Global Leadership Effectiveness: the Predictive Value of Cognitively Oriented Competencies

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GLOBAL LEADERSHIP EFFECTIVENESS: THE PREDICTIVE VALUE OF
COGNITIVELY ORIENTED GLOBAL LEADERSHIP COMPETENCIES

A Thesis

Presented to

the Faculty of the Department of Psychology

San José State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

by

Silma Lange

May 2015
The Designated Thesis Committee Approves the Thesis Titled

GLOBAL LEADERSHIP EFFECTIVENESS: THE PREDICTIVE VALUE OF COGNITIVELY ORIENTED GLOBAL LEADERSHIP COMPETENCIES

By

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APPROVED FOR THE DEPARTMENT OF PSYCHOLOGY

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May 2015

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GLOBAL LEADERSHIP EFFECTIVENESS: THE PREDICTIVE VALUE OF COGNITIVELY ORIENTED COMPETENCIES

By Silma Lange

Global leadership is becoming increasingly important in multinational companies as well as in non-profit and public sectors. The purpose of this study was to investigate what makes a global leader effective, by identifying key predictors of global leadership effectiveness. The predictors investigated in this study included a combined measure of overall intercultural global leadership competency and selected cognitively oriented competencies: nonjudgmentalness, inquisitiveness, tolerance of ambiguity and cosmopolitanism. The sample consisted of 171 undergraduate and graduate students from a large university. Linear and multiple regression analyses were conducted to identify the ability of the competencies to predict effectiveness. Inquisitiveness was the only cognitive competency found to successfully predict global leadership effectiveness. While no effect was found for overall intercultural global leadership competency, exploratory analyses revealed two other individual competencies as predictors: self-confidence and self-identity. The results of the study suggest that inquisitiveness is a key competency indicating cognitive flexibility that enables individuals to adapt to the situation at hand. Furthermore, self-identity and self-confidence likely enables individuals to participate and display leadership skills in novel and challenging situations.
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Introduction

Recent and accelerating advances in society in general and technology in particular, have brought about fundamental changes to the way we do business. Leaders now operate in a global context that spans boundaries of culture, geographic locations and time zones. The definition of “global leadership” has been an ongoing discussion, as the literature reveals different approaches to defining the concept of “global” (Mendenhall, Reiche, Bird & Osland, 2012) as well as different ways of distinguishing between global and domestic leadership (Osland et al., 2013). In response to this ambiguity, Osland, Li and Wang (2014) adapted the definition of Mendenhall and colleagues (2012) to define global leadership as:

The process of influencing others from multiple cultures to adopt a shared vision through structures and methods that facilitate positive change while fostering individual and collective growth in a context characterized by significant levels of complexity, flow and presence. (Osland, Li & Wang, 2014, p. 5).

This definition incorporates the need for global leaders to influence people from other cultures, defines leadership as the act of influencing others to facilitate change and growth, and points out the key defining aspects of the global context. It has been argued that global leadership is fundamentally different from domestic leadership, specifically with regard to the degree of skill and skill deployment that is required of global leaders (Osland, Bird & Oddou, 2012). Mendenhall and colleagues (2012) have identified complexity, flow and presence as the three defining features of the global context. Complexity refers to the need for global leaders to navigate a highly complex
environment characterized by high levels of variety, interdependence and frequent and rapid change. Flow refers to the boundary spanning and relational depth and influence of their interactions with relevant constituents that is required of global leaders. ‘Presence’ describes the need for global leaders to be physically available in various geographic locations. Multinational companies are particularly dependent on global leadership, as their executives must successfully manage and navigate complex and ambiguous global corporate environments (Bartlett & Ghoshal, 1992; Caligiuri & Di Santo, 2001; PriceWaterhouseCoopers, 2014).

Global leadership was first related to company success in the late 1990s. Stroh and Caliguiri (1998) found that global leadership development ranked among the top three organization-wide practices impacting effectiveness in 60 of the largest multinational companies in the United States. The need for competent global leaders was moreover rated as the most important business need in a Fortune 500 study by Gregersen, Morrison & Black (1998). Since then, more recent studies have validated the importance of global leadership. PriceWaterhouseCoopers’ 17th Annual Global CEO Survey (2014) described how leaders of global companies operate in an ever-evolving environment characterized by increasingly complex demands. A study by McKinsey (2012) identified global leadership as the key factor for company success, and among the ten most urgent issues listed in the World Economic Forum (WEF) Global Agenda Outlook, the global leadership vacuum was identified as the most significant challenge (WEF, 2013).
This ‘global leadership vacuum’ refers to the need for global leadership in the private, public and non-profit sectors. The recognition of the need for global leadership has been accompanied by the need to understand both the critical competencies associated with global leadership effectiveness and how to develop these competencies (Osland, 2015). In the field of global leadership, work has been dedicated to identifying the requirements for effective global leadership (for a review, see Osland, 2013). Most of this research has applied a competency approach, assuming that these competencies in turn predict global leadership effectiveness (Bird & Stevens, 2013). Although there is a theoretical foundation for work-related competencies to support this relationship, more empirical research is needed to test the ability of global leadership competencies to successfully predict global leadership effectiveness.

In response to this gap in the literature, the primary purpose of this study was to test whether previously identified global leadership competencies are in fact predictive of global leadership effectiveness. The secondary purpose of the study was to specifically investigate selected cognitive competencies as predictors of global leadership effectiveness, arguing that these competencies indicate cognitive flexibility and adaptability needed in the shifting and ambiguous context of global leadership.

Several competencies related to cognitive flexibility have been demonstrated as predictive of global leadership in previous studies. These include independent cognitive competencies, such as inquisitiveness, open-mindedness, flexibility and ability to deal with complexity (Black, Morrison & Gregersen, 1999; McCall & Hollenbeck, 2002), overall management of one’s perceptions (Bird et al., 2010), expert cognition (Osland,
2012) and a global mindset (Beechler & Javidan, 2007; Levy, Beechler, Taylor & Boyacigiller, 2007). Global mindset, defined as the ability to shift between local and global perspectives (Levy et al., 2007), has often been suggested as a fundamental to global leadership effectiveness (Beechler & Javidan, 2007; Gupta & Govindarajan, 2002; Levy et al., 2007). A recent advance in the field of global mindset was made by Clapp-Smith and Lester (2014) applying cognitive psychology as a theoretical framework for understanding the processes involved in global mindset and how it is that having a global mindset makes a global leader successful (Clapp-Smith & Lester, 2014). In addition to testing the predictive value of overall intercultural global leadership, a secondary aim of this study was to test the comparative value of cognitively oriented global leadership competencies in predicting global leadership effectiveness. The cognitive competencies included in the study were selected on the basis of being related to cognitive flexibility and being related to global leadership effectiveness in previous studies, and include nonjudgmentalness, tolerance of ambiguity, inquisitiveness and cosmopolitanism (Black et al., 1999; Caligiuri & Tarique, 2011; Levy et al., 2007; Vogelgesang, Clapp-Smith & Osland, 2014).

**Research on Global Leadership Competencies**

Global leadership was first established as an independent field of study in the 1990s (Mendenhall, 2013), drawing from fields such as intercultural communication, expatriation, global management and comparative leadership (Osland, 2013). Historically, research in the field of global leadership has focused on two areas: competencies necessary for global leadership execution and the development of such
expertise (Osland, 2013). Most of the research has been conducted by interviewing various samples of participants about the competencies necessary for global leadership; few studies have sampled effective global leaders and then identified competencies in these subjects, as evidenced in the following descriptions.

Wills and Barham (1994) conducted the first empirical study on global leadership competencies by interviewing 60 successful senior executives from global firms. Through their work, they identified what they termed a holistic core competency in these global leaders, composed of cognitive complexity, emotional energy and psychological maturity. In their study, cognitive complexity consisted of several components, including active listening, a sense of humility and cultural empathy. Emotional energy was comprised of self-awareness, acceptance of risk, emotional resilience and emotional support. Finally, psychological maturity was described as having strong values that provided life with meaning and was manifested by personal morality, presence in the moment and an active approach to learning. Notably, these leaders were not explicitly referred to as global leaders at the time of the study. Since they were nominated by human resource managers as top performers and managed people across several countries, they still fit the current definition of global leaders.

Whereas Wills and Barham (1994) relied on a qualitative analysis of their interview data, Yeung and Ready (1995) conducted the first quantitative study of global leadership competencies. They specifically asked 1,200 managers from eight nations to select items they thought to be descriptive of global leaders. Out of the original list provided by the researchers, the following items were most frequently selected by their
subjects: articulating a vision, value and strategy, being a catalyst for both strategic and cultural change, empowering others and having a results orientation as well as a customer orientation.

