frequency of interaction between. This means that leaders who have an ability to acquire new behaviors that are appropriate for a new culture and have frequent interactions with followers have followers who experience a weaker level of personal or emotional trust in the leader. The same was the case for distance between, which moderated the relationship between metacognitive CQ and affect-based trust. Meaning that the involvement of distance between on the intervention weakened the relationship between metacognitive CQ and affect-based trust. Leaders who have the ability to

acquire new behaviors that are appropriate for a new culture and work closely (in terms of physical distance) with followers, have followers experience a weaker level of trust based on emotions and personal relationships.

The relationships between cognitive CQ and affect-based trust were moderated by global roles, frequency of interaction between and within, and distance. This means that the involvement of global roles and frequency within weakened the relationship between cognitive CQ and affect-based trust. Leaders who are aware of their social environment and the information available to them in terms of cultural knowledge, have a global role or interact with single followers more than average, have followers experience a weaker level of trust of personal or emotional trust in leader, based on their cognitive CQ. The opposite was true for the relationship between cognitive CQ and affect-based trust when moderated by frequency between and distance between. This means that leaders who are aware of their environment and the knowledge available to them and interact frequently with their followers and/or work closely with their followers, have followers experience higher levels of trust in leader based on emotions or personal relationships.

These results contradict the idea that both cognitive CQ and metacognitive CQ should impact follower affect-based trust on leaders the same way and in the same direction. One possible explanation could be that metacognitive CQ has more to do with the ability to acquire new behaviors and cognitive CQ has to do with the knowledge leaders have about cultures. Thus, if leaders have the ability to acquire new behaviors and a global role, that would impact followers' ratings on affect-trust. However, since metacognitive CQ may be harder to observe, followers who work closely with leaders may be unable to see such intricacies, but are able to see that leaders have knowledge of

different cultures, unless leaders work very closely with followers (higher than average), which makes them more likely to see inconsistencies that could impact how much trust they place on leaders.

#### *Cognition-based trust*

Cognition-based trust refers to trust based on evidence of the leader's competence and reliability (McAllister, 1995). The single construct of global mindset of a leader was not related to cognition-based trust. This result was not expected and goes against Taylor et al's (2008) findings that employees would have more confidence and trust in the leader to be capable of leading the organization to success.

In order to understand more about the lack of significance between the two constructs, another HLM was entered that included the subscales of global mindset. Metacognitive CQ, cognitive CQ, motivational CQ, and global business orientation were then used to predict cognition-based trust. Results indicated that metacognitive CQ was related to cognition-based trust. This means that leaders who are able to acquire new behaviors in new cross-cultural situations are viewed by followers as more reliable and competent, fostering cognition-based trust in followers. This result was expected and it is consistent with the work of Taylor et al (2008) and Rockstuhl and Ng (2008).

Cognitive CQ was negatively related to cognition-based trust. This means that as leaders become more aware of their environment and the behaviors associated to them (regarding culture), followers report lower levels of cognition-based trust in leader. Motivational CQ was negatively related to cognition-based trust. This means that as leaders become more motivated to adapt their behaviors to a new cultural context,

followers experience lower levels of trust in leaders based on their competence and reliability.

These results were not expected, however, it is possible that for followers to have the confidence and trust in the leader's ability to be successful in a global environment, more than motivation to interact with people from different cultures and knowledge about different cultures were necessary. Because followers may mistakenly believe that leaders are overly confident about their abilities, they are more likely not to trust the leader's abilities. This result can also be explained by the findings of Huff and Kelley (2003), who reported that individuals in a collectivistic culture are less likely to trust others.

#### *Leader-member-exchange*

Leader-member-exchange describes the quality of relationship between leader and follower (Graen & Uhl-Bien, 1995). The relationship between global mindset and LMX was moderated by frequency of interaction within. This means that the involvement of the frequency of interaction within weakened the relationship between global mindset and LMX. Leaders who have a global mindset and interact on average much more frequently with one follower, have that follower experience a weaker quality of relationship with the leader. This result was surprising, but can be explained by the fact that individuals in collectivistic cultures value the needs and goals of the group over the individual (Gudykunst, 1997). Thus, if an individual is separated from the group and the leader is frequently interacting with that person more than others, that individual may believe that they are in the out-group, as opposed to being in the in-group, if in an individualistic culture. These results are also similar to the results of Nishii and Mayer

(2009) who reported that high-quality of LMX may actually lead to negative individual level outcomes.

Another HLM analysis was conducted to test the impact of global mindset subscales on LMX. Metacognitive CQ impacted LMX. This means that leaders who are able to acquire new behaviors appropriate to a new culture have followers who experience a higher quality of relationship between leaders and followers. This result was expected and consistent with the work of Matkin (2005) who reported that leaders who are more culturally sensitive, have followers who report higher LMX.

The relationship between cognitive CQ and LMX was moderated by frequency of interaction within. This means that the involvement of frequency of interaction within weakened the relationship between cognitive CQ and LMX. Leaders who are self-aware of their environment and information available to them that have a higher frequency of interaction with a single follower more than the others, have followers experience a weaker relationship between LMX and cognitive CQ. This can also be explained by the fact that individuals in collectivistic cultures value the needs and goals of the group over the individual (Gudykunst, 1997). Thus, if an individual is separated from the group and the leader is frequently interacting with that person more than others, they may believe that they are in the out-group, versus being in the in-group, if in an individualistic culture.

#### *Organizational Commitment*

Organizational commitment (affective commitment) was defined as the involvement and identification with a particular organization (Mowday et al, 1979).

Global mindset had a direct negative impact on organizational commitment. This means that leaders who have a global mindset have followers who report weaker relationships



between organizational commitment and global mindset. This finding was against Taylor et al (2008), who reported that individuals who work for top managers who have a global business orientation and are culturally sensitive are more committed to their organizations. Frequency of interaction between moderated the relationship between global mindset and organizational commitment. Leaders who have a global mindset and interact frequently with followers have stronger scores on organizational commitment. Frequency of interaction within also moderated the relationship between global mindset and organizational commitment. This means that leaders who have a global mindset and interact frequently with single followers more than others on average, have weaker relationships between global mindset and organizational commitment. Leaders with a global mindset, who interact frequently with followers, have followers who are more committed to the organization. On the other hand, if an individual follower interacts with a leader more frequently than average, that individual report lowers levels of organizational commitment. This can also be explained by the fact that individuals in collectivistic cultures value the group over the individual (Gudykunst, 1997). Thus, if an individual is separated from the group and the leader is frequently interacting with that person more than others, it may impact ratings of organizational commitment. This is also consistent with the findings of Nishii and Mayer (2009).

Another HLM analysis was entered to analyze the impact of the four global mindset subscales (metacognitive CQ, cognitive CQ, motivational CQ, and global business orientation). Global business orientation had a direct negative impact on followers' ratings of organizational commitment. Specifically, as leaders scores on global business orientation increases, follower scores on organizational commitment decreases.

However, frequency of interaction between moderated the relationship between global business orientation and organizational commitment. This means that as leaders' scores on global business orientation increases, and they have frequent interactions with followers, followers' organizational commitment scores increases. This is very interesting as global business orientation without frequent interaction between leaders and followers, negatively impacts organizational commitment. Thus, frequency of interaction between leaders and followers is very important if leaders want followers to be more committed.

Cognitive CQ and organizational commitment were moderated by frequency of interaction within. This means that the involvement of frequency of interaction within in the intervention weakened the relationship between cognitive CQ and organizational commitment. Leaders who are aware of the information available to them (in terms of culture) and have a higher than average interaction with followers, have followers report lower levels of organizational commitment. This finding is very interesting because if leaders have a higher than average interaction with followers, followers may notice inconsistencies in the leader behaviors or feelings, which may lead to lower ratings on organizational commitment.

