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GLOBAL MINDSET DEVELOPMENT DURING CULTURAL TRANSITIONS

By

Rachel Clapp-Smith

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: Business

Under the Supervision of Professor Fred Luthans

Lincoln, Nebraska

July 2009

GLOBAL MINDSET DEVELOPMENT DURING CULTURAL TRANSITIONS

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University of Nebraska, 2009

Advisor: Professor Fred Luthans

This dissertation sought to explore two research questions: what is the process of global mindset development and how can it be accelerated? The components that were hypothesized to contribute to global mindset development were cultural self-awareness, cognitive complexity, cultural intelligence, positivity, and suspending judgment. Culturally appropriate behavior served as the outcome of the process. Overall, it was found that a path model with the three main variables of cultural self-awareness, cognitive complexity and cultural intelligence had a strong fit. However, an interaction with positivity and partial mediation of suspending judgment were not supported. The results testing how to accelerate the process were inconclusive, as changes over the duration of the study were not present, likely due to a brief testing period of 10 days. Overall, however, the study is one of the first empirical explorations of global mindset development and its contributions to a budding area of research are discussed, as well as implications for management and future directions.

DEDICATION

This dissertation is dedicated to Tyler, Harrison and Molly for their constant support and understanding and for helping me keep a sense of humor.

AUTHORS ACKNOWLEDGMENTS

The author would like to acknowledge the intellectual support of Drs Bruce Avolio, Mary Uhl-Bien and Fred Luthans. Thank you for continually challenging my assumptions and helping me to see new perspectives.

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GLOBAL MINDSET DEVELOPMENT DURING CULTURAL TRANSITIONS

CHAPTER ONE
INTRODUCTION TO THE STUDY

"Culture eats strategy for breakfast." – Jerry Rawls, CEO, Finisar

Purpose of the Study

In a panel discussion regarding authentic leadership, Jerry Rawls uttered these words to highlight the impact that culture has on even the best strategic plans, which organizations oftentimes fail to implement at rates hovering about 70% (Charan & Colvin, 1999). Contributing to such strategic implementation failures is the impact of global trends on business strategy that have challenged the leadership of small, medium and large organizations. These leaders need to address the growing challenges of operating in a global marketplace where information, services and goods rapidly cross borders in ways that have enhanced the competitive landscape for most organizations.

We now live in an era in which interactions with culturally diverse suppliers, customers, regulators, and employees take place regularly, either face to face or virtually. Not only have the transformations associated with globalization made organizational leaders more likely to come into contact with people from a diverse range of other cultures, but information technology has enabled all leaders and followers to have more frequent virtual interactions with parts of the world that many individuals probably didn't know existed (Thomas & Inkson, 2004).

As this increased interaction across every imaginable geographic and cultural boundary occurs, the need to make meaning of it and to find ways to incorporate the globalizing world with our own understanding of the community in which we live has become increasingly apparent to both management scholars and practitioners (Kegan, 1994; Markus & Kitayama, 2003; Thomas & Inkson, 2004; Triandis, 1980). To begin addressing this call, the current dissertation will focus on developing the concept of "global mindset" and identifying how individuals may acquire a global mindset.

The concept of global mindset has been suggested by scholars as a way to achieve a better understanding of ways to engage in appropriate levels of cross-cultural functioning, (Bartlett & Ghoshal, 1998; Gupta & Govindarajan, 2004). Global mindset has been defined as "the cognitive ability that helps individuals figure out how to best understand and influence individuals, groups, and organizations from diverse socio/cultural systems" (Beechler & Javidan, 2007; Clapp-Smith, Luthans, & Avolio, 2007: 110). In today's business environment companies are increasingly looking for ways to develop global mindset among their leaders. To be successful in the global economy, leaders must have the ability to navigate the needs and norms of multiple cultural groups simultaneously. Global mindset provides leaders with the capacity to not only understand the nuances of culture, but to also have a broader understanding of the impact of global trends on local strategies.

Despite the critical need for understanding global mindset, to date little empirical research has been conducted to build a model of global mindset. Therefore, this study aims to test a process model of what constitutes a global mindset. To understand how global mindset provides leaders the capacity to understand and influence individuals, groups and organizations from diverse cultural systems, I propose that it is comprised of cultural

awareness, cognitive complexity, cultural intelligence, positivity, and the capacity to suspend judgment.

In addition to laying a broader conceptual and empirical foundation to the emerging theoretical work on global mindset, this study will examine the process through which a "global mindset" develops in individuals. Many scholars addressing the actualization of a global mindset have commented on development in broad-brush strokes, often suggesting that companies send employees abroad as a means to acquire a global mindset (Beechler & Javidan, 2007; Gupta & Govindarajan, 2004). However, very few have recommended a process model that explains how the ability to function successfully across a diverse range of cultures, as global mindset is defined above, can be enhanced and accelerated. Therefore, this study also aims to understand the developmental process that produces global mindset.

A final gap in the extant global mindset literature deals with the understanding of global leadership. This is a challenging issue that results from prior cross-disciplinary attempts at defining global leadership. Specifically, the need for global mindset and how it is construed is often linked to leadership through the justification that leaders' greatest challenges today typically stem from a rapidly globalizing world (Beechler & Javidan, 2007; Black, Morrison, & Gregersen, 1999; Gupta & Govindarajan, 2002; Ireland & Hitt, 1999). Such discussions have emerged in the strategy literature with the outcome of these discussions presenting two specific dilemmas. The first is that leadership has been equated with a management position or role, e.g., CEO, thus ignoring how many leadership scholars define leadership at any level of an organization as a process, not a person or role. The second dilemma stems from the levels of analysis. Scholars who study strategic management and leadership operationalize and analyze key constructs such as strategic management at the

firm level. For example, Perlmutter and Bartlett and Ghoshal blur the lines between the individual level (CEO) and the firm level, defining them as almost synonymous. To tackle this issue, the secondary goal for this study is to more clearly define what constitutes global mindset at the individual level of analysis and to establish a theoretical link to leadership that takes into account the social influence process characterizing leadership as opposed to the current view from the strategy literature of the individual manager who finds herself managing a culturally diverse group of employees.

Taking these points into consideration, in this study global mindset will be defined and operationalized as a general perspective taking capacity, characterized by cultural self-awareness, cognitive complexity, positivity, cognitive cultural intelligence, and the ability to suspend judgment that enables individuals to integrate multiple cultural paradigms in order to understand and influence culturally diverse social events and interactions.

This chapter is organized as follows. I first set the stage with an overview of the literature of what constitutes global leadership and why global mindset is interconnected and, at times, practically synonymous with this concept. I then discuss the issue of levels of analysis and justify why I am pursuing in this dissertation operationalizing and testing global mindset at the individual level. Then, and most importantly, I discuss the available empirical evidence that supports the theory of global mindset development. I also describe how my proposed theoretical model depicts the developmental process associated with the emergence of a global mindset. I conclude this first chapter by outlining the research questions that are derived from the theoretical model.