The participants who were asked to rate the competencies, however, were not selected because they themselves were identified global leaders. Nevertheless, there is evidence within the literature on leadership to support the importance of leadership perceptions amongst a leader’s followers. Implicit leadership theories indicate that follower’s subconscious representations inform the distinction of a leader from a non-leader (Shondrick & Lord, 2010). Thus, the Yeung and Ready study constitutes a useful contribution despite its deviation from sample selection in competency research.

When Black, Morrison and Gregersen (1999) developed what they called the Global Explorer Model of global characteristics, they began with an exploratory approach to analyze numerous of in-depth interviews with manager and executives at various levels. Their sample consisted of 130 senior line and HR executives in 50 companies across Europe, North America and Asia; 40 people in this sample were nominated as global leaders. From their content analysis of in-depth interviews with the entire sample, Four characteristics emerged; inquisitiveness, embracing duality, exhibiting character and demonstrating savvy. In their work, inquisitiveness was defined as a love of learning and fascination with diversity. It was considered as the fundamental concept in the model. Moreover, global leaders were thought to view uncertainty as an invigorating and natural part of global business, which is what the researchers referred to as embracing duality. Having the ability to connect emotionally with people from different backgrounds and
cultures, while demonstrating integrity in conflicts, was termed exhibiting character. Finally, demonstrating savvy included the ability to demonstrate both organizational and business savvy.

Kets de Vries and Florent-Treacy (1999) described global leadership excellence based on in-depth analyses of case studies with three global CEOs. Shared characteristics among these successful CEOs included having a compelling vision and being able to enthusiastically and confidently express that vision, being accessible to one's followers, and empowering employees by sharing power, knowledge and information. Furthermore, they were found to surround themselves with individuals with talents that complemented their own, and to devote energy to developing organizational cultures incorporating communication, learning and innovation. Kets de Vries and Florent-Treacy (2002) subsequently concluded that global leadership is both a combination and expansion of leader and manager roles. In a follow-up study, Kets de Vries, Florent-Treacy and Vrignaud (2004) conducted semi-structured interviews from which 12 psycho-dynamic properties related to global leadership were extracted, namely envisioning, empowering, energizing, designing, rewarding, team-building, outside-orientation, global mindset, tenacity, emotional intelligence, life balance and resilience to stress.

The samples used by Wills and Barham (1994) and Kets de Vries and Florent-Tracy (2002) consisted solely of successful global leaders. McCall and Hollenbeck (2002) followed in their footsteps, recruiting 101 top performing executives from 16 global companies and 36 countries. They commented on the challenge of finding common global leadership capabilities across a variety of global jobs, arguing that there
is no ‘one universal global leadership position’. Despite this belief, they reluctantly identified seven competencies that allow for successful executive work across cultures. Successful global leaders were collectively found to be open-minded and flexible, able to deal with complexity and to possess both cultural interest and sensitivity. Furthermore, they were resilient, resourceful, optimistic and energetic, had a stable personal life and operated from a state of honesty and integrity. Lastly, they possessed value-added technical or business skills.

In contrast to the approach taken in earlier studies, Caligiuri (2006) was the first researcher to attempt to identify global leadership competencies by examining specific tasks associated with global leadership. Using data collected in focus groups, she conducted a job analysis to identify important global leadership tasks. Then she worked backwards from the global leadership tasks to identify what might lead to effective performance on these tasks. Examples of such activities include interacting with internal and external clients from other countries, working with colleagues from other countries and supervising employees from different nationalities. With regard to the knowledge, skills and abilities needed to carry out these behaviors, Caligiuri (2006) pointed to three types of knowledge: culture-general, culture-specific and international business knowledge, as well as intercultural interaction skills, foreign language skills and cognitive ability. Her subsequent studies with Tarique, addressed in a later section, further looked into individual characteristics and how they relate to global leadership effectiveness. The next section addresses the work that has been done in attempting to integrate the overall body of research on global leadership competencies.
Consolidating the Global Leadership Competencies

The literature review above was not a comprehensive review of all studies conducted on global leadership competencies. The studies included were the most rigorous and heavily cited, and collectively they accurately represent the body of research on global leadership competencies. Considering that the competencies associated with global leadership have been identified in separate studies, there is much to gain from consolidating and categorizing the competencies within a framework. A common framework provides a better organization of the different kinds of competencies, giving organizations and companies more clarity on what to look for and develop in their leaders. Furthermore, it allows for researchers to attain alignment on what they are studying under the conceptualization of global leadership competency and to generalize across findings.

As noted by Bird (2013), several attempts have been made at consolidating the global leadership competencies. Any such attempt is complicated by the different methodological approaches taken across studies in identifying the competencies (Osland, 2013). Moreover, the competencies that have been identified are qualitatively different, such that some are pre-dispositional, some behavioral, and others motivational in nature (Bird, 2013). When Bird (2013) reviewed the literature on global leadership competencies between 1993 and 2012, he identified nearly 160 competencies.

In an initial attempt at an integrative review of global leadership competencies, Mendenhall and Osland (2002) described global leadership as a multidimensional construct and categorized the existing global leadership competencies as: cross-cultural relationship skills, traits and values, cognitive orientation, global business expertise,
global organizing expertise and visioning. In a similar effort, Bird (2013) recently categorized the content domain of global leadership as business and organizational acumen, managing people and relationships, and managing self-research. Research and theory on how to develop global leadership has often involved expatriate experiences, as overseas assignments have been considered an essential way of developing the necessary global leadership competencies (Black et al., 1999; Mendenhall, 2001; Caligiuri & Tarique, 2009). Mendenhall (2001) suggested that the competencies identified in the global leadership literature were likely to overlap with competencies found to determine expatriate adjustment. When Bird, Mendenhall, Stevens and Oddou (2010) compared these categories of competencies to those identified in the literature on expatriate effectiveness, they were able to demonstrate significant overlap between the two fields. By conducting factor analyses, Bird et al. (2010) consolidated the body of cross-cultural global leadership competencies into 16 dimensions, with three overarching factors. In this framework of overall intercultural global leadership competencies, the factors were labeled perception management (cognitively oriented competencies), relationship management (interpersonal competencies) and self-management (intrapersonal competencies). The perception management factor concerns the way in which individuals learn about and mentally process differences between themselves and others. Its associated competencies are nonjudgmentalness, inquisitiveness, tolerance of ambiguity, cosmopolitanism and interest flexibility. The relationship management factor refers to a person’s orientation toward developing and maintaining relationships, and includes the following competencies: relationship interest, interpersonal engagement,
emotional sensitivity, self-awareness and social flexibility. Lastly, the self-management factor assesses an individual’s ability to manage their own thoughts, emotions and reactions, particularly in response to challenges and stress faced in intercultural situations. Its competencies are optimism, self-confidence, self-identity, emotional resilience, non-stress tendency and stress management. This categorization emerged from the development of a psychometric instrument known as the Global Competency Inventory, which has been used for research purposes as well as for assessment and development purposes (Bird et al., 2010; Mendenhall, Stevens, Bird & Oddou, 2010; Stevens, Bird, Mendenhall & Oddou, 2014).

**Global Leadership Effectiveness**

In studying global leadership, it is imperative to understand exactly what makes a global leader successful, namely what predicts global leadership effectiveness. While studies on global leadership competencies have been conducted with this objective in mind, most of them have relied on subjects’ self-reports of what it takes to be a successful global leader. The theoretical foundation for the field of global leadership competencies is the underlying assumption that the skills and abilities identified as necessary for global leaders (read: competencies) will enable them to be effective in situations that require global leadership. This competency approach to global leadership is theoretically founded in McClelland’s (1973) work around competencies in the workplace. McClelland defined work-related competencies as underlying characteristics or capabilities found to be predictive of superior or effective work performance. To expand on this, Boyatzis (1982) argued that in order for a characteristic to be considered
a competency, there needs to be a causal connection between the characteristics and performance. Building on the work of McClelland and Boyatzis, Bird and Stevens (2013) contend that three assumptions should be met in order for a capability to be considered a competency. First, it should exist prior to performance; secondly, it should have a demonstrable causal link to performance; and third, it should be possessed by above-average performers.