### *Implications for Practice*

Practicing global leaders need to consider the overwhelming impact of the amount of interaction they have with followers. When leaders with a global mindset interact with more frequency than average with a single follower, that follower tends to have a lower trust in leader, a lower quality of relationship with leader, and lower organizational commitment. On the other hand, when leaders interact frequently with followers but not

above and beyond the group, the relationship between global mindset of leaders and follower ratings of trust in leader, LMX, and organizational commitment tended to increase. There was only one exception to the rule, when leaders who report a metacognitive cultural intelligence and frequent interactions with leader, diminished the relationship between metacognitive CQ and affect-based trust. This could be explained by the difficulty followers may have in observing metacognitive CQ. Global leaders need also to be aware that some elements of global mindset are more important than others in influencing affect-based trust, cognition-based trust, LMX, and organizational commitment in followers. For example, motivational CQ only negatively impacted ratings of cognition-based trust, but it did not contribute to any other model. It is clear that much more than motivation to interact with different cultures alone is necessary for the relationship between global mindset and outcomes to increase.

Organizations should be cautious when employing training programs for individuals to develop a global mindset based on the results of this study. While global mindset did impact the way followers view leaders, that impact was very small. Organizations should invest time in training and developing global leaders, however, more than global mindset trainings need to be done. Based on the results of this study, about 80% of the variance in the outcome variables studied, are in the individual level, meaning, that global leaders only have a small impact on how followers feel about the leader and the organization. This implies that development of followers is also important. Based on the results of this study, organizations should also be cautious about recruiting individuals based on their global mindset, as the impact of global mindset and the outcome variables studied were very small. However, global mindset may be very

important for leaders' performance and effectiveness. Caution should also be applied because individuals in this sample were more likely to belong to a collectivistic and high power distance culture, so the results may be indicative for only populations with similar characteristics.

### *Strength of Findings*

This study was the first empirical work in determining the impact of a leaders' global mindset on individual level outcomes as rated by followers. Several significant results were found that lend to the understanding of how one's global mindset can impact those with whom they work. All of the measures in this study performed above recommended reliability. High level statistical analysis was utilized, offering a depth of analysis not often found in much of the leadership research. This study also combined existing measures to study global mindset and a factor-analysis confirmed that the measures utilized lead to one single factor, in this case, global mindset. This study sampled from a truly global organization with global leaders. The diversity and world representation in the sample provides a truly unique view of the world in terms of leaders' global mindset.

The strongest finding of this work is the clear linkage between global mindset and the outcome variables when combined with the amount of interaction between leader and follower. The moderating variables were very successful in adding to the relationship. While global mindset alone, did not have an impact on the outcome variables, when frequency of interaction between and within were added, these relationships became significant. The model with multifactor global mindset and subscales was able to explain more variance than the single factor of global mindset.

### *Limitations of Findings*

It appears that global mindset and global mindset constructs were able to explain between 4 to 12% of the variability in the outcome variables. Thus, significant variability were left unexplained at both level 1 and level 2. The small sample population could explain this. Scholars have been trying to develop statistical procedures that would be less biased for larger sample sizes or group sizes, however, most statistical techniques, especially HLM, are biased towards larger level 2/ level 1 ratio. While on average, this study had 3 direct reports for each leader, that number is still considered small.

The way global mindset was calculated may also be a limitation. While the measure was able to factor, and reliability estimates performed well, global mindset was self-reported with an instrument that could lead to social desirability. This means that global mindset scores may not be a true representation of a leader's global mindset. However, because the population selected has vast experience dealing with cultural differences, they may be less inclined to over estimate their abilities. It may be also hard for followers to observe one's global mindset because of the nature of the construct. Thus, a leader may have a global mindset, but the leader's behavior may not demonstrate this global mindset.

The diversity in the sampling population added strength to the findings, but also added a limitation. Cultural differences may very well be the cause of most unexplained or unsupported relationships in this study. Most of the research that supported the development of the hypotheses were not as global as the sample in this study. The sample diversity makes it challenging to draw conclusions or predictive information. Thus, while

we had a very diverse population, this may have made our findings less generalizable. This also highlights the challenges of doing global research.

Finally, the results of this study cannot be generalized to all industries or organizations. The sample population was drawn from a very large diversified global Fortune 100 organization. The majority of this organization's workforce is abroad and they have been a strong presence globally for many years. The majority of the sampled individuals are in upper or top management positions. Thus, findings should not be generalized for domestic organizations or organizations that are just becoming global, organizations that are smaller, or individuals in lower management positions. Finally, results of this finding are not generalized to all industries.

#### *Directions for Future Research*

Because this study represents the first known research to examine the role of leaders' global mindset on individual level outcomes rated by followers, many opportunities exist to test the existing model. Larger sample size, different industries, and measures of cultural differences are ways that this study could be strengthened. Adding mediating and different moderating variables may provide more relevant information because global mindset is an internal-level construct, individuals may not be able to observe global mindset, or just because a leader has a global mindset, their behaviors may not be representative of that. Adding mediating variables to aid in this gap would strengthen the results. Controlling for cultural differences may also strengthen the results. Because there are significant levels of variance that were left unexplained by this study, other studies should be conducted to address these.

Other individual level outcomes should be studied. The relationships between a leader's global mindset and follower ratings of psychological capital (hope, efficacy, resiliency, and optimism), sources of motivation, satisfaction, and performance should be examined. Organizational outcomes such as organizational performance, international presence, percent of global business, and global strategy should also be studied to see if global mindset of leaders relates to these organizational level variables. If future studies confirm that a leader's global mindset contributed to positive individual level and organizational level outcomes, scholars should also examine global mindset development and the antecedents of global mindset. Personality, life experiences, experience abroad, number of languages spoken, psychological capital, type of formal education, and constructive development should be examined. Finally, strong qualitative research may be beneficial to truly understand the nuances of a leader's global mindset. Interviews with well-known effective global leaders might increase our awareness of not only the intricacies of global mindset but also how one develops one.

### Summary

This multi-level study examined the relationship between leaders' global mindset with followers' rating of trust in leader, quality of the leader-member relationship (LMX), and organizational commitment. Complexity of global role and leader distance were also examined as moderating variables.

Data were collected from 78 leader participants and 240 raters from one Fortune 100 multinational organization. A multilevel data analysis was conducted using Hierarchical Linear Modeling. No significant relationships were found between global mindset and ratings of follower trust in leader and quality of the leader-member-

relationship. A significant negative relationship was found between global mindset of leaders and follower organizational commitment. Specifically, as leaders' scores of global mindset increased, followers' ratings of organizational commitment decreased.

Global roles and physical distance between the leader and the follower did not moderate the relationship between global leadership and outcome variables, however the frequency of interaction between leaders and followers did. Specifically, the involvement of frequency of interaction between leaders and followers increased and strengthened the relationship between global mindset and followers' ratings of organizational commitment. This supported the notion that without a high amount of interaction, global mindset would not significantly impact ratings of organizational commitment. The relationship between the frequency of leader- follower interaction when a single follower interacted on average with a more frequency than others in the group (within), significantly moderated the relationship between global mindset and affect-based trust in leader, LMX, and organizational commitment. Specifically, the involvement of frequency of leader-follower interactions within weakened the relationship between global mindset and affect-based trust, LMX, and organizational commitment as rated by followers. These results indicate that followers who interact on average more frequently than the rest of the group with a leader who has a global mindset, report lower scores of trust in leader, LMX, and organizational commitment. Because most participants were from a collectivistic culture, these findings are indicative that followers would rather be a part of the group than separate from the group even if that means more interaction with the leader.



The combination of these findings suggests caution when stating that global mindset is a key construct that is essential for effective global leadership. While some significant relationships were found, the models were only able to explain between 4 to 6 percent in the variance of all outcome variables.

## CHAPTER VI

Global mindset: A construct clarification and framework

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### Abstract

Global mindset has been proposed to be the only unique characteristic of effective global leadership. This article proposes a framework of global mindset by combining cultural intelligence and global business orientation. In addition, relationships are proposed between global mindset and individual outcomes such as trust, leader-member exchange relationship quality, and organizational commitment. Variables such as complexity of global role and leader distance are also proposed to see if they moderate the relationship between a global leader's global mindset and outcome variables. The article also discusses the impact of the proposed relationships and states directions for future research.

### Global Mindset: A construct clarification and framework

*“Financial resources are not the problem. We have the money, products, and position to be a dominant global player. What we lack are human resources. We just don’t have enough people with the needed global leadership capabilities.”*  
*Jacke Riechert (Gregersen, Morrison, & Black, 1998).*

The globalized economy has brought many challenges and opportunities to organizations and communities. While few leaders have succeeded in global settings, those that have, share distinct characteristics from leaders in domestic settings. Adler and Bartholomew (1995) described this distinction by observing that successful leaders have a global perspective and they have gained experiences from people from many cultures simultaneously. Several conceptualizations of global leadership have emerged during the past 15 years (Alder & Bartholomew, 1992; Bartlett & Ghoshal, 1992). Global leadership has been described as involving “people in business settings whose job or role is to influence the thoughts and actions of others to achieve some finite set of business goals ... usually displayed in large, multicultural contexts” (Gessner, Arnold, & Mobley, 1999: xv).