Global Leadership

Who would believe that simply adding the descriptor global to the concept of leadership would make for a definitional nightmare? Applying leadership to a global context has been examined thus far in several different streams of management literature as representing the management of individuals from diverse socio-cultural backgrounds (Beechler & Javidan, 2007), the strategic management of multinational corporations (Bartlett & Ghoshal, 1998; Doz & Prahalad, 1987), and similarities and differences in how leadership is construed and displayed across different cultures (Bass, 1997; Gerstner & Day, 1994; House, Hanges, Javidan, Dorfman, & Gupta, 2004; Peterson & Hunt, 1997; Scandura & Dorfman, 2004). However, how global leadership is defined tends to depend on the research agenda of the scholar(s) defining the concept within each of the respective streams. For example, in reviewing global leadership literature, Hollenbeck found different approaches and understandings of global leadership depending on the academic perspective or orientation. He noted that six academic perspectives address global leadership: strategic, cross-cultural, expatriate, competency, adult learning, and leadership perspectives (Hollenbeck, 2001). Hollenbeck's review highlights what is problematic about defining global leadership: each perspective defines global leadership based on the organizational role of interest. Hence, expatriates and their managers are defined as global leadership from the expatriate perspective, while executives of multinationals represent global leadership from the strategic perspective.

With previous global leadership definitions removed from leadership theory and limited to an organizational role, I will take as a starting point for defining global leadership where most leadership scholars begin in terms of the most cited definition of leadership from Yukl and Van Fleet. "Leadership is viewed as a process that includes influencing the task

objectives and strategies of a group or organization, influencing people in the organization to implement the strategies and achieve the objectives, influencing group maintenance and identification, and influencing the culture of the organization" (Yukl & Van Fleet, 1992: 149). The essence of the definition implies that leadership is a process in which influence occurs. This influence can occur at any level, such as at the follower level as well as at any leadership position level within an organization. Further descriptions of leadership include the importance of followers and context in depicting this social influence process (Avolio, 2007). As such, leadership viewed from the perspective of an individual manager or role, as has been typically done in the strategy literature, is quite limiting.

This isn't to say that individuals who have global responsibilities do not in some way contribute to the leadership process. They certainly do, and referencing work from Marion and Uhl-Bien's (2001) complexity theory of leadership, I argue that they serve as tags or catalysts in an influence process. But what is this influence process that we want to call global?

Yukl and Van Fleet note that the influence process can occur around strategies, people, tasks, group identity, and organizational climate. As such, leadership often creates the conditions that enable desired outcomes to occur. The primary difference when we talk about global is that the context of the influence process changes. Instead of influencing a strategy for a single market, strategy formulation needs to balance global efficiencies of the firm with local demands. The tasks that leadership may influence may require different paths to achieving them given different political, economic, and social structures. The people involved with the shift in context come from diverse cultural backgrounds and thus may not share cultural norms and values. Group identity of a multi-cultural group must balance

multiple socio-cultural perspectives. An organizational climate, when being impacted by global cultural influence processes, must balance the norms and values of the organization with a diverse range of cultural norms and values. Therefore, when we discuss global leadership, the influence process associated with this leadership must begin to take into consideration the contextual factors of diverse societal cultures including norms and values, as well as different economic and political systems. The overarching definition that will be used to guide the work in this dissertation is that global leadership represents a social process that transcends cultural boundaries, influencing strategies, people, tasks, groups, and organizational culture by accommodating diverse cultural norms and values within the framework of the institutions and structures that are created by and reinforce said cultural norms and values.

Many scholars have conducted studies or proposed theories to help us better understand how an influence process may vary across cultural boundaries. The GLOBE project, for instance, has underscored what constitutes people's implicit notion of what is and is not associated with the leadership process. The GLOBE authors have found that there are certain commonalities across cultures such as leaders influence others by the vision, values, and roles they articulate for followers (House et al., 2004). Armed with such information, one may believe that it is easy to influence global processes if one simply enacts such behaviors deemed to be effective or perhaps 'universal' across many diverse cultures.

As another example, we might assume that building trust is a universally endorsed characteristic associated with leaders (House et al., 2004). Consequently, a leader particularly adept at building trust in one culture might be expected to build similar levels of trust in another culture, expecting a similar positive impact. GLOBE provides a broad range

of cross-cultural data that helps us to understand what different cultures value and which behaviors influence people and organizational processes to achieve desired goals. We know from the GLOBE results that people universally value integrity and trust, yet we still see many leaders continue to fumble building trust in other cultures as the actual behaviors and actions that build such trust may vary from one culture to another.

The key distinction that needs to be made is between what we know about global cultural differences and then how we go about using that information for positive gain. Specifically, global mindset takes the "what" or data representing a particular culture (norms, values, and vague behaviors) and then helps the individual translate that data into the "how" (how does one best establish trust with this group of people? How is a vision best communicated to another group of people?). As such, global mindset is highly implicated with the notion of global leadership, as without it, the knowledge once gained about different cultures may still not be used in a way that achieves either the leader's or organization's goals. This then leads to the assumption that individuals who are part of the leadership process (leaders and followers) must navigate the contextual (and cultural) factors that contribute to or impede the influence process, and will do so more or less effectively depending on what I have defined herein as global mindset.

From a practical perspective, the next generation of leaders and followers must develop meaning making strategies that allow them to transcend cultural boundaries where differences may exist. Such strategies will enable leaders and followers to recognize the nuanced nature of entering new and different cultures, to integrate the information and knowledge into a personal system of meaning, and to use that meaning to guide the development of behavioral repertoires that are consistent with both their self-concept and

with the cultural context of interaction. This leads us to the second question of interest in this dissertation, namely the development of this capacity (global mindset) that enables a positive influence process in the global context (global leadership).

In sum, given the implications of global mindset in achieving global leadership, it is important to explore the theoretical and practical origins of global mindset and the levels of analysis that apply to the construct. Following such a discussion, I then outline how my theoretical model, when tested, will validate the construct as well as provide insight into the development of global mindset.

Origins of Global Mindset

Although the term global mindset has appeared relatively recently in a number of research streams, the concept has been present for several decades. Many scholars attribute Perlmutter's characterization of a geocentric attitude, or a state of mind that has a world orientation, rather than a home-country orientation (Perlmutter, 1969), as the formal origin of a global mindset in the literature (Gupta & Govindarajan, 2002; Levy, Beechler, Taylor, & Boyacigiller, 2007). In his conceptualization of a geocentric attitude, Perlmutter argues that executives with a global mindset seek the best employees, regardless of their nationality. Such executives would view a subsidiary as a supplier of hard currency, new skills, and knowledge of advanced technology that can transcend cultural boundaries. Perlmutter also argues that subsidiary managers in these cultural contexts must look beyond their national borders for serving local customers as well as for finding demand for their products.

Bartlett and Ghoshal (1998) termed a similar concept a transnational mindset. Executives with a transnational outlook are able to balance the local demands of multinational subsidiaries, while retaining a perspective of global efficiency for the overall

company. In other words, when considering the dichotomous demands of a multinational (global strategy versus a local strategy (Doz & Prahalad, 1987)), Bartlett and Ghoshal argue that neither alone are ideal and that executives of multinationals need to develop a perspective to address the demands on both a local and global imperative that relate to having a transnational mindset. This argument implies an individual level meaning-making process that integrates the paradoxical situation of being both global and local from a strategic perspective. Thus, as strategy researchers, Bartlett and Ghoshal set out with a firm level perspective, but determine an individual level construct was necessary to center in on what constituted a transnational mindset. They, as well as Perlmutter and many other strategists, have blurred the lines in terms of the levels of analysis that apply to both operationally defining and measuring a global mindset. As such, a discussion of the levels of analysis that apply to global mindset is necessary to clarify the direction of the theory put forth in this study as well as my operational definition of this construct.