**Global Leadership Competencies and Global Leadership Effectiveness**

While there is a certain body of research on top performers and the associated global leadership competencies, less work has been done to establish the causal link between these competencies and effectiveness outcomes. Caligiuri and Tarique (2009) have made important contributions in this respect by including measures of global leadership performance in their studies on the development of global leadership competency (Caligiuri & Tarique, 2009). After Caligiuri (2006) identified specific global leadership tasks, follow-up studies were conducted to further investigate the predictors that lead to effective execution of those global leadership tasks (Caligiuri and Tarique, 2009). Surveying a sample of 256 global leaders nominated as top performers by their company, global leadership effectiveness was reported to be predicted by high-contact activities, such as being a member of a global team or taking part in global meetings in other countries. Notably, the relationship between such developmental experiences and effectiveness ratings was moderated by higher levels of extroversion, indicating that extrovert individuals might be more likely to benefit from these experiences enabled to perform or to be perceived as higher in effectiveness. In this study, the ratings of global
leadership effectiveness were provided by the participants themselves, i.e., the performance measure was a self-report. In the final part of their program of study, ratings were expanded to include performance effectiveness ratings from participants’ supervisors (Caligiuri & Tarique, 2011). This later study also included global leadership competencies as predictors, specifically referring to the included competencies as dynamic, to specify that they were assumed to be subject to influence, rather than static and unchangeable. These dynamic competencies, including cultural flexibility, tolerance of ambiguity and (reverse) ethnocentrism, were indeed found to be predictive of supervisor ratings of global leadership effectiveness. Although limited to certain competencies, this study provides partial support for the general relationship between global leadership competency and global leadership effectiveness.

In a more recent study on global leadership performance, Vogelgesang and colleagues (2014) demonstrated direct relationships between certain global leadership competencies and performance. Their analyses were conducted as part of a model including other variables and relationships, and the specific global leadership competencies included in the study was nonjudgmentalness, cosmopolitanism and cognitive complexity. The researchers hypothesized that the relationship between these global leadership competencies and performance would be mediated by global positive psychological capital. In this study, performance was measured using an aggregate of assessments related to global leadership, the majority of which were behavioral. Statistically significant positive correlations were found between nonjudgmentalness and
performance, as well as cognitive complexity and performance. To date, no attempt was made at predicting performance from overall global leadership competency.
There is evidence that overall global leadership competency, including cognitive, interpersonal and intrapersonal abilities, is associated with performance. Furuya and colleagues (2009) conducted a longitudinal study using the composite global leadership competency framework in the cross-cultural domain consolidated by Bird et al. (2010), to investigate the ability of global leadership competency to predict performance. Among 305 Japanese expatriates from five Japanese multinational companies, global leadership competency was found to successfully predict subsequent job performance, as measured by supervisor ratings provided when the expatriates returned to their home country. The study validated the Global Leadership Competency (GCI) framework of global leadership competencies (Mendenhall et al., 2010). In summary, the line of research in the area of global leadership competencies – identifying top global leaders and both quantitatively and qualitatively exploring what enables them to be effective global leaders – indicates that global leadership competency leads to global leadership effectiveness, and there is preliminary evidence to validate this. It was thus hypothesized that the overall key characteristics identified as important for global leaders, conceptualized as overall intercultural global leadership competency, will be predictive of global leadership effectiveness.

Hypothesis 1: Overall intercultural global leadership competency will predict global leadership effectiveness.

The Global Mindset and Cognitively Oriented Global Leadership Competencies

Scholars in global leadership have ascertained that increased complexity is a defining feature of the global leadership context (Osland, Taylor & Mendenhall, 2009;
Mendenhall et al., 2012; Osland et al., 2013). These competencies have been found repeatedly in the literature, namely cognitive complexity, behavioral flexibility, intercultural competence, learning ability or inquisitiveness and integrity (Osland, 2013). Aside from integrity and intercultural competence, it may be argued that a common denominator in these important global leadership competencies is the ability to take a complex, open and flexible approach in processing information and, in turn, adapting and successfully responding to novel situations.

The need for complex cognition in global leaders has led to research on cognitive processing in effective global leaders, and the development of the construct known as ‘global mindset’. Several researchers have pointed to a ‘global mindset’ as the key element of global leadership (Beechler & Javidan, 2007; Black & Gregersen, 2000; Javidan & Bowen, 2013; Levy et al., 2007) and/or claimed that a change in mindset is a basic requirement for effective global leadership (Gupta & Govindarajan, 2002; Mendenhall, 2001; Osland & Bird, 2000; Story & Barbuto, 2011). According to Black and Gregersen (2000), one fundamental aspect of global leadership development is altering one’s mental maps to make them increasingly global. The notion of global mindset was first introduced by Perlmutter (1969) as a ‘geocentric’ mental orientation: a focus on the world at large. Whereas Perlmutter discussed the concept of global mindset in the context of multinational companies, subsequent researchers have come to describe global mindset as what enables an individual to look beyond their own culture (Osland, Oddou, Bird & Osland, 2013). Levy and colleagues (2007) have defined global mindset specific to global leaders as an openness to, and articulation of, the different ‘business
realities’ at the local and global levels. Based on a review of the literature, they have argued that the concept of global mindset consists of two sub-dimensions, namely cosmopolitanism and cognitive complexity. While cosmopolitanism is considered a culturally-oriented characteristic, commonly conceptualized as an interest in and awareness of the world, cognitive complexity is thought to be more strategically oriented, and commonly refers to the complexity of incorporating both local and global perspectives on business parameters such as strategy and operations (Levy et al., 2007).

**Expert Cognition and Global Mindset as a Cognitive Process**

Osland et al. (2007; 2012; 2013) took an analytical approach to investigating cognitive processing in global leaders by analyzing expert cognition in global leaders. Using specific criteria to identify expert global leaders, they subsequently analyzed the cognitive approaches taken among these leaders in their work. A key finding from this research project was that the success of global leadership experts was facilitated by their ability to deal with ambiguity and make sense of their challenges, employing their expert cognitive strategies in various ways. This approach was described as consisting of problem solving, strategic thinking and boundary spanning/stakeholder management, as well as global skills (Osland et al., 2012).

Empirical research on global mindset has been conducted both on global mindset as an independent construct and as one of several global leadership competencies (Javidan & Teagarden, 2007; Kets de Vries et al., 2004; Levy et al., 2007; Yunlu & Clapp-Smith, 2014). Although definitions of global mindset vary considerably and sometimes include management behaviors, most of the conceptualizations have been
cognitive in nature (Osland, Bird, Mendenhall & Osland, 2006). To add clarity and
determine exactly how global mindset fosters global leadership effectiveness, Clapp-
Smith and Lester (2014) recently suggested taking a process approach and applying the
cognitive psychological perspective. According to the definition of a mindset from a
cognitive perspective, an individual cannot apply two mindsets at once (Clapp-Smith &
Lester, 2014). As such, the authors argue that global mindset should be considered a
process of mindset activation and switching rather than a static characteristic or capability.
In their view, what enables effective global leadership is effectively alternating between
different perspectives, such as a local and a global perspective, or simply that of another
culture. As such, it is this capacity of ‘mindset activation’ (activating the appropriate
mindset) and ‘mindset switching’ (effectively applying it to adapt to the immediate
situation, or across various situations), that makes global leaders effective in their work.

Cognitive Processing and Global Leadership Effectiveness

Considering the increasing need for effective global leaders, there is arguably
much value in defining the way that successful global leaders think, i.e. the importance of
their respective cognitive competencies, as well as identifying the process by which their
cognition enables them to be successful. As becomes apparent from the above discussion,
the cognitive process or processes leading to effective global leadership are likely
complex and have yet to be fully discovered. The objective of this the current study was
not to uncover the complete mechanism by which global mindset leads to global
leadership effectiveness, but to investigate the relationship between key cognitively
oriented competencies and global leadership effectiveness, and to test the ability of these
cognitive competencies in predicting global leadership effectiveness. Whether global mindset is best considered a competency or a process of mindset activation and switching, the need still remains to establish the causal relationship between cognitive competencies and global leadership effectiveness.

Theoretical support for the relationship between cognitive competencies such as global mindset and its sub-components and global leadership effectiveness can be found in the cognitive literature on mindsets. This literature provides support for cognition as a precursor to behavior by defining it as a ‘readiness to act’ (Gollwitzer 2012; Hamilton et al., 2011). Furthermore, global mindset is assumed to result in global leadership effectiveness through enabling effective decision-making (Gupta & Govindarajan, 2002; Levy et al., 2007). As for empirical findings, competencies related to complexity of cognition have repeatedly surfaced in global leadership studies. Wills and Barham (1994) included cognitive complexity as part of their holistic core competency. Black et al. (1999) later found that inquisitiveness and embracing duality were two of the key characteristics in their sample of nominated global leaders. McCall and Hollenbeck (2002) discovered that characteristics such as being open-minded, flexible and able to deal with complexity were associated with global leadership effectiveness. Kets De Vries and his colleagues (2004) later defined global mindset as part of the key competencies relating to global leadership excellence. Furthermore, Osland and her colleagues (2013) identified problem-solving and other cognitive approaches taken by outstanding global leaders.
Empirical studies that indicate a causal relationship by including predictive analyses of cognitive competencies and global leadership performance or effectiveness are limited to that of Furuya and colleagues (2009). This study included cognitive competencies, but did not differentiate between cognitive competencies and overall competencies. However, in their 2012 study, Caligiuri and Tarique (2012) demonstrated predictive value in what they defined as dynamic global leadership competencies. Including cultural flexibility, tolerance of ambiguity and reverse ethnocentrism, it may be argued that these competencies are cognitively oriented and related to flexibility of thinking. As previously noted, Vogelgesang and colleagues (2014) furthermore demonstrated direct relationships between both nonjudgmentalness and cognitive complexity and performance, and it may be argued that these two competencies that are clearly cognitive in nature.