CEOs of multinational organizations reported dire needs for more globally developed talent (Gregersen et al, 1998; Sloan, Hazucha, & Van Katwyk, 1999). The disconnect between global leadership needs and typical skills leaders have in these areas has trumpeted the global leadership development gap, which limits growth and effectiveness of multinational organizations (Zahra, 1998). The need to study and understand global leadership has never been stronger than it has been now, which is more alarming because the field has shockingly few generalizable practical interpretations. The majority of the literature on global leadership has been based on anecdotal and shared experiences. Substantive contribution to the field’s understanding of global leadership

can only occur with rigorous empirical examination of the global leadership phenomena. Global mindset was proposed to be a key construct for global leadership development and success (Kedia & Mukherji, 1999; Pucik & Saba, 1998; Black & Gregersen, 2000; Oddoul, Mendenhall, and Richie, 2000).

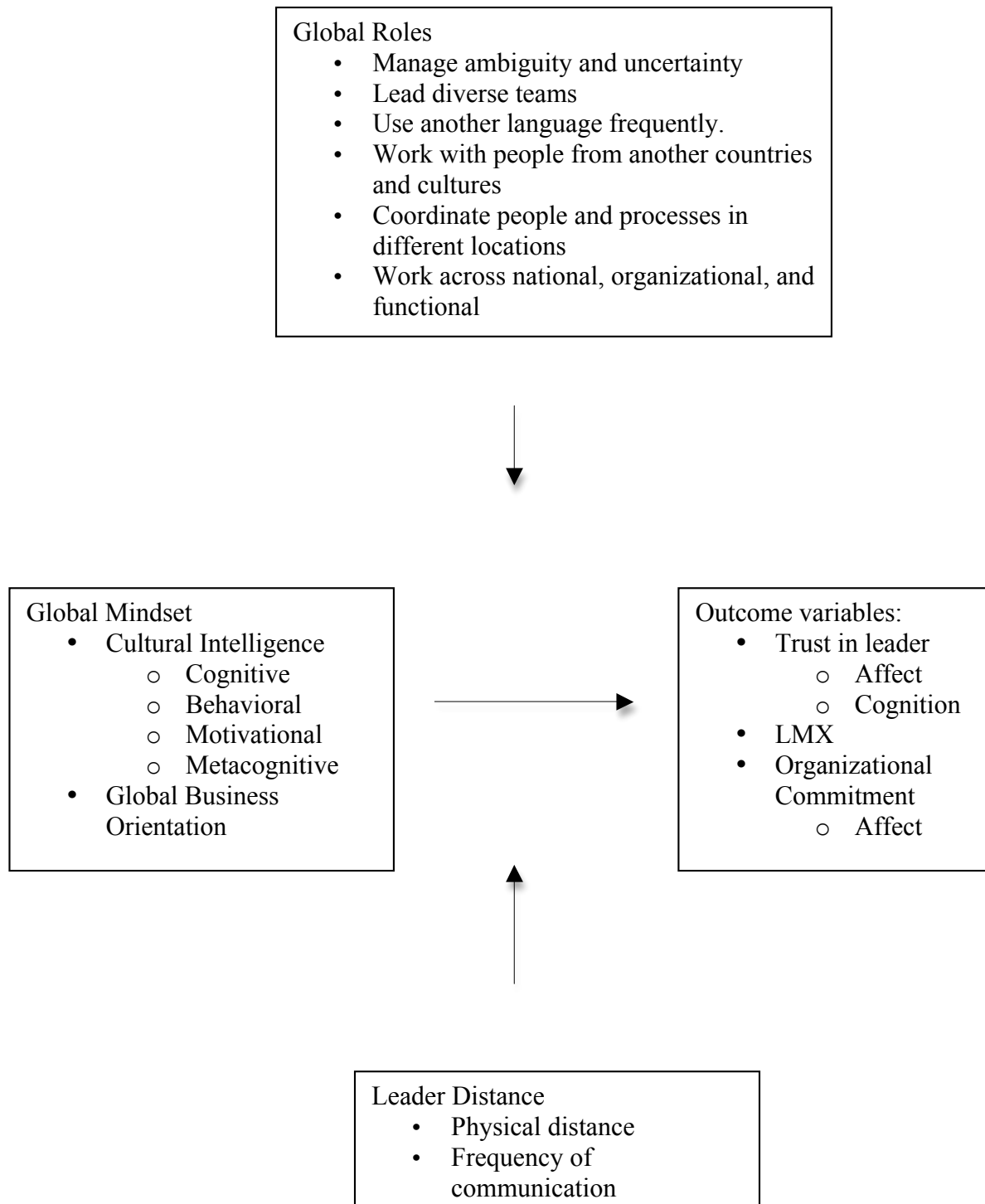
Many frameworks of global mindset have been proposed in the literature but no clear consensus has emerged. Those who have attempted to study global mindset have looked at its antecedents, such as age, education, job tenure, international management training, nationality, and willingness to work abroad (Arora, Jaju, Kefalas & Perenich, 2004). Other variables have also been considered as antecedents of global mindset such as curiosity, language skills, personal history, authenticity, personal history (Clapp-Smith and Hughes, 2007), and global strategy of the organization (Murtha, Lenway, & Bagozzi, 1998). Fewer scholars tested the role of global mindset in organizational outcomes. Among the few empirical studies reported showed that percent of sales and employees abroad, number of countries with manufacturing operations were each related to the organizational leader global mindset (Kobrin, 1994). However, the relationship between global mindset of the leader and a multinational or global strategy yielded mixed results (Kobrin, 1994; Levy, 2005; Harverston, Kedia, & Davis, 2000; Nummela, Saarenketo & Puumalainen, 2004). Thus, most of the research on global mindset has examined the antecedents and development of global mindset but the importance of global mindset has not been empirically determined in the field. Before testing the antecedents of global mindset, the field needs to ascertain the true impact or value global mindset –specifically, as it impacts organizational behavior or performance.

The consensus view of global mindset assumes that leaders in global settings will be equipped to guide organizations and develop the necessary relationships for positive organizational outcomes. Among the most salient variables, trust in leader, quality of relationship between leader and follower, and organizational commitment have been examined extensively in the literature and can be considered one of the most important organizational behavior variables. Research of these variables in the global context was lacking, however, their role in the global environment may be just as important. Thus, this paper proposes an operational framework depicting how global mindset can impact individual level outcomes such as trust, leader-member-exchange, and organizational commitment. In addition, the framework explores the moderating effects complexity of the global role and leader distance has on the relationships between a leader's global mindset and outcome variables.

### Literature Review

This paper articulates a framework of global mindset and describes the conditions most likely to lead to positive organizational outcomes. The framework depicts a direct relationship between leaders global mindset and positive organizational outcomes. These relationships are then enhanced or neutralized by the moderating variables: complexity of global role and leader distance. A fuller description and review of the relevant literatures to support these variables and the framework illustrating proposed relationship follows.

*Figure 1: Proposed Framework of Global Mindset and Outcomes*



### *Global Mindset*

Over the past decade, global mindset has emerged as a necessary attribute for effective global leadership (Kedia & Mukherji, 1999; Pucik & Saba, 1998; Black & Gregersen, 2000; Oddou, Mendenhall, and Richie, 2000). In the global leadership literature, global mindset has been used to describe many things from skills, attitudes, and competencies, to behaviors, strategies, and practices (Levy, Beechler, Taylor & Boyacigiller, 2007).

Perlmutter's (1969) seminal work on global mindset defined three orientations that managers have used in multinational corporations: *ethnocentric (home country orientation)*, *polycentric (host country orientation)*, and *geocentric (world orientation)*. Geocentrism became the foundation of the global mindset construct, primarily stated at the organizational level. Rhinesmith (1992) described global mindset at the individual level noting that global mindset was an identity or paradigm for viewing the world holistically. Leaders described as having a global mindset scan the world from a broad perspective and observe unexpected trends and opportunities. He indicated that people with global mindsets drive for the broader picture, accept the complexity of the world, trust process more than structure, value diversity and cultural differences, are comfortable with change, surprise, and ambiguities, and constantly re-examine themselves and their boundaries.