Level of Analysis

Klein, Tosi, and Canella (1999) comment that one barrier to multilevel theory development is often the tradition of our training. For instance, the origins of global mindset come from the strategy field, which focuses, in general, on a more macro level of analysis. However, many scholars have made the argument that for global mindset to exist at the firm level, executives within a firm must possess a global mindset. Such recommendations have, indeed, blurred the levels of analysis rather than developed a coherent multilevel theory.

By implying a multilevel relationship between executives of a firm and firm characteristics in the global context, global mindset has been described as an individual level construct in which cognitive processes occur that allow a multinational to have firm level

characteristics and firm level outcomes. While such a multilevel approach to global mindset theory is valuable at some future point in time, before such a construct can be either deemed isomorphic or to influence macro-level outcomes, it must be defined and validated at one level in order to further theorize at multiple levels (Klein, Tosi, & Cannella, 1999). As such, and drawing from the definition of global mindset to entail cognitive processes, this study aims to validate an individual level construct so that future research may systematically theorize and test cross-level effects (Rousseau, 1985), and then establish whether global mindset can be defined and exist at the macro-level, as suggested by Perlmutter and Bartlett & Ghoshal. I turn now to describing my theoretical model that serves as a justification for exploring the concept of global mindset at the individual level of analysis. The model describes how trigger moments, cultural self-awareness, cognitive complexity, cultural intelligence, positivity, and suspending judgment relate to each other in developing global mindsets.

Theoretical Model

The theoretical model that I propose begins with culturally induced trigger moments. These trigger moments are an antecedent to cultural self-awareness as they initiate the expansion of cultural self-awareness, which in turn increases cognitive complexity. The awareness of one's culture and that of others may require additional cognitive categories to accommodate this new awareness and thus individuals are expected to develop richer dimensionality in their categorization of cues and stimuli. The relationship between cultural self-awareness and cognitive complexity is moderated by positivity, since a positive state of mind allows individuals to be more receptive to new stimuli/information and to take an inquisitive stance towards them (Fredrickson & Branigan, 2005). Cognitive complexity, then,

is expected to have a positive relationship with cultural intelligence, as the ability to understand complex relationships allows individuals to build strategies for attaining and applying cultural knowledge. Suspending judgment partially mediates this relationship, as the more individuals take a systems view of events (cognitive complexity) the more they understand the limitation of quick judgments based on minimal or superficial information. Suspending judgment, in turn, increases cultural intelligence by accessing more information for developing cultural knowledge. Finally, cultural intelligence leads to culturally appropriate behavior, as individuals have the motivation to apply cultural knowledge to adjusting their behavior. Figure 1 depicts my proposed model and below, I expand on each of these relationships, supplying the theoretical justification for each component and their linkages within the proposed model.

Insert Figure 1 about here

Global mindset development can be viewed as a process of reframing a cognitive reference point, shifting a worldview, or developing a new paradigm of meaning or perspective taking (Bartunek, 1988; Westenholz, 1993). A culturally induced trigger moment often presents paradoxical information that is so strangely new that individuals cannot rely on existing frames or schema to understand the situation. Scholars who have researched the development of global executives have noted that the one developmental moment that global executives share in common is culture shock that leads to a perspective-changing experience (Hollenbeck & McCall, 2001:53). While this is broadly described based

on interview results, there is evidence that what is occurring is that the moments are often exposing the limitation of current cultural frames of reference that guide how these individuals derive meaning from experience, make decisions (Clapp-Smith & Hughes, 2007), and ultimately initiate greater cultural awareness.

Cultural awareness refers to one's understanding of how an individual's culture of origin influences one's thinking. Markus and Kitayama have noted that "cultural contexts and social situations provide the very frames within which psychological systems develop" (Markus & Kitayama, 2003:281). Other authors have argued that cultures provide conventions for "sampling information and determine how much to weigh the sampled elements from the environment" (Triandis & Suh, 2002). Once aware of this influence of culture on the collection and processing of environmental cues, individuals can then step outside of their cultural paradigm and try to understand the cultural frames used by others. Specifically, in their conceptualization of global mindset, Gupta and Govindarajan (2004) have suggested a similar process in that individuals must become aware of their current mindsets in order to develop a broader and more integrated global mindset.

Cultural awareness of both self and others allows individuals to expand the categories they use to interpret the environment around them, thus facilitating the development of greater levels of cognitive complexity and perspective-taking capacity (Bartunek, 1988; Kegan, 1994). In other words, once individuals shift to viewing events through more than one cultural lens they must expand the categories they use to organize new information they receive and to make sense of this information.

Cognitive complexity has been defined as constituting two dimensions: differentiation and integration. Differentiation describes the capacity to use many categories

or dimensions to organize information. Individuals high in differentiation tend to see nuances and shades of grey in cross-cultural interactions whereas individuals low in differentiation will place cues into simple categories of black and white and either/or. Integration, on the other hand, describes how individuals find connections and relationships among the differentiated dimensions (Kegan, 1983; Suedfeld, Leighton, & Conway, 2006; Tadmor & Tetlock, 2006).

Expanding the two dimensions of cognitive complexity helps individuals to build what has been referred to as cultural intelligence (CQ). My proposed theoretical model considers the cognitive component of CQ. Cognitive CQ is the specific cultural knowledge that individuals possess about any given culture (Earley & Ang, 2003; Thomas & Inkson, 2004). Often, more advanced cognitive complexity lends itself to a rapid and rich attainment of cultural knowledge. As such, it enhances cognitive CQ, as it provides a more complex cognitive framework for organizing and understanding cues that may then inform individuals' awareness of knowledge structure and regulation and strengthen the acquisition of cultural knowledge. Armed with adequate cultural knowledge, individuals than may add to their behavioral repertoires and enact behaviors that are more appropriate based on the cultural understanding they now possess.

The global mindset components of cultural self-awareness, cognitive complexity, and cultural intelligence allow for the outcome of culturally appropriate behavior. Such behavior corresponds to the conventions of a culture as well as accommodates the behaviors of culturally different others when interacting in a home culture or across cultures such as when individuals are in a virtual environment. Cultural intelligence ultimately impacts culturally appropriate behaviors as it provides the regulating mechanisms and the cultural knowledge

that helps expand behavioral repertoires as well as allow for the determination of when and how to adjust behavior to the context or interaction.