Although the studies outlined above indicate a relationship between cognitively oriented competencies and global leadership effectiveness, the relationship between cognitive processing and global leadership effectiveness still remains to be tested empirically. The four competencies that will be investigated in this study include nonjudgmentalness, tolerance of ambiguity, inquisitiveness and cosmopolitanism.

**Nonjudgmentalness.** As measured by the Global Competencies Inventory, nonjudgmentalness refers to the extent to which one is inclined to withhold or suspend judgment about persons or situations or behavior that is new or unfamiliar (Mendenhall et al., 2010). Nonjudgmentalness has been identified as a competency of global leaders by McCall and Hollenbeck (2002). It has been further investigated as reverse ethnocentrism
Tolerance of ambiguity. Tolerance of ambiguity refers to the ability to manage uncertainty in new and complex situations where there is not necessarily a right way to interpret things (Mendenhall et al., 2010). It has been identified in several global leadership competency studies (Osland, 2013), and been found to predict global leadership effectiveness (Caligiuri and Tarique, 2011).

Inquisitiveness. Black et al. (1999) considered inquisitiveness fundamental to their model of global leadership, defining it as a love of learning and fascination with diversity. As it also covers a person’s capacity to actively take advantage of opportunities for growth and learning, it can be defined as having an active learning orientation (Mendenhall et al., 2010; Stevens et al., 2014). Although inquisitiveness has been repeatedly identified as a key competency for a global leader (Wills & Barham, 1994; McCall & Hollenbeck, 2002), no study to date has attempted to demonstrate the individual, predictive ability of inquisitiveness as it relates to performance or global leadership effectiveness.

Cosmopolitanism. This construct commonly refers to a natural interest in and curiosity about different countries and cultures, the world and international events (Mendenhall et al., 2010). Cosmopolitanism has emerged in the literature on global leadership as an individual competency (Bird & Osland, 2004; Mendenhall & Osland, 2002; Osland, 2008) and as one of the two components of global mindset (Levy et al.,
The relationship between cosmopolitanism and global leadership effectiveness was demonstrated by Levy et al. (2007).

Based on the above discussion of theoretical implications and empirical findings relating cognitive competencies to global leadership effectiveness, it was hypothesized that the cognitively oriented competencies nonjudgmentalness, tolerance of ambiguity, inquisitiveness and cosmopolitanism would be able to predict global leadership effectiveness, as measured individually and as a collection of cognitively oriented competencies.

**Hypothesis 2A:** Cognitively oriented competencies, including nonjudgmentalness, inquisitiveness, tolerance of ambiguity and cosmopolitanism, will individually predict global leadership effectiveness

**Hypothesis 2B:** Cognitively oriented competencies, including nonjudgmentalness, inquisitiveness, tolerance of ambiguity and cosmopolitanism, will predict global leadership effectiveness when measured as a composite of cognitive competencies.

To assess the relative predictive value of cognitively oriented competencies (nonjudgmentalness, inquisitiveness, tolerance of ambiguity and cosmopolitanism), as compared to overall intercultural global leadership competency, the following hypothesis was tested:

**Hypothesis 3:** Cognitively oriented competencies will be better able to predict global leadership effectiveness than overall intercultural global leadership competency.
Method

Participants

The sample used in the study consisted of 171 college students from a large state university in California. The scores on the predictor and outcome measures in the study were collected through the participation in part of undergraduate and graduate global leadership courses. Students’ ages ranged from 20 to 39 years, with a mean of 26.3. 39% of the students identified as female and 61% identified as male. Demographic information for participants is shown in Table 1.

Table 1

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean (SD)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>26.03 (4.01)</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
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<tr>
<td>Male</td>
<td></td>
<td>61.0%</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td>39.0%</td>
</tr>
<tr>
<td>Ethnicity</td>
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<tr>
<td>African American/Black</td>
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</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td></td>
<td>13.5%</td>
</tr>
<tr>
<td>White-European/Other</td>
<td></td>
<td>32.7%</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td></td>
<td>46.2%</td>
</tr>
</tbody>
</table>
Measures

Global leadership competency. The Global Competencies Inventory (GCI) was used to measure overall intercultural global leadership competency (Bird et al., 2010; Mendenhall et al., 2010; Stevens et al., 2014). The GCI is a reliable, valid instrument shown to possess all the characteristics of a well-constructed measure (Stevens et al., 2014). This norm-referenced score was a weighted average of scores on all sixteen competencies, across three factors of perception management, relationship management and self-management. All 160 items were formulated as self-report statements written to allow for subject responses using a 5-point Likert format, ranging from 1=“Strongly Disagree” 2=“Disagree,” 3=“Neither Agree Nor Disagree,” 4=“Agree,” to 5=“Strongly Agree.” The results from the GCI assessment provide scores on all sixteen individual dimensions, the three overarching factors and a social desirability score.

Cognitively oriented competencies. Measures on the four cognitively oriented competencies were derived from participants scores on the following four dimensions of GCI (Mendenhall et al., 2010), namely nonjudgmentalness, inquisitiveness, tolerance of ambiguity and cosmopolitanism. These four cognitively oriented dimensions from the perception management factor were selected because their relationship with global leadership effectiveness is supported in the literature (Black et al., 1999; McCall & Hollenbeck, 2002; Levy et al, 2007; Vogelgesang, Clapp-Smith & Osland, 2014). Descriptions of the dimensions and examples of associated items have been included below.
**Nonjudgmentalness.** Nonjudgmentalness as measured by the GCI, refers to the extent to which one is inclined to withhold or suspend judgment about persons or situations or behavior that is new or unfamiliar (Mendenhall et al., 2010). Samples of reverse-scored items include ‘In my experience, people are pretty stubborn and unreasonable’, ‘People are too self-centered,’ and ‘Once you start doing favors for people, they'll just walk all over you’. The dimension included nine items, with an inter-reliability of .72.

**Inquisitiveness.** Inquisitiveness, as measured by the GCI, reflects an openness towards and active pursuit of understanding of that which is different, including ideas, values, norms, situations, and behaviors (Mendenhall et al., 2010). As it also includes one’s capacity to actively take advantage of opportunities for growth and learning, it includes having an active learning orientation (Mendenhall et al., 2010). Sample items include ‘I treat all situations as an opportunity to learn something’, ‘I have developed significant new skills over time,’ and ‘I learn from mistakes’. Ten items were included in the scale to measure this dimension, with a reliability of .84.

**Tolerance of ambiguity.** As measured by the GCI, tolerance of ambiguity refers to the ability to manage uncertainty in new and complex situations where there is not necessarily a “right” way to interpret things (Mendenhall et al., 2010). Sample items include ‘I avoid settings where people don't share my values,’ ‘A good teacher is one who makes you wonder about your way of looking at things,’ and ‘I like parties where I know most of the people more than ones where all or most of the people are complete strangers’. This dimension included a total of twelve items, with a reliability of .73.
**Cosmopolitanism.** As measured by the GCI, cosmopolitanism refers to a natural interest in and curiosity about different countries and cultures, as well as the degree of interest in world and international events. Sample items are ‘I routinely read, watch, or listen to international news,’ ‘My friends would say I know a lot about world geography’ and ‘Every now and then I watch television programs about other countries and cultures.’ A total of seven items were included to measure this dimension, which had a reliability of .84.

**Global leadership effectiveness.** Global leadership effectiveness was measured through participants’ performance on a behavioral exercise that resembles a global negotiation. The simulation was designed to assess the participants’ ability to successfully demonstrate global leadership in an international business encounter. In this simulation, the participants negotiate an agreement with a fictitious foreign company, and are required to actively decode behavior, display intercultural sensitivity and adjust their behavior to accommodate that of the foreign culture. The situation furthermore assesses their ability to tolerate ambiguity, be persuasive and effectively communicate their ideas.