Gupta and Govindarajan (2002) described a conceptual framework of global mindset in terms of market and cultural awareness and openness, and the ability to integrate differing perspectives. Their framework included two variables, integration and



differentiation. Integration was described as the ability to integrate diversity across cultures and markets. Differentiation was described as openness to diversity across cultures and markets. The authors proposed that scores high in integration and differentiation mean that an organization or a person has a global mindset.

Kedia and Mukherji (1999) concurred that global managers should change their paradigms and mindsets to think more globally. They proposed four managerial mindsets: *defender* (managers that are focused on domestic market and its needs), *explorer* (managers that are focused on domestic market but are aware of international market and opportunities to increase sales or distribution), *controller* (ethnocentric mindset with focus on domestic and international markets), and the *integrator* (managers with a global perspective who create multiple diverse relationships).

Kefalas (1998) advocated that globally minded people with strong local results were best candidates for global leadership positions. Kefalas' (1998) conceptualized two variables- *conceptualization* and *contextualization*. Conceptualization described people with a global view of the world. Contextualization described people's capacity to adapt to their local environments. High scores in both dimensions were optimally described *most global* and low scores on both dimensions were considered *least global*.

Arora, Jaju, Kefalas, and Perenich (2004) tested this framework in the textile industry and reported significant relationship between age and global mindset (-), as well as significant relationships between level of education and global mindset (+). Additionally, international management training was related to global mindset (+). American managers scored significantly lower on global mindset than foreign managers. Managers with a family member living abroad scored significantly higher than those who

have no family abroad. Managers who were willing to work abroad scored higher on global mindset than those who were not willing. Managers who took the questionnaire via computer were more globally minded than those who took it on paper. They concluded that two different skills seem to be the most relevant for developing a global mindset: intercultural sensitivity and global business knowledge.

Bleechler and Javidan (2007) described global mindset as a person's knowledge, cognitive ability, and psychological attributes that allowed them to lead in diverse cultural environments. They proposed that global mindset has three major components: intellectual capital (global leader's intellectual and cognitive capabilities), psychological capital (psychological makeup that enables global leaders to put their knowledge into use), and social capital (relationships inside and outside the organization).

Murtha, Lenway, and Bagozzi (1998) operationalized global mindset in terms of managers' cognition of international strategy and organization. They developed a questionnaire, which measured global mindset at the individual level in terms of integration, responsiveness, and coordination variables. They reported that when the company adopted a global strategy, the managers' mindset shifted towards a more global as opposed to domestic focus.

Bouquet (2005) studied global mindset and reported three overarching behaviors related to it – the capacity to process and analyze global business information, the capacity to develop relationships with key stakeholders around the world, and the capacity to use globally relevant information while making decisions for the organization. This research also indicated the approaches organizations were taking to effectively build global mindset in its managers: having a job identity that requires a global mindset,

having the right infrastructure in place for global leaders to execute their job, having the right incentives that motivate the managers, and finally, having a leadership development program which includes training, international assignments, and mentoring.

Levy, Taylor, Boyacigiller and Beechler (2007) described global mindset from three different perspectives – cultural, strategic, and a combination of the two. The cultural perspective believes that managers are constantly faced with the challenge of prevailing over the ethnocentric mindset by managing culturally divergent interorganizational relationships. This perspective believes that managers need to overcome the ethnocentric mindset in order to adopt a global mindset – one that allows managers to be self-aware of cultural differences, has an openness and understanding of other cultures, and selective incorporation of foreign values and practices (Levy, Taylor, et al, 2007). The strategic perspective frames global mindset in terms of the increased complexity created by the globalization (Levy, Taylor, et al, 2007). The foundation of this perspective lies in literature on international strategy – that asserts that complexity, heterogeneity, and indeterminacy of multinational corporations, creates a need for managers to change their styles of thinking and adopt a global mindset. Cognitive complexity has been proposed as an important construct of global mindset (Boyacigiller et al, 2004). Cognitive complexity represents the degree of differentiation, articulation, and integration within a cognitive structure (Weick & Bougon, 1986). The multidimensional perspective integrates the two perspectives listed above. The foundation of this perspective lies with the work of Rhinesmith (1992). Levy, Taylor, et al, (2007) defined global mindset as the ability to be open to and to articulate various

cultural and strategic realities at the local and global levels, while encompassing these multiple perspectives. This is the operational definition used in this article.

### *Proposed Global Mindset Framework*

Scholars have developed frameworks of global mindset, but most of these have not been researched. Based on the literature and empirical evidence of global mindset, it is evident that global mindset has two important but yet distinct characteristics. An individual with a global mindset must have an acute sense of the global business world but should also be able to be culturally adaptable. In this article, global mindset is conceptualized as having two dimensions: global business orientation and cultural intelligence.

### *Cultural Intelligence*

Earley and Ang (2003) proposed that culturally intelligent individuals are capable of developing a common mindset derived from available information even in the absence of a understanding of local practices and norms. Thus, a culturally intelligent person has the capability to acquire behaviors that are needed in a completely different environment. Furthermore, culturally intelligent individuals are not only required to think about or understand their new environment, but they must act in appropriate ways. Earley and Ang (2003) argued that cultural intelligence required an interaction of three important elements: *cognitive*, *motivational*, and *behavioral*. The cognitive component of cultural intelligence describes how individuals use the knowledge available to them. Specifically, individuals are more self-aware and in-tune with their social environment and the information available to them. Other characteristics necessary for the cognitive component of cultural intelligent individuals are: cognitive flexibility, inductive and

analogical reasoning, and a high degree of adaptability (Earley & Ang, 2003). Another component of cultural intelligence is the motivational facet, which describes the motivation of a person to adapt their behaviors according to a new cultural context. Individuals must be open, be confident, and consistent in order to be motivated to act in culturally appropriate ways (Earley & Ang, 2003). The behavioral component of cultural intelligence described a big behavioral repertoire, which is flexible, broad, and easily adaptable (Earley & Ang, 2003). Another important characteristic has to do with the capacity to acquire new behaviors that are appropriate for a new culture, which describes the *metacognitive* component of cultural intelligence (Earley & Ang, 2003).

Earley and Ang (2003) reasoned that culturally intelligent individuals had both the wisdom to choose the best path and the perseverance to succeed in global settings. A person with high cultural intelligence has a greater capability to “store” and categorize their experiences, than a person with low cultural intelligence. Thus, their mindsets are different. Alon and Higgins (2005) proposed that cultural intelligence moderate the relationships between emotional intelligence, analytical intelligence, and leadership behaviors and global leadership success.

Ang, Van Dyne, Koh, & Ng (2004) developed an instrument to measure cultural intelligence, which included cognitive, motivational, behavioral, and metacognitive. Ang, Van Dyne, and Koh (2006) correlated the Big Five personality constructs with cultural intelligence and they reported that openness to experience correlated positively among all components of cultural intelligence. Earley, Murnieks, and Mosakowski (2007) compared global mindset and cultural intelligence. They categorized cultural intelligence as “a person’s capability to adapt effectively to new cultural contexts and it has both process

and content features” (p.83). They reported that since cultural intelligence focuses only on cultural differences and interactions the construct is narrower than that of global mindset, however, they are interrelated. Global mindset is broader as it takes into consideration the complexity of the interaction that may or may not be related to cultural differences.

Thomas (2006) described cultural intelligence and global mindset as the capacity of individuals to thrive in cross-cultural situations. Similarly, Levy et al. (2007) stated that the construct of global mindset and cultural intelligence are not as differentiated as scholars may propose. The one main difference stated in the literature is that individuals with a global mindset also have a global business orientation (Levy et al, 2007). This implies that for an individual to have a global mindset they must be culturally intelligent and also have a global business perspective to not only integrate the complexity of the global business environment, but also to act in culturally appropriate ways. This notion is not new to the literature, as it was presented in the work of Kefalas (1998) and Kedia and Mukherji (1999).