While trigger moments referenced above may lead to greater cultural self-awareness, which influences one's level of cognitive complexity, thus impacting cultural intelligence and ultimately leading to culturally appropriate behavior, evidence suggests that global mindset development may not be direct or as straightforward as some authors have suggested (Clapp-Smith & Hughes, 2007; Gupta & Govindarajan, 2004). To account for this possibility, I propose to test interactional and intervening variables in my theoretical model. For example, in my proposed model, the individual's level of positivity is depicted as moderating the relationship between cultural self-awareness and cognitive complexity as it has been shown to have a broadening effect on thinking and to create upward spirals of human functioning (Fredrickson & Branigan, 2005; Luthans, Youssef, & Avolio, 2007). I also suggest that an individual's level of positivity is state-like and provides the mechanism for an individual to more aptly overcome the stresses of realizing the limitations of one's cultural framework. In other words, in some instances the cultural awareness individuals experience will create dissonance that could be buffered or ameliorated by viewing the limitations of one's cultural paradigm as an opportunity to learn and grow versus defend one's position (Tadmor & Tetlock, 2006). In the presence of higher positivity, I expect the individual to resort to deeper levels of inquiry that would afford the opportunity to expand global mindset. This type of broadening effect is exactly what Fredrickson has proposed with individuals higher in positivity.

In general, positivity has been shown to allow for greater inquiry (Fredrickson & Losada, 2005), which in the context of this study helps to explain a willingness and desire to

learn from a new cultural frame. Thus, in the presence of a positive stance towards a situation, cultural awareness is more likely to be associated with greater differentiation in cognitive complexity, or the use of more dimensions to categorize stimuli. Individuals are more likely to be inquisitive to further understand other cultural frames and less likely to advocate their current cultural paradigm (Fredrickson & Losada, 2005) which elicits an expansion of categories, thus, the differentiation facet of cognitive complexity.

Suspending judgment is expected to partially mediate the relationship between cognitive complexity and cultural intelligence as it describes an assessment of a situation or event in the absence of cultural stereotypes. Individuals with a worldview that is made up of multiple dimensions and highly integrated will see cultural stereotypes as limiting to understanding cultural interactions. Levy et al. (1998) found individuals who believe personalities to be somewhat malleable and a product of the context tend to find stereotypes to be untrue. Similarly, those with greater cognitive complexity will tend to not rely on stereotypes and instead suspend judgment until adequate information about an individual or situation is available (Kitchener & King, 1981; Triandis, 2006).

Suspending judgment contributes to cultural intelligence because the individual is less likely to interpret the situation based on cultural stereotypes, while being more likely to regulate their cognitive strategies and use the cues around them to attain new cultural knowledge. As individuals suspend judgment about a person or situation, they are more likely to gather information about which behaviors are appropriate for the given situation and then regulate their behavior accordingly.

In the situation where individuals make hasty judgments based on stereotypes, they are less likely to utilize the appropriate cognitive strategies to gather cultural knowledge that

indicates how behaviors should be enacted. Cultural intelligence provides the mechanisms for understanding how to gather cultural knowledge as well as for regulating how to enact behaviors based on that knowledge. In the absence of hasty judgments, individuals are more motivated to collect cultural knowledge, build the cognitive strategies to do so, and can appropriately apply such cultural knowledge to determining how to regulate behavior.

To conclude this overview of the proposed theoretical model, I have suggested that global mindset is comprised of three main variables: cultural self-awareness, cognitive complexity, and cultural intelligence. Trigger events serve as an antecedent to cultural self-awareness, while positivity moderates the relationship between cultural self-awareness and cognitive complexity. Suspending judgment partially mediates the relationship between cognitive complexity and cultural intelligence. Finally, culturally appropriate behavior is the outcome that the process model of global mindset development is proposed to influence. Given these relationships described above, the research questions that this dissertation aims to address are as follows:

Research Questions

1. What are the relationships that contribute to global mindset development?
2. How can global mindset be development be accelerated?

Organization of the Dissertation

This dissertation consists of four chapters. Chapter one has provided an introduction to the purpose for the study, and overview of the theoretical model and research questions. The second chapter reviews the literature pertinent to the theoretical model as well as provides an overview the foundational theories that inform this study. Thus, literature

pertaining to culture, meaning making, the working self-concept, and acculturation and biculturalism will be reviewed. These provide a backdrop and theoretical support for the development of global mindset. A theoretical justification for the process model and the development of hypotheses follows. Chapter three provides an outline of the study design to test the hypotheses and chapter four reports the results of the study. Enjoy!

CHAPTER 2: LITERATURE REVIEW

As described in the introduction, globalization has drastically changed the way companies hire employees, source materials, implement strategies, and finance operations. In addition, globalization has placed numerous cultural stimuli at the doorstep of individuals. Thus, with cultural transitions occurring without necessarily traversing national borders, this study is guided by the underlying research question: how can the concept of global mindset be developed to help individuals enact culturally appropriate behaviors?

While the proposed model in Chapter One provides a guiding framework for this chapter, several theoretical concepts provide the foundation for the proposed relationships of global mindset development. Taking a broad perspective, global mindset can be thought of as the intersection of culture, meaning making in adult development, and the self-concept (see Figure 2). Because culture influences the meaning making process (Fiske, Kitayama, Markus, & Nisbett, 1998; Kegan, 2000) and the "self-concept is made of meaning" (Baumeister, 2004: 247), it is important to understand how these theories build on each other to inform global mindset development. As such, I begin with a review of relevant culture research, followed by a brief overview of the constructive-developmental approach to meaning making, and conclude this portion of the chapter with a description of the self-concept, incorporating a discussion of acculturation and biculturalism to exemplify its significance in global mindset development. After presenting the theoretical background, I then explicate the theoretical model to build the hypotheses to be tested in this study. Chapter 3 provides greater detail regarding the methods and design of the study. The appendices provide all the measures included in the study as well as the outline for the proposed intervention.

Culture

"If we learn anything from the history of economic development, it is that culture makes all the difference" – Landes, (1998): 516

Culture is central to the construct of global mindset and the process of global leadership as it is a social mechanism that influences thoughts and behavior in ways that are so ingrained that they seem inherent (Markus & Kitayama, 2003). The opening quotes of both chapters 1 and 2 highlight how pervasive culture is in our current economic, political, and social environment. Its pervasiveness explains the need to continually define culture and try to understand its influences. Culture has been described as "the realm of meaning" that shapes the institutional fabric and the behavior in and between organizations (Redding, 2007: 53). It has also been defined as the shared values, attitudes, beliefs, norms, rituals, and modes of behavior that "reduce the uncertainty surrounding human interaction within a society" (Osland, Bird, & Gundersen, 2007:7).

The two most cited descriptions of culture come from Kluckhohn (1954) and Hofstede (1980, 1991). Kluckhohn suggests that culture can be described as a map that outlines ways of thinking, feeling and believing, whereas Hofstede portrays culture as the "software" of the mind. Despite the plethora of definitions and depictions of culture, general consensus seems to settle around a societal set of norms that influence individual thought and behavior, providing schema for understanding and rules for behaving. As such, culture provides a structure of meaning that is external to individuals and this structure influences the cognitive development of individuals as they make sense of their worlds guided by the patterned relationships of their culture (Fiske et al., 1998).

Social psychologists have begun to study the influence of culture on psychological processes, as “in order to participate in any social world, people must incorporate cultural models, meanings, and practices into their basic psychological processes” (Fiske et al., 1998: 915). While humans have developed to take adaptive advantage of a culture, this psychological capacity also makes “their psyches dependent on their own particular culture” (Fiske et al., 1998: 916). Thus, global mindset development helps individuals transition from being dependent on one cultural framework, or frame of reference for meaning making, to recognizing their own framework and incorporating other cultural frameworks into how they make sense of the world around them.