The associated performance measures that were used in the study consisted of self-evaluation and peer evaluations from other participants. The team evaluation sheet consisted of ratings for both one’s own team and the opposing team, rated on a scale from 1 to 3, where 1 = poor, 2 = average and 3 = excellent. Participants rated themselves and each other on a total of six outcome measures: overall contribution to the negotiation, as well as five behaviors important to global leadership in real-life settings. The second and third item rated included the ability to decode and understand the other party’s behavior.
and to modify and adjust behavior to the other party’s cultural background. Such behaviors of decoding culture and code-switching are essential for effective global leadership (Levy et al., 2007; Osland, 2013?). Fourth, the ability to manage stress and cope with ambiguous situations and unpredictable demands was measured, which is arguably essential in the complexity of the global context (Mendenhall, 2012; Osland et al., 2007). Furthermore, the participants were rated on effectiveness of negotiation and communication, such as their ability to demonstrate the advantages of proposals and persuade the other party. Lastly, participants were rated on their ability to communicate ideas effectively to the other party, arguably an important feature of a good leader.

According to global leadership scholars, global leadership is similar to domestic leadership, but varies in scale and complexity (Mendenhall et al., 2012; Osland et al., 2014). Negotiation and communication abilities are commonly argued as key features of leadership in general, and remain important leadership behaviors in the global context (Yukl, 2012). The self-evaluation sheet included the same behavioral measures as the team evaluation, rated on the same scale of 1-3.

Procedure

**Overall intercultural global leadership competency.** Scores for the overall intercultural global leadership competency measure were collected by having students complete the Global Competency Inventory online by using electronic devices, such as a computer or a tablet. The responses were stored on a server from which they were later retrieved in order to be included in the analyses.
**Cognitively oriented competencies.** Scores for the cognitively oriented competencies were collected, stored and retrieved through the same procedure, as the dimensions were part of the overall global competency instrument.

**Global leadership effectiveness.** The negotiation simulation was conducted in a classroom setting, where participants were divided into two groups and provided with instructions. The information provided was two-part, including private information specific to each group and public information on the business context and objectives of the negotiation. The public information included the profile and business situations of both companies, while the private information was company-specific and included strategy, history and important decision points. The participants were provided with an instruction sheet which gave them full visibility into the structure of the exercise, the timeline and expectations, provided in (see student instruction in Appendix). This sheet also listed the competencies found in effective negotiations, which were subsequently measured in the peer evaluation. Most of these competencies had been taught and reinforced in previous class activities and readings. To ensure that participants understood their role, they completed a comprehension test before initiating the negotiation. To practice their assigned cultural approach, they were prompted to begin enacting their assigned culture beforehand. Furthermore, they completed a worksheet to prepare their approach for the negotiation (see Negotiation Preparation in Appendix).

Upon completing the preparation, the participants engaged in the first 15 minute round of the negotiation. In this round, participants were instructed to complete introductions and begin working toward their goal of coming to agreement on four key
issues. At the end of Round 1, teams were then given time to individually fill out process checks (see Process Check in the Appendix) followed by a 5 minute break and regroup to discuss the strategy within their teams for the second round. In the second and final 15-minute round of the negotiation, teams were instructed to reach and confirm agreement in writing (see Negotiation Agreement in appendix). Not all teams were successful.

Self and peer evaluations were obtained after completing the simulation by having the participants rate themselves as well as their fellow team members on their performance in the exercise (see Team Evaluation Sheet in Appendix). Participants were asked to evaluate objectively and professionally each member of their respective groups on their performance, in terms of the behaviors outlined above.

**Software and Statistical Procedures**

The data collected in the study was analyzed using SPSS. Correlations were analyzed to investigate the relationship between variables, and linear and multiple regressions were run to test predictive ability of the independent variables on the outcome variable. All analyses were conducted and interpreted by the author.
Results

Descriptive Statistics

Table 2 presents the means and standard deviations for the variables included in the study, as well as the correlations among variables. Within the possible range of scores being 1 through 5, the scores for overall intercultural global leadership competency ranged from 2.5 – 4.43, with a mean score of 3.54 ($M = 3.54$, $SD = 0.36$). As for the cognitively oriented competencies, nonjudgmentalness displayed an average score of 3.16, ($M=3.16$, $SD=.58$) with scores ranging from 1.56 to 4.44. Scores on Inquisitiveness were somewhat higher overall, ranging from 3.10 to 5.00, with a mean score of 4.27 ($SD=.48$). Tolerance of ambiguity displayed a mean of 3.43 ($SD=.49$) with scores that ranged from 2.33 to 4.36, while cosmopolitanism displayed the highest variance, scores ranging from 1-5. The mean score for cosmopolitanism was 2.79 ($SD=.90$) across participants. When comparing participants’ scores across the variables included as cognitive competencies, scores were highest on inquisitiveness ($M=4.27$), and most varied for cosmopolitanism (Range=4). For cognitive competencies overall, a composite of the four above mentioned competencies, the mean score was 3.41 ($SD=.41$). Global leadership effectiveness had a possible range of 1 through 3, and actual scores for participants ranged from 1.85 to 3.00 with relatively little variance. The mean score across participants in this sample was in the higher range of 2.78 ($SD=0.23$).
Table 2

*Means, Standard Deviations, and Correlations Among Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Overall Global Leadership Competency</td>
<td>3.54</td>
<td>.36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Non-Judgmentalness</td>
<td>3.16</td>
<td>.58</td>
<td>.34**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Inquisitiveness</td>
<td>4.27</td>
<td>.48</td>
<td>.71**</td>
<td>.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(.84)</td>
</tr>
<tr>
<td>4. Tolerance of ambiguity</td>
<td>3.43</td>
<td>.49</td>
<td>.67**</td>
<td>.25**</td>
<td>.42**</td>
<td></td>
<td></td>
<td></td>
<td>(.73)</td>
</tr>
<tr>
<td>5. Cosmopolitanism</td>
<td>2.79</td>
<td>.90</td>
<td>.53**</td>
<td>.04</td>
<td>.30**</td>
<td>.40**</td>
<td></td>
<td></td>
<td>(.84)</td>
</tr>
<tr>
<td>6. Overall Cognitive Competency</td>
<td>3.41</td>
<td>.41</td>
<td>.83**</td>
<td>.47**</td>
<td>.61**</td>
<td>.74**</td>
<td>.78**</td>
<td></td>
<td>(.52)</td>
</tr>
<tr>
<td>7. Global Leadership Effectiveness</td>
<td>2.78</td>
<td>.23</td>
<td>.03</td>
<td>-.03</td>
<td>.22**</td>
<td>.02</td>
<td>-.06</td>
<td>.03</td>
<td>(.85)</td>
</tr>
</tbody>
</table>

Note. N = 171

**p < .01 (two-tailed).

Cronbach alpha reliabilities for observed variables are in parentheses in the diagonal.
Intercorrelations Among Variables

All intercorrelations among variables are displayed in Table 2. High intercorrelations were found between overall cognitive competency and overall intercultural global leadership competency, with positive correlations ranging from .34 to .71. Similarly, a significant positive correlation was found between overall cognitive competency, and overall intercultural global leadership competency ($r=.83$, $p < .01$), as well as between the cognitive competencies and overall intercultural global leadership competency. Although all individual cognitive competencies were significantly and positively related to the composite score of overall cognitive competency, the intercorrelations between the cognitive competencies were varied. The highest correlation was found between tolerance of ambiguity and inquisitiveness ($r=.42$, $p < .01$) and tolerance of ambiguity and cosmopolitanism ($r=.40$, $p > .01$), respectively. Tolerance of Ambiguity was similarly the only variable significantly correlated with nonjudgmentalness ($r=.25$, $p < .01$). These correlations show that participants who scored high on overall intercultural global leadership competency also had high scores on overall cognitive competency. However, participants’ scores on one cognitive competency were not necessarily related to their scores on another cognitive competency.

Overall intercultural global leadership competency was not found to be significantly correlated with global leadership effectiveness ($r=.03$, $p > .05$). Similarly, no significant correlation was observed between the composite of overall cognitive competency and global leadership effectiveness ($r=.03$, $p > .05$). When investigating the individual cognitive competencies, inquisitiveness was found to be significantly
correlated to global leadership effectiveness ($r=.22$, $p<.01$), whereas none of the other
cognitive competencies were found to be individually related to the outcome measure.
These findings indicate that people who scored higher on overall intercultural global
leadership competency or overall cognitive competency did not score higher on global
leadership effectiveness, nor did those with higher scores on nonjudgmentalness,
tolerance of ambiguity or cosmopolitanism. Those with higher scores on inquisitiveness,
however, did receive higher ratings on global leadership effectiveness.

**Hypothesis Testing**

It was stated in Hypothesis 1 that overall intercultural global leadership
competency would predict global leadership effectiveness. To test this hypothesis, a
linear regression was performed. Results showed that overall intercultural global
leadership competency was not predictive of global leadership effectiveness ($R^2 < .00$, $p > .05$).

Hypothesis 2A stated that the cognitive competencies, nonjudgmentalness,
inquisitiveness, tolerance of ambiguity and cosmopolitanism, would be able to predict
global leadership effectiveness as a composite of overall cognitive competency. To test
this hypothesis, a linear regression was conducted entering overall cognitive competency
as the predictor and global leadership effectiveness as the dependent variable. This
analysis did not yield any significant result to show that overall cognitive competency
was predictive of global leadership effectiveness ($R^2 = < .00$, $p > .05$).