#### *Global Business Orientation*

Global business orientation describes individuals’ attitudes towards internationalization as well as the ability to adapt to new business environments (van Bulck, 1979). This is characterized by an awareness and knowledge of global markets and processes with a structure and process to mediate the very volatile environment. Individuals with a global orientation make decisions based outside one culture and embrace diverse perspectives (Taylor, Levy, Boycigiller, & Beechler, 2008).

Taylor et al, (2008) used global business orientation to operationalize global mindset and reported that top management orientation mediated the relationship between organizational culture and HRM practices with organizational commitment. Specifically, global orientation impacts employee commitment. They concluded that top management orientation shapes employees' attitudes towards the organization.

Kobrin (1994) operationalized global mindset as geocentrism and reported that a global mindset was related to percentage of sales, total number of employees abroad, and the total number of countries with manufacturing operations. Organizations with a global mindset tend to make more use of transpatriates in managing global operations and have a higher number of non- U. S. born directors (Kobrin). International assignments and developmental activities abroad were correlated with a global mindset. Organizations with a global mindset emphasize cultural adaptability and diversity. However, global mindset had no relationship with multinational strategy and organizational structure (Kobrin).

Levy (2005) studied the relationship between top management teams' attention patterns and global strategy and reported that top management teams' attention pattern to the external environment was related to the global strategy of the organization. Similarly, top management's attention patterns to the internal environment were negatively related to a global strategy. He also reported that top management teams that focused on a wider spectrum of elements in the external environment were more likely to develop a global strategy.

Nadkarni and Perez (2007) studied the role of domestic mindsets in organizational internalization and reported that the complexity of a domestic mindset makes a difference

while internationalizing, as leaders are more able to use the knowledge acquired in the domestic market in the global market.

Harverston, Kedia and Davis (2000) studied the relationship between managerial mindset and an organization's engagement in international activity and reported that global orientation of managers had a significant relationship with born global firms. Furthermore, managers of born global firms had more international experience than gradual global firms' managers. Finally, managers of born global firms were reported to have higher risk tolerance than managers of gradual globalizing organizations.

Nummela et al, (2004) studied the relationship between global mindset and effective internationalization of small and medium sized companies. They measured global mindset by looking at global orientation – with elements of proactiveness, commitment, and international vision. Findings indicated that international work experience had a positive relationship with global mindset. Market characteristics also had a positive relationship with a global mindset. This means that a firm's global market has a relationship with a manager's global mindset. Global mindset also had a positive relationship with financial indicators of international performance.

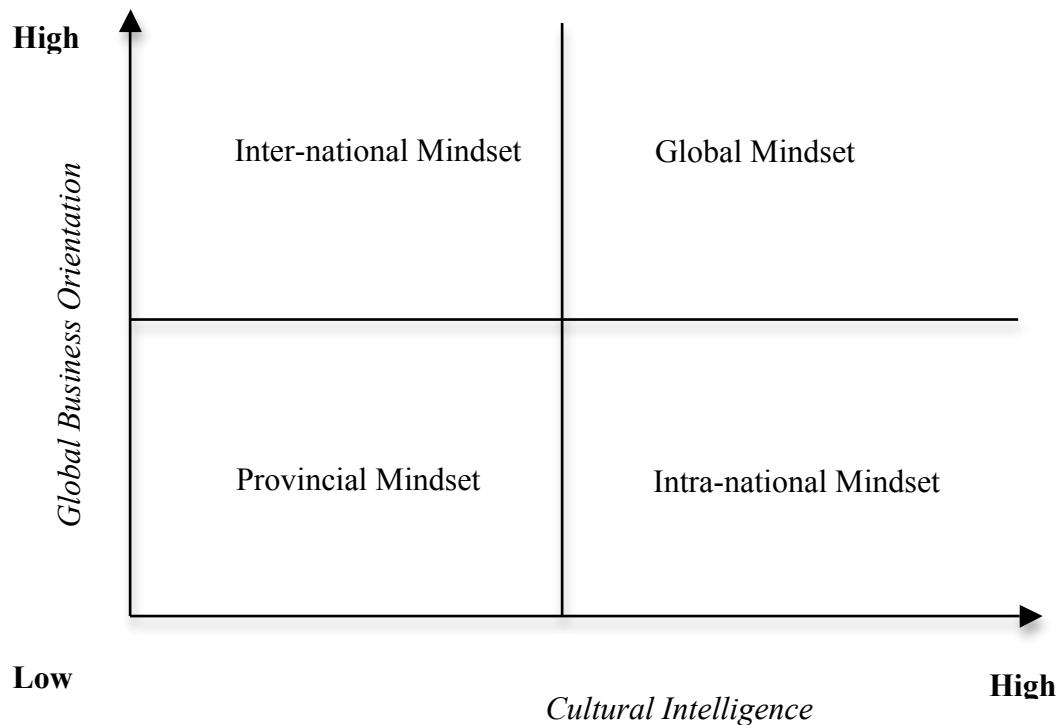
### The Framework

As evidenced from the reported studies many liberties and generalizations have been use to operationalized global mindset in research. Short of using other complementary constructs to represent global mindset, a more precise framework of global mindset and its complexities is necessary to set the stage for empirical research. A global mindset framework is proposed that combines the two constructs of global business orientation and cultural intelligence (see Figure 2). The framework is illustrative



of the concept and the quadrants do not necessarily represent a cut-off score of the mindsets.

*Figure 2: Mindsets according to Global Business Orientation and Cultural Intelligence*



A *provincial mindset* is that of individuals who are more ethnocentric and have a domestic business orientation. These individual managers would most likely be effective in homogeneous organizations and markets with a focus solely on the local operation. This is similar to the work of Kedia and Mukherji's (1999) defender managerial mindset and Perlmutter's (1969) ethnocentric mindset.

An *inter-national mindset* reflects an individual leader who is ethnocentric but has an orientation for global business. Leaders with this mindset would be most likely to start up business abroad, but not adapt to the local culture. This concept is similar to the

controller mindset by Kedia and Mukherji (1999) and polycentric mindset by Perlmutter (1969)

*An intra-national mindset* reflects the state of mind of individuals who are focused on the local business but can act in culturally sensitive ways in a heterogeneous cultural environment. Thus, leaders with this intra-national mindset most likely would foster diversity in their organizations, but not focus on a global market.

Individuals with a *global mindset* have a global business orientation and are adaptable to the local environment and culture. Thus, leaders with a global mindset focus on the global market, while being sensitive to the needs and characteristics of the local environment and culture. This view is similar to the work of Kedia and Mukherji (1999) on integrator mindset, Perlmutter's (1969) geocentric mindset, and Kefalas' (1998) global mindset.

#### *Outcome Variables*

While some propositions have been offered in prior work little research has been done testing the outcomes of global mindset. It is imperative to conduct more research to test whether global mindset does in fact lead to positive outcomes and therefore is essential for global leadership. While research examining the role of a leader's global mindset on organizational level outcomes is relevant, the goal of this article is to propose the impact that global mindset of global leaders has on relational-based outcomes. Trust in leader, quality of relationships between leaders and follower, and organizational commitment have all been examined extensively in the literature and can be considered among one of the most important organizational behavior outcomes. Research of these

variables in the global context is lacking and necessary to advance the field's understanding of the true impact of global mindset.

Trust in leaders has been described as necessary for organizations that function in a highly competitive, fast paced, and diverse environment. Without trust, global leaders are disadvantaged in pursuit of objectives since followers may doubt leaders' actions, withhold support, and may challenge the leaders' assumptions (Gillespie & Mann, 2004). With the market changes occurring almost daily, a global leader must act fast and have precise support from its team members. Trust becomes even more challenging when leaders are working with members from different cultures, but no less essential for effective global leadership success.

Another outcome variable in the proposed framework is leader-member-exchange quality (Graen & Uhl-Bien, 1995). The quality of the relationship between leaders and followers determines many organizational and personal outcomes. A global leader must be able to establish good relationships with followers and team members in order to be able to advance the organization's agenda (Beechler & Baltzley, 2008). Furthermore, without good relationships, the global leader will most likely become overwhelmed and not be able to do the job efficiently. This is particularly important for global leaders who are working in a country in which they are not familiar with the culture, customs, and rituals. Having a strong relationship with team members will truly be beneficial for global leaders to be effective in their roles, especially when different cultures are involved, as cultural diversity can hinder the development of social cohesion between employees (Buckley & Casson, 1998).