There are many perspectives on culture in the literature and copious studies that test the variability of constructs across cultures. While many of these are pertinent to global mindset and global leadership as described in chapter one, my primary concern here is to highlight how culture influences the meaning making process and ultimately the self-concept in order to demonstrate how global mindset is the intersection between these three concepts.

Triandis has commented that of all the cross-cultural dimensions, individualism and collectivism explains most of the variance between cultures (Triandis & Gelfand, 1998). While these dimensions explain a cultural level set of norms and values, self-concept scholars have also noted that differences in self-concepts across cultures are often based on notions of independence and interdependence (Markus & Kitayama, 1991). An independence self-concept is characterized by a belief that one is a stable, free entity that possesses preferences, motives, beliefs, abilities, which are the forces behind action. Interdependence, on the other hand is a “self in relation to others” (Fiske et al., 1998: 922).

Although not every person of an individualistic society maintains an independent self-concept, certain aspects of an individualistic society contribute to the development of such a self-concept. For instance, the prevalence of choice in American service exemplifies the need to be a free individual and have it "Your way" (Fiske et al., 1998). Several East Asian cultures, for example, foster interdependence as harmony in social relationships are valued rather than the individual voice that may create conflict. Kanagawa et al. (2001) found that Japanese described themselves in terms of their actions and interdependencies, while Americans described themselves in terms of internal attributes, or as independent. The Japanese respondents were more likely to adjust their self-descriptions based on the context (presence of an authority figure, solitary condition, group condition, and peer condition), which indicated their self-concepts as being more a function of the interdependencies associated with the context.

Kanagawa et al.'s study highlights that culture plays a role in how we see ourselves. It develops our self-concepts and provides the programming or "software" that guides how we see ourselves and how we make meaning of different social situations. Because culture is the "realm of meaning" that shapes behavior and thought, we need global mindset to understanding what meaning culture holds for us and to understand what meaning it may create for others. As a result, I turn now to a discussion of meaning making followed by the self-concept to integrate the role of global mindset and culture in positive global leadership.

Meaning Making

"The mindset is the repository of meaning" (Redding, 2007: 54) and global mindset develops as individuals transform into more complex meaning makers (Kegan, 1983), who

incorporate multiple cultural frameworks into their meaning systems. The construction of meaning is a personal experience, in which we develop constructs to understand what is happening around us (Fransella, 1982). Thus, meaning making is simply the activity of being and we experience our reality as the meaning we make of it (Kegan, 1983).

Kegan suggests five stages through which individuals develop or evolve to construct meaning in more complex ways. Moving from one stage to the next is a process of transformation that involves a change in the relationship "between the subject and the object of one's knowing" (Kegan, 2000: 53). The "object" way of knowing is something "we can look at, take responsibility for, reflect upon, exercise control over, and integrate with some other way of knowing" (Kegan, 2000: 53). The "subject," on the other hand, runs us and identifies us. "We cannot be responsible for that to which we are subject (Kegan, 2000: 53)." Thus, to transform to higher levels of cognitive development, or to become more complex meaning makers, is to shift away from being "made up by" the values and expectations of our family friends, community, and particularly culture toward having a relationship to said values and expectations (Kegan, 2000: 59). In other words, individuals transform from uncritically internalizing the values and belief systems their culture provides to analyzing several cultural systems of meaning and making choices about which values to use as guides for understanding the world and their self-concepts. Through this process what was formerly subject, now becomes object for the individual at a higher level of development.

Nerlove and Snipper highlight cultural opportunities as a means to transform the relationship between subject and object ways of knowing. Considering language as a cultural opportunity, studies have shown that language learners performed better than monolinguals on measures of divergent thinking. "Exposure to two languages is said to stimulate

comparisons between the languages, which then accelerates the attainment of objectification" (Nerlove & Snipper, 1981:452).

In the transformative learning literature, the structure of assumptions and expectations that guide how we filter cues is referred to as a frame of reference. Similar to Kegan's levels of cognitive development based on the object and subject way of knowing, a frame of reference is a way of knowing, or a meaning perspective (Mezirow, 2000:16). It is a meaning-making paradigm that we maintain with rigor as we may have an emotional attachment to it. It is influenced by culture, as it may be "an expression of our familial loyalties or tribal identification" (Kegan, 2000: 52).

The challenge involved with global mindset development is that it often requires that we suspend our frame of reference, which means letting go of cultural meanings that we hold closely, in order to make meaning using other cultural frames. Transforming through the stages of development requires that we not only acquire new knowledge; but that we change the form with which we attain knowledge, i.e. use a new cultural frame of reference. This point highlights a critical characteristic of global mindset development. Many global leadership theories suggest that leaders' transition to global effectiveness by acquiring cultural knowledge. Kegan calls this an informative change, in which we add to what we know. However, global mindset is a transformative change, in which we change how we acquire knowledge.

Applying the meaning making theories of Kegan and Mezirow to the proposed global mindset theory, we can derive why a number of variables have been proposed in the theoretical model. Transformations occur when individuals become critically aware of their "tacit assumptions and expectations and those of others (Mezirow, 2000:4)." This is the

process of becoming aware of one's cultural perspective, hence the variable of cultural self-awareness. Mezirow also highlights the threatening emotional experience of cultural self-awareness, as the recognition of the need to change also includes a shift in how we support our emotional responses. This explains in part the necessity of incorporating positivity into the model, as a positive approach to regulating emotions facilitates a transformation through stages of cognitive development. Finally, at the core of the transformation of meaning making is the development of cognitive complexity. To become meaning makers who can accommodate the complexity of the varied cultural paradigms that are present in the global economy, individuals must first differentiate the world into greater numbers of categories and find ways to integrate across these categories to attain levels of abstraction, or a more complex systems view for understanding the world around us.

The transformation or evolution into a complex meaning maker requires an integration of cultural meaning systems, or different cultural frames of reference into the self-concept. "The self-concept is made of meaning" (Baumeister, 2004:247) and as a result, I explore how the final ingredient, the working self-concept, provides the third pillar for global mindset development.

The Working Self-Concept

"I am neither an Athenian nor a Greek. I am a citizen of the world" – Socrates

The self-concept is a dynamic structure of self-views that involves all aspects of social information processing. "It's a collection of images, schemas, conceptions, prototypes theories, goals and tasks (Markus & Wurf, 1987: 301)." It regulates behavior and adjusts

based on the social environment. Scholars have come to agree that the self-concept is not a static entity, rather it is a dynamic phenomenon that engages actual, ideal, and ought selves. Some selves are temporal while others are possible (a future self). Global mindset development activates the possible selves, which allows for an expansion of the current self-concept structure and creates more possible selves available for activation in any given socio-cultural interaction.

The working self-concept is how we see ourselves at any particular point in time. It describes the identities that we access at any given time. So, like Socrates, we may see ourselves as attached to a culture or may see ourselves as having a relationship with a culture. How we see ourselves, then, will influence what value system we utilize to making meaning of events and to guide our behavior.

The literature on culture and adult development implies that meaning making is a process that is patterned by a set of socio-cultural values, such as independence or interdependence (Fiske et al., 1998). While the self-concept literature supports this idea with evidence that culture influences how individuals see themselves (Kanagawa, Cross, & Markus, 2001; Markus & Kitayama, 2003), evidence is also available that the self-concept may adjust according to the cultural context.