In order to test Hypothesis 2B, which stated that the cognitive competencies
would be able to individually predict global leadership effectiveness, individual linear
regression analyses were conducted. According to the analyses, inquisitiveness was the only cognitive competency able to significantly predict global leadership effectiveness, accounting for 4% of the variance (adjusted $R^2 = .04$, $F(1, 171) = 8.36, p < .01$). No significant results were found in either of the remaining cognitive competencies, nonjudgmentalness (adjusted $R^2 = -.01$, $F(1, 171) = .18, p > .015$), tolerance of ambiguity (adjusted $R^2 = .00$, $F(1, 171) = .04, p > .05$) or cosmopolitanism (adjusted $R^2 = -.00$, $F(1, 171) = .54, p > .05$). Considering inquisitiveness was the only competency found to be significantly correlated to, and predictive of, global leadership effectiveness, only limited support was found for Hypothesis 2B. The findings show that participants who were high on inquisitiveness performed better on the global leadership effectiveness task, whereas scoring higher on the other cognitive competencies did not affect their performance, nor did their overall cognitive competency score (see Tables 2 and 3).

Table 3

<table>
<thead>
<tr>
<th>Variables</th>
<th>Overall Intercultural Global Leadership Competency</th>
<th>Overall Cognitive Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$R^2$</td>
<td>$\beta$</td>
</tr>
<tr>
<td>Global Leadership Effectiveness</td>
<td>.00</td>
<td>.03</td>
</tr>
</tbody>
</table>

*p < .01, **p < .001.
Finally, Hypothesis 3 stated that cognitive competencies would be better able to predict global leadership effectiveness than overall global competency. To test the relative contribution of these variables to the variance in global leadership effectiveness, a standard MRC was conducted (see Table 4). Global leadership effectiveness was entered as the outcome variable, and overall global competency, nonjudgmentalness, inquisitiveness, tolerance of ambiguity and cosmopolitanism were entered as the predictors. The standard MRC showed that as a whole, overall intercultural global leadership competency, nonjudgmentalness, inquisitiveness, tolerance of ambiguity and cosmopolitanism were significantly predictive of global leadership effectiveness, accounting for between 5 and 8% of the variance ($R^2 = .08$, adjusted $R^2 = .05$, $F(5, 171) = 2.91, p < .05$), with Inquisitiveness being the only variable that significantly contributed to the variance in global leadership effectiveness ($\beta = .40, t = 3.51, p < .01$). This provides partial support to cognitive competencies being more predictive of global than overall intercultural global leadership competency.

**Exploratory Analyses: Other Individual Competencies**

In response to overall global competency not being significantly correlated with global leadership effectiveness, additional analyses were conducted. As outlined previously, the overall intercultural global leadership competency measure consists of sixteen individual competencies, all of which have previously been related to global leadership (Bird et al., 2010; Mendenhall et al., 2010). In the initial analyses, only the composite score on all variables was investigated, as well as four individual cognitively oriented competencies (nonjudgmentalness, inquisitiveness, tolerance of ambiguity and
cosmopolitanism). The remaining twelve competencies in the overall intercultural global leadership competency composite, as measured by the GCI, additionally includes interest flexibility, relationship interest, interpersonal engagement, emotional sensitivity, self-awareness, social flexibility, optimism, self-confidence, self-identity, emotional resilience, non-stress-tendency and stress management.

When investigating the individual correlations between the remaining global leadership competencies included in the overall intercultural global leadership competency and global leadership effectiveness, two significant correlations emerged. A significant positive correlation was found between self-identity and global leadership effectiveness \( (r=.20, p<.01) \), and between self-confidence and global leadership effectiveness \( (r=.21, p<.01) \), meaning that those participants who scored higher on either self-identity or self-confidence, respectively, also had higher ratings on global leadership effectiveness. In order to test the predictive ability of self-identity and self-confidence, linear regressions were conducted, entering these variables as predictors and global leadership effectiveness as the outcome variable. Results showed that self-confidence was predictive of global leadership effectiveness \([\text{adjusted } R^2 = .04, F (1, 171) = 7.14, p < .01]\), as was self-identity \([\text{adjusted } R^2 = .04, F (1, 171) = 8.06, p < .01]\).

To compare the relative contributions of inquisitiveness to that of self-confidence and self-identity, a standard MRC was conducted (see Table 5). The overall model accounted for 7% of the variance, as demonstrated by an adjusted R square of .07 \( (F (3, 171) = 4.27, p < .01) \). Interestingly, none of the variables significantly accounted for an
individual amount of variance in this model, as demonstrated by none of the beta values being significant, indicating a lot of shared variance between the variables.
Table 5

Results of the Standard Multiple Regression Analysis of Overall Global Leadership Competency and Cognitive Competencies Predicting Global Leadership Effectiveness

<table>
<thead>
<tr>
<th>Variable</th>
<th>Overall Global Leadership Competency</th>
<th>Non-Judgmentalness</th>
<th>Inquisitiveness</th>
<th>Tolerance of Ambiguity</th>
<th>Cosmopolitanism</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>β</td>
<td>B</td>
<td>SE</td>
</tr>
<tr>
<td>Global Leadership Effectiveness</td>
<td>-.16</td>
<td>.10</td>
<td>-.25</td>
<td>.01</td>
<td>.03</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05, **p < .01,

Table 6

Results of the Linear and Multiple Regression Analyses of Inquisitiveness, Self-Confidence and Self-Identity Predicting Global Leadership Effectiveness

<table>
<thead>
<tr>
<th>Variable</th>
<th>Inquisitiveness</th>
<th>Self-Confidence</th>
<th>Self-Identity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>β</td>
</tr>
<tr>
<td>Global Leadership Effectiveness</td>
<td>.07</td>
<td>.15</td>
<td>.14</td>
</tr>
<tr>
<td>Overall Model $R^2$</td>
<td>.07  **</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05, **p < .01
Discussion

In the current body of research on global leadership competencies, various skills and abilities have been suggested to lead to effective global leadership. Yet there is only limited evidence to support the direct relationship between these global leadership competencies and effectiveness or performance outcomes (Osland, 2015). In line with the research on global leadership competencies previously identified (Bird et al., 2010; Mendenhall et al., 2010), the first aim of the study was to test the ability of these global leadership competencies collectively in predicting global leadership effectiveness. The assumption that a collection of previously identified global leadership competencies will be predictive of global leadership effectiveness is supported by the competency approach taken in previous studies (Bird & Stevens, 2013). The global leadership competencies included in the current measure of overall intercultural global leadership competency have been identified in top performers and are assumed to exist prior to performance. Certain studies have found evidence for a causal link between global leadership competencies in the past, including that of Furuya and colleagues (2009), Caliguiri and Tarique (2011), Vogelgesang, Clapp-Smith and Osland (2014).

As a considerable amount of the research on what makes a global leader effective has focused on cognitive competencies such as inquisitiveness, cognitive complexity and cosmopolitanism, it was a secondary aim of this study to demonstrate the predictive value of cognitively oriented competencies with regard to global leadership effectiveness. It was argued that cognitively oriented competencies are key predictors of global leadership effectiveness because they enable the leader to adapt to the various requirements of
different contexts at the local and global level (Levy et al. 2007; Osland et al. 2007; 2005; 2012; Clapp-Smith & Lester, 2014). In congruence with a competency approach (Bird & Stevens, 2013). These competencies have furthermore all been identified in global leaders that are top performers and as existing prior to performance, providing theoretical support for their causal relationship with global leadership effectiveness. Researchers have argued that cognitive competencies lead to global leadership effectiveness through enabling effective decision-making (Gupta & Govindarajan, 2002; Levy et al., 2007; Osland et al., 2012). Further support of this notion of a ‘global mindset’ (composed of cognitive competencies) being related to effective global leadership is found within the cognitive literature, in which a mindset is considered a precursor of related behaviors (Gollwitzer, 2012; Hamilton et al., 2011).

In the analyses conducted in this study, no significant correlation was demonstrated between overall intercultural global leadership competency and global leadership effectiveness. Furthermore, testing the ability of overall intercultural global leadership competency to predict global leadership effectiveness did not yield significant results. In further examining whether the cognitively oriented competencies (inquisitiveness, nonjudgmentalness, tolerance of ambiguity and cosmopolitanism), would be predictive of global performance, no relationship was found for an overall composite of cognitive competencies. However, when these four predictors (cognitively oriented competencies) were investigated separately, inquisitiveness was found to be positively correlated to global leadership effectiveness, and to predict global leadership effectiveness. Although neither of the remaining competencies had a relationship with
global leadership effectiveness, inquisitiveness was found to contribute more to global leadership effectiveness than overall intercultural global leadership competency. This provides partial support for the hypothesis that cognitively oriented competencies are better able to predict global leadership effectiveness than other competencies. Exploratory analyses showed that the additional dimensions of self-confidence and self-identity both were positively correlated to, and predictive of global leadership effectiveness.