Another important variable studied is organizational commitment. Followers committed to organizational goals demonstrate greater perseverance in doing their jobs. In a global economy, many key team members who are necessary for organizations to succeed may have opportunities to work for other organizations and a chance for a better salary (Mathieu & Zajac, 1990). Multinational organizations have more difficulty in fostering committed employees as cultural differences lead to differences in expectations and perceptions of treatment (Taylor, Levy, Boyacigiller, & Beechler, 2008). Furthermore, the fast changes in the environment may lead to many organizational changes that employees may not necessarily feel are important (Taylor et al, 2008). Global leaders need committed followers in order to act in the benefit of the organization and their cause.

#### *Research Propositions*

Taylor et al, (2008) argued that top managers with a global orientation that are also culturally sensitive, welcome the challenges of globalization and are effective in dealing with the complexity of the environment. They proposed that employees will have the confidence and trust in the leader to be capable of leading the organization to success. They also proposed that because of their global mindset, employees will feel more committed to the organizational success. Rockstuhl and Ng (2008) stated that trust between members with dissimilar cultures is hard to achieve, however, it is extremely important for the success of a global organization. They reported that culturally intelligent individuals are able to foster trust and to trust other members of the organization when they are from different cultures. Similarly, Flaherty (2008) reported that cultural intelligence had a positive significant relationship with team member

acceptance and integration. Culturally intelligent individuals are able to develop high quality relationships with those who are different from themselves.

While no research has been conducted between a leaders' global mindset (as conceptualized above) and individual level outcomes, it is clear that based on the research and the relationships proposed above, that leaders with a global mindset will be able to instill trust in followers, develop a high quality of relationship with them, and make sure that followers stay committed to the organization. The following propositions are proposed:

*Proposition 1:* Leaders' global mindset will be positively related to followers' ratings of trust in leaders (a), leader-member-exchange (b), and organizational commitment (c).

#### *Moderating Effects of Complexity of the Global Role*

While the global leadership literature reports several necessary competencies and characteristics, it is unclear roles global leaders have, if these roles differ, and if these differences matter. Global roles may include managing uncertainty and ambiguity (Gregersen, Morrison, & Black, 1998), lead diverse teams (Graen & Hui, 1999), use another language (Caligiuri, 2006; Kets de Vries & Florent-Treacy, 2002), work with people from another countries and cultures (Caligiuri, 2006), coordinate people and processes in different locations (Bartlett & Ghoshal, 1992), and work across national, organizational, and functional boundaries (Pucik & Saba, 1998). It is clear that global leaders may execute some of these functions to different degrees. Thus, some global

leaders may have a high complexity global role and some global leaders may have a low complexity global role.

Global leaders with a high complexity global role will manage uncertainty and ambiguity more frequently than those with a low complexity global role. They will also lead teams with diverse values with more frequency than those with a low complexity global role. They will use more than one language to execute their job functions and with more frequency than those with a low complexity global role. They will work to influence team members and stakeholders from different countries and nationalities more frequently than those with a low complexity global role. They will coordinate people and processes in different places more frequently than those with a low complexity global role. They will also work across national, organizational, and functional boundaries more frequently than those with a low complexity global role.

Thus, global leaders who have a high complexity global role will work in an environment that is more complex. These individuals will meet challenges of the global environment and diversity with more frequency than those with a low global role. Thus, global mindset will be more important for leaders who have a high global role than for those who have a low global role.

*Proposition 4a:* Complexity of the global role will moderate the relationship between leaders' global mindset and trust in leader (a), leader-member-exchange (b), organizational commitment (c) such that global mindset will have a more positive impact on trust (a), leader-member-exchange (b), and organizational commitment (c) when the complexity is high rather than low.

### *Moderating Effects of Leader Distance*

The global environment has promoted working relationships that span physical and temporal distance. The concept of distance between the supervisor and subordinate is not new in the leadership literature (Napier & Ferris, 1993). Three types of distance have been proposed: psychological distance, structural distance, and functional distance. Psychological distance refers to the perceived differences between the subordinate and leader. Structural distance refers to the physical distance, organizational structure, and supervisor structure. Functional distance refers to the degree of closeness of the relationship between the leader and subordinate as a result of psychological and structural distance (Napier & Ferris, 1993).

Global leaders lead across global operations by coordinating people and processes in different places (Sloan et al, 2003). Thus, global leaders may work in different cities or even countries than those they lead. This is important because leadership effectiveness has been related to the degree of closeness or distance between the leader and the follower (Antonakis & Atwater, 2002). Kerr and Jermier (1978) argued that physical distance may hinder the ability of the leader to be effective. Podsakoff, MacKenzie, and Bommer (1996) reported that physical distance between leaders and follower was positively related to perceptions of role conflict and negatively related to group altruism. In the same meta-analysis it was demonstrated that physical distance was negatively related to follower performance, conscientiousness, and civic duty. Physical distance was also negatively correlated to follower satisfaction (Burrows, Munday, Tunnell, & Seay, 1996). Howell and Hall-Merenda (1999) studied the moderating effects of physical distance between leaders and followers with transformational leadership and

performance. Results indicated that close relationships produced statistically significant higher performance than distance relationships. Similarly, Howell, Neufeld, and Avolio (2005) reported that transformational leadership had a higher impact on unit performance when the leaders and followers were closely located. However, contingent rewards had a higher impact on unit performance when the leaders and followers were located in different places. Avolio, Zhu, Koh and Bhatia (2004) reported that structural distance moderated the relationship between transformational leadership and organizational commitment.

The impact of leaders' global mindset on followers should also be affected by the physical distance between leaders and followers. Close leaders may be able to demonstrate culturally appropriate behaviors and a global vision while distance leaders may have more difficulty in demonstrating this capacity. Thus, physical distance will impact the relationship between global leaders' global mindset and follower's trust in leader, quality of the relationship, and organizational commitment.

*Proposition 5a:* Physical distance between the leaders and the followers will moderate the relationship between leaders' global mindset and trust in leader (a), leader-member-exchange (b), and organizational commitment (c) such that global mindset will have a more positive impact on trust (a), leader-member-exchange (b), organizational commitment (c) when physical distance is low rather than high.

Antonakis and Atwater (2002) proposed that leader-follower interaction frequency is another type of distance. They defined this dimension as "the perceived degree to which leaders interact with their followers" (p. 686). Technological advances



may be able to assist with the barriers of physical distance by having followers and leaders who are physically distant having close relationships because of the frequency of their communication. Thus, the frequency of leader-follower interaction should also impact the relationship between leaders' global mindset and followers' ratings of trust, leader-member-exchange, and organizational commitment.

*Proposition 6a:* Perceived frequency between leader-follower interactions will moderate the relationship between leaders' global mindset and trust in leader (a), leader-member-exchange (b), and organizational commitment (c) such that global mindset will have a more positive impact on trust (a), leader-member-exchange (b), and organizational commitment (c) when interaction is high rather than low.

### Discussion and Future Directions

Global mindset has been proposed as a unique characteristic of effective global leaders (Levy et al, 2007), however, its impact has not yet been tested. This paper provides an operational framework of global mindset by combining cultural intelligence and global business orientation. This article also articulates the importance of studying global mindset of leaders and its effect on individual level outcomes.

This framework may guide research in the field of global leadership and international management. Testing the nuances of global mindset – how a global leaders' global mindset impacts follower trust in leader, quality of their relationship, and organizational commitment – provides salient opportunities for inquiry. The propositions articulated in this paper need to be subjected to empirical inquiry. If global mindset

impacts positive outcomes, global leaders would therefore need to focus on developing a global mindset. Global leadership development efforts would focus on selection or training of individuals who either have a global mindset, or need to develop their global mindset, respectively.

Another contribution of the proposed framework is the inclusion of complexity of global role as a moderating variable. By distinguishing between different degrees of “globalness” that leaders role’s encompass the relative importance of their global mindset varies. It is important to test whether global mindset is relevant for all leaders in a multinational organization or only to leaders who have a role that is global.

Another substantive contribution of this framework is the inclusion of leader distance as a moderating variable. It has been proposed that leader distance moderates the relationship between global mindset and the individual level outcomes. Distinguishing between leaders working in close proximity with regular face to face contact versus with those with less frequent and primarily distance (email, passive forms of communication) the relative importance of global mindset on organizational outcomes can be ascertained. Given the global environment, it is important to see whether leaders who work closely with the people they supervise will instill more trust, have a higher quality of relationship, and will be more committed than those who don’t work closely with their leader.