In a study comparing American and Japanese students, Kitayama, Duffy, Kawamura, and Larsen (2003) asked both sets of students to make a judgment by paying attention to context in one instance and ignoring context in the other. As expected, Japanese students excelled in the context task while Americans excelled in ignoring context. In order to test if such tendencies were a result of cultural origin, i.e. coded into cognitive processing at a young age and taking on trait-like qualities, the researchers also tested Americans in Japan

and Japanese in the United States. They found an interaction effect of location, implying that the visitors adopted the perspective or frame of the host culture with regard to analyzing situations using context.

Overall, the cross-cultural findings reported for Japanese versus Americans show that when perceiving an object and making a judgment about it, the social environment influences how one makes meaning to a larger degree in some cultures versus others. Thus, individuals may not only have schema encoded into their self-concept by one culture, but they may adjust or call upon a different set of cultural rules for meaning making according to the environment in which they are embedded. While Kitayama et al. demonstrated this in a laboratory setting, acculturation literature provides further evidence of how individuals incorporate several cultural modes of meaning making and rules of behavior.

Acculturation deals with the changes that individuals experience when they make cultural transitions (Berry & Sam, 1997). These changes often include the incorporation of cultural norms into the self-concept. Similarly, biculturalism focuses on the identity of individuals who have dual cultural backgrounds, either as a result of having parents of different cultural origins, or by living in one culture but having family traditions and a home language from another culture (i.e. Chinese-born Americans) (Benet-Martinez, Lee, & Leu, 2006; Benet-Martinez, Leu, Lee, & Morris, 2002).

The significance of these related streams of research to the study of global mindset development is that they provide insight into the existence of self-concepts that are not bound by a single culture. Acculturation literature has found evidence of how individuals integrate their heritage culture with a new culture (Ryder, Alden, & Paulhus, 2000). For example, researchers have found that bicultural individuals have available two separate cultural

paradigms that they may use to make sense of events and to enact certain behaviors. Thus, I will draw on the literature from these two research streams (acculturation and biculturalism) to understand how interacting with other cultures (either by changing one's cultural environment or by interacting with culturally others) may induce the development of a more culturally rich self-concept and how such a multi-cultural self-concept may influence behavioral repertoires.

Acculturation

Research on the process of acculturation has had a very broad scope, as studies have dealt with varying populations such as immigrants, sojourners, refugees, and ethno cultural groups (Berry & Sam, 1997). The literature has also addressed antecedents to acculturation such as the purpose or intent of a cultural transition, the context or situation of the transition (host culture characteristics as well as heritage culture characteristics), and the personality characteristics of the individual transitioning cultures (Ryder et al., 2000). Finally the predominant outcome of acculturation is adaptation to a new or different culture, which has been captured as social adaptation as well as psychological adaptation (Searle & Ward, 1990).

Seemingly void from the list of applications of acculturation literature is the instance of business interactions, leader/follower relationships, and the context of an organization, such as found in the global economy. Although it is not the intent of this study to test models of acculturation, the process of change that acculturation literature describes is useful for examining the context associated with global mindset development. Therefore, I will review below a sampling of dominant models in the acculturation literature and explain how they inform the theory of global mindset development.

One of the predominant models of acculturation was proposed by Berry in 1970 to address the decisions individuals make about how to acculturate. Berry suggested that four strategies exist, depending on the level of contact and participation individuals choose to have with the host culture, and to what extent individuals wish to maintain their heritage culture identity (Berry, 1970). These four strategies include marginalization, separation, assimilation, and integration.

Marginalization refers to individuals who shed their cultural identity but also have little interest in adopting the host culture. The separation strategy, on the other hand, depicts individuals who value maintaining their heritage culture identity and avoid participation in the host culture. Assimilation refers to a strategy in which individuals do not wish to maintain their heritage culture identity and adopt a high level of contact to participate fully in the norms of the host culture. The strategy that is often associated with the most successful social and psychological adaptation is integration, in which individuals preserve some level of their heritage culture in their self-concepts, but also choose to actively participate and adopt norms of the host culture. While these strategies were proposed to describe the strategies used by individuals when immigrating to a new country or being raised in a country by parents of a differing cultural origin, the strategies provide a potential framework for understanding how individuals manage the heritage self-concepts and possibly incorporate aspects of a new culture into their self-concepts. Some researchers refer to this strategy as a bicultural strategy (Tadmor & Tetlock, 2006), which leads us to a discussion of biculturalism.

Biculturalism

The study of biculturalism is intended to examine the processes involved in the development and maintenance of a bicultural identity (Benet-Martinez et al., 2006). Out of this literature also comes the concept of cultural frame switching in which individuals with a bicultural identity apply two different meaning systems in response to cultural cues. This concept provides evidence that multiple self-concepts exist and that individuals activate the self-concept that is relevant to differing cultural cues.

The empirical research addressing biculturalism and the outcome of cultural frame switching provides evidence that individuals may possess a mindset of multiple cultural meanings or frames of reference and use these frames to make sense of cultural cues and elicit appropriate responses to these cues (Benet-Martinez et al., 2006; Hong, Morris, Chiu, & Benet-Martinez, 2000). It is argued, then, that repeated instances of frame switching lead to a more cognitively complex organization of reality, and ultimately through development to a more integrated form of meaning making. Studies have found that individuals with a bicultural mindset, or an ability to feel comfortable and involved in two different cultures, have a higher level of complexity when analyzing situations than individuals who use one cultural frame, or mono-culturals (Benet-Martinez et al., 2006; Gutierrez & Sameroff, 1990).

The findings of bicultural research suggest that a) individuals are capable of maintaining more than one cultural frame in their self-concept to analyze, interpret and formulate behavior and b) using more than one cultural frame lends itself to the development of greater levels of cognitive complexity. Global mindset development extends biculturalism by seeking to not only understand how individuals differentiate between two cultural maps or frames and integrate them together, rather, how individuals may approach situations with no

cultural map at all and find their way to nonetheless make sense of an ambiguous and unfamiliar situation.

The intersection between culture, meaning making and the self-concept provides a foundation for the development of a global mindset. Empirical evidence implies that culture provides guidelines for meaning making, that the self-concept is a structure for meaning making, and that culture informs the self-concept and meaning making process. These three streams of research are the pillars of global mindset development, which explains how individuals understand themselves apart from their cultural heritage and develop a behavioral repertoire that provides multiple possible responses that may be chosen for the appropriate cultural scenario. I turn now to the operationalization of global mindset development by explicating the theoretical model and providing hypotheses that will be tested in this study.

Overview of the Model of Global Mindset Development

Global mindset development is a process that can occur throughout the life span. The constructivist/developmental model that Kegan provides allows us to understand how global mindset is not a factor of traits and skills, but rather a process of knowing one's capacities to make meaning of events and to use this capacity to display appropriate behaviors.