**Theoretical Implications**

Although no unified theory of global leadership cognition has been proposed to date, several common denominators have reoccurred in the literature and in empirical studies. Four cognitively oriented competencies were included in this study: nonjudgmentalness, inquisitiveness, tolerance of ambiguity and cosmopolitanism. Nonjudgmentalness, tolerance of ambiguity and cosmopolitanism have all individually been related to global leadership effectiveness in previous empirical studies (Caligiuri & Tarique, 2011; Levy et al. 2007; Vogelgesang et al., 2014). By demonstrating a predictive effect of inquisitiveness on global leadership effectiveness, this study has complemented previous studies by now adding inquisitiveness to the list of cognitive competencies found to be predictive of global leadership effectiveness.

Inquisitiveness has long been considered a central competency in models of global leadership, from being identified as the core competency by Wills and Barham (1994) to being included in the Global Explorer Model by Black and colleagues (1999). Moreover, three of the seven key capabilities identified by McCall and Hollenbeck (2002)
related to abilities involving open-mindedness and flexibility, ability to deal with complexity and possessing sensitivity and interest in foreign cultures. Among the cognitive strategies identified by Osland and colleagues (2007; 2012; 2013) were the ability of expert global leaders to make sense of their challenges and successfully apply cognitive strategies such as problem solving, strategic thinking and boundary spanning. There are various possible theoretical explanations as to why inquisitiveness is central to global leadership effectiveness. Having an open attitude and being inquisitive about new and different information is likely to have a positive impact on performance in novel situations (Mendenhall et al., 2010).

As mentioned in the introduction, recent advances have been made in the area of global mindset and the study of global leadership cognition, broadening the understanding of the possible process by which global mindset and other cognitive competencies may enable a global leader to be successful. Clapp-Smith and Lester (2014) have recently suggested that global mindset is more appropriately considered a process of mindset activation and switching (Clapp-Smith & Lester, 2014), than a ‘static’ competency. Although no attempt was made in this study to fully address this assertion, it has been argued that competencies related to flexible and adaptive cognition would be likely to facilitate flexible processing. From a cognitive process perspective, inquisitiveness would be beneficial for a global leader in identifying the appropriate mindset for a given situation, by actively seeking information and exploring the context. Furthermore, it would be beneficial in allowing the global leader to be open to adapting to the local culture or situation at hand.
In light of the literature on global leadership competencies, global mindset and expert cognition in global leaders, (e.g. Levy et al., 2007; Osland, 2012), it is surprising that the remaining cognitive competencies were not found to be predictive in our sample. As for cosmopolitanism, which has been considered central to global mindset, the interest in and active pursuit of cultural and worldly information in general would not be as applicable to the simulation environment. A possible explanation as to why nonjudgmentalness and tolerance of ambiguity did not yield significant results might be that these could be ‘background factors, unable to demonstrate clear, independent relationship to global leadership effectiveness. When referencing the intercorrelations, no correlation was found between these two variables and inquisitiveness, while tolerance of ambiguity was highly correlated to all other cognitive competencies. This suggests that tolerance of ambiguity overlap with the other competencies to the degree that it is not able to account for much variance on its own. Investigations of the relationship between the cognitively oriented competencies have previously been conducted at the factor analysis level, but not yet through empirical and predictive analyses including outcome measures. For future studies, researchers should aim to obtain more empirical clarity on the relationship between these variables and, if applicable, where in the cognitive process each of them comes into play.

**Practical Implications**

The global leadership context has been described as complex and characterized by a high degree of situational diversity, as well as rapid change (Mendenhall et al., 2012). Previous findings on the importance of cognitive competencies, and the lack of alignment
among these, may be indicative of this inherent variety and flux within global context. McCall and Hollenbeck (2002) have previously been reluctant to identify competencies common to global leadership, arguing that there is no one global leadership position. Considering the variety of effective leadership found in the leadership literature at large, there is reason to expect variety within the findings on global leadership effectiveness. The findings in this study could suggest that the inquisitiveness is central to global leadership effectiveness by providing a foundation for effectiveness across situations. Individuals with an inquisitive orientation, who are open to interpreting and integrating new information, are more likely to adapt across a variety of situations, even as diverse as those in a global environment. In practice, this would mean that individuals who score high on inquisitiveness would be more likely to succeed across situations that require global leadership, due to their flexible cognitive processing.

Although the relationship between overall intercultural global leadership competency and global leadership effectiveness has been demonstrated in the past (Furuya et al., 2009), this relationship was not supported by the findings global leadership effectiveness in this study. However, exploratory analyses did reveal a significant relationship between two separate competencies and global leadership effectiveness, namely self-confidence and self-identity. There are several possible explanations as to why and how self-confidence and self-identity could affect global leadership effectiveness. As for general implications, self-confidence is likely to allow a person to exhibit successful behaviors when faced with an unfamiliar and undefined situation. Intercultural research has shown that self-confidence is important to intercultural
adjustment and effectiveness (Arthur & Bennett, 1995; Harrison, et. al., 2004; Shaffer, et. al., 1999). Not only is a confident person more likely to put their abilities to use, they are also more likely to display higher levels of overall engagement. In practice, this implies that those who are confident might be more likely to be effective in global leadership because they are more likely to step up to the challenge and less likely to be intimidated by the unknown. As mentioned above, tolerance of ambiguity was not significantly related to global leadership effectiveness in this study. It is possible that the effect of self-confidence effectively trumped the contribution from tolerance of ambiguity, as this confidence mitigated the effect of the fear of the ambiguous or unknown.

Self-identity is described as the ability of a person to maintain their personal values in the face of another’s, allowing them to successfully adapt to new cultures (Mendenhall et al., 2010). It has been likened to integrity, which has previously been identified as important to global leadership in studies on top performing global leaders (Black et al., 1999; McCall & Hollenbeck, 2002). Wills and Barham (1994) found integrity to be important to intercultural management, and it has since been argued as critical to global leadership success (Bird & Osland, 2004). Mendenhall and colleagues (2010) have explained the importance of self-identity in terms of people with a strong sense of self being able to integrate new information without being threatened or overwhelmed. The overall findings suggest that a successful global leader has a flexible cognitive foundation that allows them to be open to integrating new information, while their strong sense of identity enables them to be comfortable with views and practices.
that differ from their own. Finally, self-confidence allows them to actively participate and exhibit leadership behaviors when the opportunity presents itself.

**Strengths, Limitations and Suggestions for Future Research**

There are three key limitations to this study. First, the effectiveness measure was comprised of a peer evaluation and a self-evaluation, which may have led to inflated ratings for those participants who were higher on self-confidence. Those who are self-confident might be more likely to give themselves higher performance ratings, and moreover to receive higher ratings due to their perceived effectiveness. Notably, this limitation only applies to one of the competencies and does not influence the validity of the other competencies identified. With regard to the sample, another related limitation concerns features of the sample and the simulation situation they engaged in. As these were students, participants with a certain personality profile might be both more likely to engage and more likely to be noticed. The more confident, outgoing students with higher self-identity might be the ones who are perceived as being effective on the various measures, again leading to higher performance ratings. Although this could be mitigated by the quality of the evaluation form, features of the evaluation could be insufficient in compensating for the possible peer- and self-bias in the ratings. The key risk in consequence is that participants with certain global leadership competencies were either a) not able to demonstrate these, or b) not noticed for their effectiveness. This is a possible explanation as to why self-identity and self-confidence, in addition to inquisitiveness, were the only competencies demonstrated as predictive of global leadership effectiveness. Moreover, the evaluation measure is subject to the quality of the raters, which were
neither trained nor rewarded for providing observation ratings. This could have led to inaccurate ratings as well as limited variability. The limited of variability observed in the descriptive statistics for the outcome measure may indicate that this is a valid concern, possibly leading to underreporting of effects.

A third limitation to address in future studies is that all of the predictor measures originated from the same instrument. The analyses on the relative impact of cognitive competencies on the outcome measure compared individual cognitive competencies to an overall composite score for intercultural global leadership competency. These measures all came from the same psychometric instrument, namely the Global Competency Inventory (GCI). This limitation was in part addressed by the follow-up exploratory analyses, which included all of the individual competencies within the overall intercultural global leadership competency measure. Future studies are needed to better determine the independent contributions of each of the competencies, in order to shed light on the relative importance of inquisitiveness and other cognitive competencies. This will add clarity to the question of how the cognitive competencies relate to each other, and to the cognitive processing that is necessary for global leadership effectiveness.