The need for global minded talent is evident in the literature and in practice (Gregersen et al, 1998). If global mindset can truly demonstrate an impact on individual level outcomes, future frameworks and research studies may include other important organizational behavior variables such as psychological capital, motivation, employee

satisfaction, and employee performance. Organizational outcomes such as organizational performance, international presence, percent of global business, and global strategy may also be included in conceptual in conceptual and tested frameworks to see if global mindset of leaders relates to these outcomes. Scholars should also examine global mindset development and the antecedents of global mindset.

This is an important area of study, which has been filled with rich dialogue. Empirical testing is necessary to truly advance the field of global leadership. Until propositions and “common sense” statements are tested and generalibility of results can be accessed, the field’s understanding will be limited to dialogue and armchair philosophy. Studying the proposed relationships is necessary and will be one of the first to really test individual level outcomes as a consequence of global leaders’ global mindset.

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## APPENDIX A – Definition of terms

**Global leadership:** Global leadership is defined as involving “people in business settings whose job or role is to influence the thoughts and actions of others to achieve some finite set of business goals ... usually displayed in large, multicultural contexts” (Gessner, Arnold, & Mobley, 1999: xv).

**Global mindset:** Global mindset is defined “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” (Levy, Taylor, Boyacigiller, & Beechler, 2007, p. 27).

**Trust:** Trust is defined as “a psychological state comprising of the intention to accept vulnerability based upon positive expectation of the intentions or behavior of another” (Rousseau, Sitkin, Burt & Camerer, 1998, p. 395). Affect-based trust refers to the trust from a bond that arises from one’s emotions and sense of other’s feelings and motives. Affect-based trust is demonstrated by care and concern for the welfare of their leaders (McAllister, 1995). Cognition-based trust refers to trust based on evidence of the leader’s competence and reliability (McAllister, 1995).

**Leader-member-exchange (LMX):** LMX describes the relationship between leaders and those who report directly to them. More specifically, this relationship can be classified by the quality of the exchange as high LMX (mutual trust, respect, liking, and reciprocal influence) or low LMX (downward influence and role- defined relations) (Liden, Wayne & Stilwell, 1993).

**Organizational commitment:** Organizational commitment (affective commitment) is defined as “the relative strength of an individual’s identification with and involvement in a particular organization” (Mowday, Steers, & Porter, 1979, p.226).

## APPENDIX B – Institute of Review Board Letter of Approval



October 14, 2009

Joana Story  
Agricultural Leadership, Education and Communication  
926 S 34th St Lincoln, NE 68510

John Barbuto Jr  
Agricultural Leadership, Education and Communication  
300 AGH UNL 68583-0709

IRB Number: 20091010214EP

Project ID: 10214

Project Title: Testing the impact of global mindset on positive organizational outcomes: A multi-level analysis

Dear Joana:

This letter is to officially notify you of the approval of your project by the Institutional Review Board (IRB) for the Protection of Human Subjects. It is the Board's opinion that you have provided adequate safeguards for the rights and welfare of the participants in this study based on the information provided. Your proposal is in compliance with this institution's Federal Wide Assurance 00002258 and the DHHS Regulations for the Protection of Human Subjects (45 CFR 46).

Date of EP Review: 10/14/2009

You are authorized to implement this study as of the Date of Final Approval: 10/14/2009. This approval is Valid Until: 10/13/2010.

We wish to remind you that the principal investigator is responsible for reporting to this Board any of the following events within 48 hours of the event:

- Any serious event (including on-site and off-site adverse events, injuries, side effects, deaths, or other problems) which in the opinion of the local investigator was unanticipated, involved risk to subjects or others, and was possibly related to the research procedures;
- Any serious accidental or unintentional change to the IRB-approved protocol that involves risk or has the potential to recur;
- Any publication in the literature, safety monitoring report, interim result or other finding that indicates an unexpected change to the risk/benefit ratio of the research;
- Any breach in confidentiality or compromise in data privacy related to the subject or others; or
- Any complaint of a subject that indicates an unanticipated risk or that cannot be resolved by the research staff.

For projects which continue beyond one year from the starting date, the IRB will request continuing review and update of the research project. Your study will be due for continuing review as indicated above. The investigator must also advise the Board when this study is finished or discontinued by completing the enclosed Protocol Final Report form and returning it to the Institutional Review Board.

If you have any questions, please contact the IRB office at 472-6965.

Sincerely,

A handwritten signature in black ink, appearing to read "Maria J. Luba".

Mario Scalora, Ph.D.  
Chair for the IRB



## APPENDIX C- Cover Letter to Participants



Email Correspondence sent to potential participants

(DATE)

Researchers at the University of Nebraska have partnered with our organization to study attitudes and behaviors of global leaders. Your participation in this study will contribute to the field's understanding of these areas and its impact on organizational behavior and performance.

For this research project information from leader and direct reports must be obtained. Your part will only take approximately 15 minutes and your direct reports' part will require the same amount of time. We will collect data for just two weeks so we hope you will find the time to do so in the upcoming days.

To participate in the study you will need to visit the website linked below, give your consent for participation, and enter a random 7-digit number at the top of the survey. You may need to copy and paste the link into a new browser. Please make note of this 7-digit number and supply it to all those you supervise. Data cannot be used unless we can link leaders and direct reports using this random code. No other identifying information will be kept or stored, thus the data will be entirely anonymous.

<https://www.surveymonkey.com/s/leadersurvey>

After you complete the survey, send the following link to each of your direct reports and include the 7-digit code you created, as this will be the only way to match the employee data to your responses.

<https://www.surveymonkey.com/s/directreport>

If you have any questions or concerns, please feel free to contact one of the investigators listed below.

Thank you in advance for your support!

Joana S. Story, M.S., Principal Investigator - Office (402) 472-2815  
John E. Barbuto, Jr., Ph.D., Co-Investigator – Office (402) 472-8736

## APPENDIX D – Study Participants’ Informed Consent

WEB-BASED INFORMED CONSENT FORM  
IRB# 20091010214EP

Identification of Project:

Testing the relationships between global mindset and positive organizational outcomes: A multi-level analysis.

Purpose of the Research:

This research is being conducted as part of the requirement for a doctoral dissertation. You are invited to participate in a research study related to the attitudes and behaviors of global leaders. Your participation in this study will contribute to the field's understanding of these areas and its impact on organizational behavior and performance. You must be 19 years of age or older to participate in the study.

Procedures:

Participation in this study will be conducted online. If you consent, you will be asked to electronically complete a questionnaire. The questionnaire involves a simple format that will ask you to respond using the scale provided. The questionnaire and scripts require approximately 15-20 minutes of your time. You will also be asked to provide demographic information in this survey. You may choose to not respond to any question at your discretion.

Risks and/or Discomforts:

There are no known risks or discomforts associated with this research.

Benefits:

You may find the learning experience from this project enjoyable as you mentally process the personal and organizational oriented questions.

Confidentiality:

Any information obtained during this study, which could identify subjects, will be kept strictly confidential to the immediate research team, which includes the principle investigator and one co-investigator. The online data will be stored on a secure server and stored by a unique code (not by participant name). Any non-electronic data will be stored in a locked cabinet in the investigator's office and will only be seen by the investigator during the study and for three years after the study is complete. The information obtained in this study may be published in scientific journals or presented at scientific meetings but the data will be reported as aggregated data.

Opportunity to ask questions:

You may ask questions concerning this research and have those questions answered before agreeing to participate. Joana Story's office phone number is (402) 472-2815, and Dr. John Barbuto's office phone number is (402) 472-8736. If you have any questions concerning your rights as a research subject that have not been answered by the investigators, you may contact the University of Nebraska- Lincoln Institutional Review

Board at (402) 472-6965.

**Freedom to Withdraw:**

Participation in this study is voluntary. You can refuse to participate or withdraw at any time without harming your relationship with the researchers or the University of Nebraska-Lincoln, or in any other way receive a penalty or loss of benefits to which you are otherwise entitled.