Gupta and Govindarajan have described the development of global mindset as a series of S-curves, in which individuals become aware of their current mindsets, find a means to articulate these and become more inquisitive and open to learning about new cultures, which again exposes their current mindset, and thus the process continues (Gupta & Govindarajan, 2004). While this characterization of global mindset is useful, in order to measure this process and find a means by which to accelerate it, a process model is necessary to move

such developmental theory forward. Therefore, I propose that discovering current mindsets occurs with a culturally laden trigger moment. Such trigger moments challenge the assumptions we hold about the world and people in it and make us aware of how our heritage culture informs this set of assumptions. In this vein, cultural awareness may be characterized by experiencing a level of cognitive dissonance, in which assumptions are challenged and a dissonance reduction occurs. How we choose to react to this dissonance is heavily influenced by the positive psychological resources available to us at that time. Thus, I propose that positivity moderates the relationship between cultural self-awareness and an increase in cognitive complexity.

With the presence of positivity, cultural awareness may lead us to make sense of the world in a manner that incorporates more categories and integrates these categories more efficiently. In other words, cognitive complexity will increase allowing the use of multiple perspectives when our assumptions are challenged. Cognitive complexity, in turn, has a positive relationship with cultural intelligence. Suspending judgment partially mediates the relationship between cognitive complexity and cultural intelligence, as a more complex mode of thinking recognizes the insufficiencies of stereotypes for assessing situations. With this understanding comes the need to utilize strategies for collecting data to make an informed judgment, which then can increase cultural intelligence. Cultural intelligence enables culturally appropriate behavior.

Culturally Induced Trigger Moments

Trigger moments have been referred to as moments that matter (Avolio & Luthans, 2006), jolts (Roberts, Dutton, Spreitzer, Heaphy, & Quinn, 2005), disorienting dilemmas

(Mezirow, 2000), or critical experiences (Rizzo & Vinacke, 1975). Trigger moments are contextual instigators in the form of an interaction with a person or with the environment. Therefore, they can be a discussion with an individual from a different culture, news from a source from another culture, observation of the environment of a new culture, or the observation of a culturally other in a familiar environment. The essence of a culturally induced trigger moment is that it highlights an aspect of the environment or how people behave within a certain environment that was previously overlooked, taken for granted, or simply part of the individual's automatic cognitive processing.

Avolio and Luthans (2006) most succinctly describe trigger moments as moments that matter because they influence who we become and often initiate a process of change that may show a course of development over the lifespan. Trigger moments as critical life experiences have been examined since the 1970's, when Rizzo and Vinacke sought to understand the role of critical experiences in individuals' level of self-actualization. Individuals with higher levels of self-actualization, or a "better understanding of themselves and the world," tended to draw more meaning from the critical experiences or trigger moments in their lives (Rizzo & Vinacke, 1975).

Despite a number of studies showing the developmental impact of trigger moments on personal development, such experiences are rarely discussed in the context cross-cultural interactions. This study contextualizes trigger moments by introducing the boundary condition of a culturally induced trigger moment that is hypothesized to have the effect of creating awareness of a specific domain of knowledge processing; that which is influenced by cultural upbringing. Many social psychologists have found that meaning making is influenced by cultural practices and norms (Keller & Werchan, 2006). As discussed earlier,

cultural context has been found to influence definitions of the self-concept in Japanese and American students (Kanagawa et al., 2001). Therefore, the developmental process of global mindset requires that individuals step outside their own cultural boundaries or conceptual frameworks to gain awareness of their own and other cultural paradigms or meaning systems. A cultural induced trigger moment often is the first step to this awareness and ultimately the shift from knowledge about how one views cultural incidents as subject versus it becoming object for the individual.

Evidence for this process was found in a grounded theory study (Clapp-Smith & Hughes, 2007), in which business sojourners described the process of building strategies to quickly adjust to new environments. Described as boundary testing experiences, trigger moments often provided participants with a means to gain awareness of their own paradigm of thought and to question or test their own boundaries. This process often expanded their boundaries or brought the participants to a cognitive or paradigm shift. Bartunek (1988: 140) describes a similar experience in that trigger moments “unfreeze” an ingrained way of understanding a situation.

The powerful impact of culturally induced trigger moments is that they provide information that runs counter to a deeply held understanding of the world. Roberts et al (2005: 718) describe jolts as occasions that provide information about the limitations of the individual as well as new possibilities.

In addition to challenging previously held assumptions or initiating cultural awareness, trigger moments also ultimately influence behavior. Meyer (1982), for instance, found that trigger moments challenge theories of action and then build new behavioral repertoires. In his study of responses to a doctors’ strike, Meyer found that hospitals

responded in ways that were counter to their modus operandi, resulting in the building of additional resources and action theories for future operations.

While an expansion of behavioral repertoires is believed to underlie the development of global mindset with an outcome of culturally appropriate behavior, I argue that several cognitive processes occur to lead to such an outcome. I continue to explicate this process model by addressing the role of cultural awareness in the global mindset development.

Cultural Self-Awareness

Cultural self-awareness is akin to the moment in which assumptions are challenged and the world takes on new meaning. Mezirow (1991) has defined perspective transformation as “the process of becoming critically aware of how and why our assumptions have come to constrain the way we perceive, understand, and feel about our world” (Taylor, 1997).

Trigger moments create instances in which individuals challenge their assumptions because they make current assumptions salient and ultimately problematic or constraining. In other words, individuals are rarely aware of the assumptions they use to make sense of an event until those assumptions are no longer adequate, or perhaps uncovered through focused and adaptive reflection. This has also been described as gaining awareness of one’s current mindset (Gupta & Govindarajan, 2004).

Culturally induced trigger moments make such assumptions evident, as well as their limitations. Thus cultural self-awareness occurs as new stimuli expose the limitations of old underlying assumptions. This process can either occur as a result of individuals actively seeking ways to learn more about their assumptions or in an unexpected, serendipitous manner. Gupta and Govindarajan (2004) have recommended that multinationals send

employees into new cultural environments to allow this discovery of current assumptions to occur. While I agree that such actions could initiate cultural self-awareness, it is not sufficient and is too imprecise to find a causal link to global mindset development. One might argue it is also costly and perhaps inefficient as a means for developing global mindset in that one must rely upon serendipity for development to occur. Therefore, this study will also uncover a method by which such processes may be accelerated as well as become more salient.

Cognitive Dissonance. Cognitive dissonance provides insight to understand how assumptions are challenged and the processes that this experience induces. Dissonance, as described by Festinger (1957), can be characterized by either arousal or psychological discomfort in the face of two incongruent cognitions. Often, cultural contexts or interactions with culturally different others provide instances of cognitions that run counter to our current meaning-making systems. They may also provide paradoxes that seem irreconcilable at first.

With such cognitive dissonance, assumptions used previously in the sense-making process are challenged by opposing or contrary cognitions. In some instances, individuals cope with the psychological discomfort induced by dissonance by selectively absorbing cues that confirm their current meaning systems and assumptions. Tadmoor and Tetlock (2006) argue that this leads to integrative simplicity, or low cognitive complexity. This process reduces the dissonance and thus the psychological discomfort. However, with high levels of dissonance, individuals are often more attentive to their surroundings and the cues from their environmental context (Benet-Martinez et al., 2002). Thus, scholars have argued that high dissonance will influence individuals to expand the dimensions they use to make meaning of a situation, or increase their cognitive complexity (Tadmor & Tetlock, 2006).