More research is warranted on the defining features of the various global leadership situations and associated performance measures. Based on the expected variation across global leadership situations, (McCall and Hollenbeck, 2002; Mendenhall et al., 2002'), it may be time to start exploring the possible different types of global leadership – and associated forms of global leadership performance. Future studies in this area may help explain why such a variety of competencies have been identified as
important in the past. Researchers in the field of global leadership should work toward a better understanding of how different elements of global leadership are at play in different situations, and which competencies are required in each. In symphony with this exploration of variety, global leadership research should still aim to identify competencies that facilitate global leadership effectiveness across situations and settings.

This study has added value to the understanding of whether and how competencies related to global leadership, cognitive and otherwise, affect global leadership effectiveness. Researchers are only beginning to understand the predictive value of competencies that have previously identified as descriptive of global leaders. It is imperative to investigate the causal link between global leadership competencies and associated performance and effectiveness, especially since samples historically have varied in including actual and top performing global leaders.

It was hypothesized, based on research on global mindset and cognitive processing in global leaders that cognitive competencies related to cognitive flexibility would be of particular importance to global leadership effectiveness, as they allow for successful cognitive adaptation to the context. Support was found through the relative importance of inquisitiveness, a competency that can be likened to cognitive flexibility. Although no attempt was made in this study at testing global mindset or the process of mindset activation and switching suggested by Clapp-Smith and Lester (2014), the findings in the current study are not misaligned with their assertion that this process is what makes global leaders successful. Similarly, the findings complement those of Osland and colleagues (2007; 2012; 2013) investigating the cognitive approaches taken
by expert global leaders. It remains to be seen how cognitive competencies, such as inquisitiveness, are part of and/or enable cognitive processing as research continues to add clarity to the abilities that enable success for a leader in the global context.  

A key strength of this study is the comparison of various global leadership competencies in their ability to predict global leadership effectiveness. Whereas previous studies have investigated either specific cognitive competencies individually, or overall intercultural global leadership competency, there has been no attempt to date to compare the relative predictive contributions of competencies. This will be imperative to understanding the nature and importance of cognitive processing in enabling global leadership effectiveness. Knowledge of the relative importance of various competencies adds significant, practical value in global business settings. Furthermore, it can add academic value by laying the empirical groundwork for future research identifying the parameters that define variation across global leadership situations. 

**Conclusion**

As shown by research conducted by key contributors in the fields of global business and economy, there is a clear and growing need for global leadership in public, non-profit and corporate sectors (WEF, 2013; PriceWaterhouseCoopers, 2014). Increased knowledge of the competencies related to global leadership effectiveness will allow successful selection for global leadership positions, as well as for successful development of necessary global leadership skills. Identifying key predictors of global leadership effectiveness will help ensure success in global leadership settings and positions. By shedding light on the process and elements of global leadership, we can
collectively reach a more complete understanding of what makes for effective global leadership effectiveness, and how each of the global leadership competencies contribute to global leadership success.

References


Caligiuri, P., & V. Di Santo (2001). Global competence: What is it and can it be


Advances in global leadership (Vol. 8) (115-154). Bingley, UK: Emerald Group Publishing.


Appendix

ALPHA BETA NEGOTIATION SIMULATION:
INTRODUCTION AND NEGOTIATION SKILL COMPONENTS

In this simulation, you will be negotiating an agreement between your company and a foreign company. You will be given a role to learn and time to plan your negotiation strategy with a small assigned team. Then you will have time to negotiate with a team from a different country. You will receive peer feedback on your overall contribution and involvement in the simulation and, specifically, on the following five negotiation skills. The first three of these skills reinforce many of the intercultural competence skills we have practiced throughout the course.

1. To decode and understand the other party’s (in the negotiation) behavior from their perspective. To practice empathy and see the world as other people see it.
2. To be sensitive to the other party’s cultural background and constraints and adjust your behavior accordingly.
3. To manage stress and to cope with ambiguous situations, as well as unpredictable demands.
4. To be persuasive and demonstrate the advantages of your negotiation proposals so that the other party is willing to change their stance.
5. To communicate your ideas so that the other party will fully understand what you have in mind and not be offended.

NEGOTIATION SIMULATION -- STUDENT INSTRUCTIONS

1. Assign negotiation role
2. Carefully read your instruction sheet to yourself; there will actually be a comprehension test to help you be well prepared. © (5-8 minutes)
3. Assignment to a negotiation team. (The Alphans will stay in the incubator classroom; the Betans will go to their assigned negotiation room.) (5 minutes)
4. Begin behaving in accordance with your culture’s negotiation style. Practice so it becomes natural as your 3-person team jointly takes the Team Quiz (10 minutes)
5. Prepare the Team Negotiation Preparation Worksheet (20 minutes)
6. The Alphans will be given a room assignment and join their Betan counterparts. (5 minutes)
7. Introduce yourselves to the other team and carry out the first half of the negotiation. Your goal in the negotiation is to come to a good agreement that is reasonable for both sides on all four issues listed on your Negotiation Agreement and at the end of your simulation instructions. (15 minutes for first half of negotiation)
8. At the 15-minute mark, open Envelope #1 and INDIVIDUALLY fill out the Process Check Sheet without talking. Place it back in the envelope and seal the envelope. (5 minutes)
9. Spend the next 5 minutes regrouping with your subgroup (one team should step into the hallway so their talk is private). Talk with your two teammates about how you could improve the negotiation and your strategy. (5 minutes)
10. Complete the last 15 minutes of the negotiation (set a timer and don’t go over 15 minutes). You have 5 more minutes to write up your agreement and do peer evaluations. On the orange Negotiation Agreement clipped to Envelope #2 found on your table, write down the terms of your agreement on the four issues and have each person sign to indicate their approval. Place it in Envelope #2. Then fill out individually without talking the Team Evaluation for everyone with whom you negotiated and put your form into the Envelope #2 Team Evaluation/ Negotiation Agreement and seal. Next quickly return to the incubator classroom and hand in your two team envelopes and be seated. (20 minutes)
11. Be back in the incubator classroom by 9:50/______ (unless given a different time) ready to debrief the simulation. (10 minutes).
PREPARATION PLAN

Remember to act like your culture from now on so that you learn your negotiation style and show consistent behavior to the other team. Discuss this as a team.

1. What are your goals in this negotiation? Your priorities?

2. What do you think will be the goals of the other party? What are their priorities?

3. How are you going to figure out their values, needs, etc.?

4. What information do you need from them?

5. You know they are from a different culture. How are you going to behave?

6. How will you open the negotiation?

7. What is your initial position or offer?

8. What concessions are you willing to make?

Good luck!
Name: ______________________

PROCESS CHECK

Please answer this individually without talking to other students.

1. How is the negotiation style of the other team culturally different from your own?

2. Based on what you have observed, how do you need to adapt your own style to be successful negotiating with them?

3. a. Which of Adler’s Global Strategic Options (see below) is your team using? ______________

   b. Which option is the other negotiating team using? ______________

   "My Culture’s Way"   Cultural Dominance   Cultural Synergy
   Cultural Compromise
   Cultural Avoidance   Cultural Accommodation
   "Their Culture’s Way"

4. What’s the biggest problem you see in your negotiation to this point?

5. How are you going to fix it?

P.S. When you huddle with your own negotiation time, how can you stay true to your culture’s negotiating style AND reach cultural synergy and a win-win agreement?

Without looking at anyone else’s Process Check, please put them all into Envelope #1 and seal it.
**NEGOTIATION AGREEMENT**

We, the undersigned members of both the Alpha and Beta negotiating teams, agree to the following terms.

1. **Number of different Models:**

2. **Number of Beta Inc. units to be imported and/or produced under license by Alpha during each year:**

3. **The matter of technology sharing (Beta access to Alpha proprietary R&D advances):**

4. **Royalty rate (percentage on gross sales):**

**Signatures**

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The “other party” below refers to the other negotiating team. Please evaluate objectively in a professional manner each member of the negotiation teams, including yourself, using these criteria: 1= poor  2= average  3= good

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<th>Overall contribution to the negotiation simulation</th>
<th>Ability to decode and understand the other party’s behavior</th>
<th>Ability to modify and adjust their behavior to the other party’s cultural background and constraints (code switching)</th>
<th>Ability to manage stress and cope with ambiguous situations and unpredictable demands</th>
<th>Demonstrates the advantages of their negotiation proposals and can thereby persuade the other party to change its stance</th>
<th>Ability to communicate ideas so that the other party fully understands what you have in mind</th>
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| BETA NAMES  |                                                   |                                                         |                                                                                                 |                                                                                                |                                                                                                                                                                                                 |                                                                                                                                                                                                 |
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