**Consent, Right to Receive a Copy:**

You are voluntarily making a decision whether or not to participate in this study. By clicking the "I Consent" button you are certifying that you have decided to participate having read and understood the information presented. You should print a copy of this form for your records. Your decision to either participate or decline to participate will not be made known to your supervisor or individuals in human resources.

**Name and Phone number of investigator(s)**

Joana S. Story, M.S., Principal Investigator - Office (402) 472-2815

John E. Barbuto, Jr., Ph.D., Co-Investigator – Office (402) 472-8736

## APPENDIX E – Leader Survey Instruments

### Cultural Intelligence

Directions: Select the response that best describes your capabilities.

Select the answer that BEST describes you AS YOU REALLY ARE.

1	2	3	4	5	6	7
Strongly Disagree	Mostly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Mostly Agree	Strongly Agree

### Metacognitive CQ

- \_\_\_\_ 1. I am conscious of the cultural knowledge I use when interacting with people with different cultural backgrounds.
- \_\_\_\_ 2. I am conscious of the cultural knowledge I apply to cross-cultural interactions.
- \_\_\_\_ 3. I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me.
- \_\_\_\_ 4. I check the accuracy of my cultural knowledge as I interact with people from different cultures.

### Cognitive CQ

- \_\_\_\_ 1. I know the legal and economic systems of other cultures.
- \_\_\_\_ 2. I know the religious beliefs of other cultures.
- \_\_\_\_ 3. I know the marriage systems of other cultures.
- \_\_\_\_ 4. I know the arts and crafts of other cultures.
- \_\_\_\_ 5. I know the rules (e.g., grammar) of other languages.
- \_\_\_\_ 6. I know the rules for expressing non-verbal behaviors in other cultures.

### Motivational CQ

- \_\_\_\_ 1. I enjoy interacting with people from different cultures.
- \_\_\_\_ 2. I enjoy living in cultures that are unfamiliar to me.
- \_\_\_\_ 3. I am confident that I can socialize with locals in a culture that is unfamiliar to me.
- \_\_\_\_ 4. I am confident that I can get accustomed to the shopping conditions in a different culture.
- \_\_\_\_ 5. I am sure I can deal with the stresses of adjusting to a culture that is new.

Ang, S., Van Dyne, L., Koh, C., & Ng, K. Y. (2004). The measurement of cultural intelligence. Paper presented at the Academy of Management Conference, Symposium on Cultural Intelligence, New Orleans.

### Global Business Orientation

Please indicate your response to each statement using the following scale:

1	2	3	4	5
Disagree Totally	Disagree	Neutral	Agree	Agree Totally

#### *Proactiveness on international markets*

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

Nummela, N., Saarenketo, S., & Puumalainen, K. (2004). A global mindset- A prerequisite for successful internationalization? *Canadian Journal of Administrative Sciences*, 21 (1), 51-64.

## APPENDIX F – Follower Survey Instruments



**LMX-7**

Please indicate your response to each statement using the following scale:

- |                      |                    |                      |         |                   |                 |                   |
|----------------------|--------------------|----------------------|---------|-------------------|-----------------|-------------------|
| 1                    | 2                  | 3                    | 4       | 5                 | 6               | 7                 |
| Entirely<br>Disagree | Mostly<br>Disagree | Somewhat<br>Disagree | Neutral | Somewhat<br>Agree | Mostly<br>Agree | Entirely<br>Agree |
- 
- \_\_\_\_ 1. I usually know where I stand with my supervisor.
- \_\_\_\_ 2. My supervisor understands my problems and needs.
- \_\_\_\_ 3. My supervisor recognizes my potential.
- \_\_\_\_ 4. My supervisor would use her/his power to help me solve problems in my work.
- \_\_\_\_ 5. My supervisor would “bail me out” at her/his expense if I needed them to.
- \_\_\_\_ 6. I have enough confidence in my supervisor that I would defend her/his decision if she/he were not present to do so.
- \_\_\_\_ 7. My working relationship with my immediate supervisor is extremely effective.

Scandura, T. A., & Graen, G. B. (1984). Moderating effects of initial leader-member-exchange status on the effects of leadership intervention. *Journal of Applied Psychology*, 69 (3), 428-436.

**Organizational Commitment Scale (Affective Commitment)**

Please indicate your response to each statement using the following scale:

1	2	3	4	5	6	7
Strongly Disagree	Mostly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Mostly Agree	Strongly Agree

\_\_\_\_ 1. I would be very happy to spend the rest of my career in this organization.

\_\_\_\_ 2. I really feel as if this organization's problems are my own.

\_\_\_\_ 3. I do not feel like "part of the family" at my organization. (R)

\_\_\_\_ 4. I do not feel "emotionally attached" to this organization. (R)

\_\_\_\_ 5. This organization has a great deal of personal meaning to me.

\_\_\_\_ 6. I do not feel a strong sense of belonging to my organization. (R)

Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace: Theory, Research, and Application*. Thousand Oaks, CA: Sage.

**Trust**

Please indicate your response to each statement using the following scale:

1	2	3	4	5	6	7
Strongly Disagree	Mostly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Mostly Agree	Strongly Agree

**Affect- based trust**

- \_\_\_\_\_ 1. We have a sharing relationship. We can both freely share our ideas, feelings, and hopes.
- \_\_\_\_\_ 2. I can talk freely to this individual about difficulties I am having at work and know that (s)he will listen.
- \_\_\_\_\_ 3. We would both feel a sense of loss if one of us was transferred and we could no longer work together.
- \_\_\_\_\_ 4. If I share my problems with this person, I know (s)he would respond constructively and caringly.
- \_\_\_\_\_ 5. I would have to say that we have both made considerable emotional investments in our working relationship.

**Cognition-based trust**

- \_\_\_\_\_ 1. This person approaches his/her job with professionalism and dedication.
- \_\_\_\_\_ 2. Given this person's track record, I see no reason to doubt his/her competence and preparation for the job.
- \_\_\_\_\_ 3. I can rely on this person not to make my job more difficult by careless work.
- \_\_\_\_\_ 4. Most people even those who aren't close friends with this individual, trust, and respect him/her as a co-worker.
- \_\_\_\_\_ 5. Other work associates of mine who must interact with this individual consider him/her to be trustworthy.
- \_\_\_\_\_ 6. If people new more about this individual and his/her background, they would be more concerned and monitor his/her performance closely. (R)

McAllister, D. J. (1995). Affect- and cognition- based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, 38 (1), 24-59.

**Global Roles**

Please indicate your response to each statement using the following scale:

- |                      |                    |                      |         |                   |                 |                   |
|----------------------|--------------------|----------------------|---------|-------------------|-----------------|-------------------|
| 1                    | 2                  | 3                    | 4       | 5                 | 6               | 7                 |
| Entirely<br>Disagree | Mostly<br>Disagree | Somewhat<br>Disagree | Neutral | Somewhat<br>Agree | Mostly<br>Agree | Entirely<br>Agree |
- 
- \_\_\_\_ 1. My job requires me to manage ambiguity and uncertainty frequently.
- \_\_\_\_ 2. My job requires me to lead diverse teams frequently.
- \_\_\_\_ 3. My job requires me to use another language frequently.
- \_\_\_\_ 4. My job requires me to work with people from another countries and cultures frequently.
- \_\_\_\_ 5. My job requires me to coordinate people and processes in different locations frequently.
- \_\_\_\_ 6. My job requires me to work across national, organizational, and functional Boundaries frequently.

### **Leader distance**

Please answer the following questions about the type and frequency of communication with your supervisor.

#### *Frequency of interaction*

Adapted from Klauss, R., & Bass, B. M. (1982). *Interpersonal Communication in Organizations*. New York: Academy Press.

How often do interact with your supervisor during a typical week?

1. Once in a while.
2. Sometimes.
3. Fairly many times.
4. Very frequently.
5. Continually.

#### *Physical Distance*

Adapted from Klauss, R., & Bass, B. M. (1982). *Interpersonal Communication in Organizations*. New York: Academy Press.

Rate the physical distance between you and your supervisor.

1. Very close (same floor).
2. Close (different floor, same building).
3. Not close/not far (different building, same city).
4. Far (different city).
5. Very far (different state, different country).

#### *Type of interaction*

How do you primarily interact with your supervisor?

1. Face-to-face
2. Distance (phone, email, computer software)
3. Both
4. Neither (\_\_\_\_\_)