The biculturalism literature described above provides further evidence for this relationship. This literature shows us that individuals may possess more than one meaning-making system that can be activated by culturally relevant cues. Benet-Martinez et al. (2002) argue that individuals who integrate bicultural identities display a hyper vigilance toward cultural cues. As dissonance becomes high, attention to the context increases, thus allowing for greater differentiation in order to reduce the dissonance experienced. Thus, cultural awareness is a process in which individuals become aware of the cultural assumptions they use to make meaning of a situation. This awareness also allows for vigilance toward cultural cues and a broader system of categories with which to organize these cues. Thus, cognitive complexity results from the experience of cultural self-awareness.

Cultural Cognitive Complexity

Cognitive complexity provides an explanation of how individuals transition from cultural awareness, when assumptions are challenged, to making sense of an unfamiliar context or stimuli. Since cognitive complexity has been studied in many different disciplines including developmental psychology, communications, political science, organizational behavior, strategy, and leadership, multiple definitions of cognitive complexity have been proposed. General consensus among the various disciplines is that cognitive complexity is the degree of differentiation and integration within a cognitive system that enables individuals to make meaning based on many categories and to recognize similarities or linkages across categories (Burleson & Caplan, 1998; Clapp-Smith et al., 2007; Levy et al., 2007). Tadmor and Tetlock succinctly describe cognitive complexity as “the capacity and

willingness to acknowledge the legitimacy of competing perspectives on the same issue and to forge conceptual links among these perspectives" (Tadmor & Tetlock, 2006:174).

Despite this general consensus in defining cognitive complexity abstractly, less agreement exists regarding the extent to which cognitive complexity acts as a stable trait or as a malleable state. Scholars who have attempted to find a general disposition of cognitive complexity by utilizing the multiple forms of measurement across time and situation have found little evidence that cognitive complexity is a stable personality trait (Burleson & Caplan, 1998; Vannoy, 1965). Rather, they have found that cognitive complexity is situation specific and that individuals may be cognitively complex in one content domain (i.e. be experts) but be cognitively simplistic in content domains in which they are novices (Burleson & Caplan, 1998). In addition, countless studies exist in which changes in cognitive complexity were experienced, for instance, in the case of Middle Eastern leaders before the September 11 attacks, immediately following, and again after the United Sates entered Afghanistan (Conway, Suedfeld, & Clements, 2003). Due to the evidence for the situational and malleable nature of cognitive complexity, I adopt a constructive/developmental paradigm stemming from developmental psychology (Cook-Greuter, 1999; Kegan, 1983; Loevinger, 1985; Piaget, 1948) to assess how cognitive complexity contributes to global mindset development, thus considering it a state or state-like.

Westenholz has used the term frame of reference to describe a cognitive structure that is similar to the definition of cognitive complexity. The frame of reference, as defined by Mezirow, is a way of knowing or a way making sense of a situation. It includes knowledge of a domain, specific attributes of the domain, and the relationships among the attributes. Thus, cognitive complexity describes a frame of reference that uses more categories of

attributes to understand (differentiation) a domain and may more effectively understand the relationships (integration) than cognitive simplicity. The relevance of the work by Westenholz to the current study is the finding that frames of references can by de-framed and reframed. In other words, when current frames of reference no longer create meaning, individuals will de-frame and create new categories, or reframe, in order to make sense of the situation.

Bartunek describes a similar process in which a social trigger indicates the inadequacy or erroneous nature of a previous frame of reference and hence, initiates a de-framing and reframing. Similar to Westenholz and Bartunek, Mezirow describes the transformative learning process as a shift in the way of knowing.

Scholars who have addressed cognitive complexity in the cross-cultural literature have proposed, but not yet tested, how cognitive complexity may develop as a result of cultural awareness. "Within the cross-cultural context, integrative complexity refers to the degree to which a person accepts the reasonableness of different cultural perspectives on how to live….is motivated to develop integrative schemas that specify when to activate different worldviews and/or how to blend them together into a coherent holistic representation" (Tadmor & Tetlock, 2006:174).

In the strategy literature, Gupta and Govindarajan (2004) describe cognitive complexity as an individual's selection of what information and environmental cues to absorb, as well as the cultural biases used to interpret such information. Thus, once aware of the cultural biases individuals use to find meaning, individuals may attain cognitive complexity by "objectifying" these biases and begin the process of differentiating a cross-

cultural interaction or environment into multiple cultural dimensions to see the linkages between these dimensions. Therefore, I hypothesize

Hypothesis 1: Cultural self-awareness will have a positive relationship with cognitive complexity.

Cognitive Cultural Intelligence

As individuals build more cognitively complex systems for meaning making, they then have the capacity to regulate cognitive strategies for attaining cultural knowledge. In other words, cognitive complexity influences cultural intelligence as a more objectified way of knowing, or a highly differentiated categorization of cultural cues and well integrated understanding of them, strengthens the ability of individuals to acquire cultural knowledge and apply this knowledge to a re-evaluation of the self-concept. Because a change in cognitive complexity is a transformative change (Kegan, 2000), individuals not only increase the information they have about a culture, but also the means by which they attain information and internalize it. Cultural intelligence explains the meta-cognitive, cognitive and motivational components that are involved with this process.

Several definitions of cultural intelligence exist, although the concept has been addressed by a small, select group of scholars. These definitions include the behaviors that are considered intelligent from the point of view of people in different cultures (Brislin, Worthley, & Macnab, 2006), the ability of individuals to effectively interact with people from other cultural backgrounds (Thomas, 2006), and the ability to successfully adjust to other cultural settings (Earley & Ang, 2003).

The definitions of cultural intelligence are derived from two schools of thought in the realm of cultural intelligence. One school views cultural intelligence as contributing to cultural adjustment through the dimensions of meta-cognition, cognition, motivation, and behavior (Ang, Van Dyne, Koh, & Ng, 2004; Earley & Ang, 2003). The other school of thought views behavior as an outcome of cultural intelligence, and as a result considers the cognitive aspects of culture to indicate cultural intelligence (Thomas, 2006; Thomas & Inkson, 2004). As such, I follow the latter approach, and define cultural intelligence as the cognitive capacity that enables individuals to build strategies to regulate and attain cultural knowledge as well as the ability to incorporate such knowledge into their self-concept.

Although Earley, Murnieks, and Mosakowski (2007) compare and contrast cultural intelligence and global mindset as if they were two distinct constructs, I argue that cultural intelligence is an integral part in the development of global mindset. To this point, the process model of global mindset development has included culturally induced trigger moments, cultural self-awareness and its impact on cognitive complexity. While these are important steps in the process model, they are insufficient in bridging the gap to culturally appropriate behavior. “Cultural intelligence emphasizes the discovery of emics as well as etics through an individual’s interactions in new cultural situations” (Earley, Murnieks, & Mosakowski, 2007: 78) and as such allows an individual to make sense of broad, global perspectives as well as to pay attention to cultural specific nuances. This process becomes more salient as individuals gain more complex ways of knowing.

Thus, cultural intelligence involves a continual reformulation of the self-concept in the face of cross-cultural interactions that helps build the behavioral repertoires for culturally appropriate behavior. Three components of cultural intelligence are involved with the self-

concept reformulation as it pertains to cultural contexts: meta-cognition, cognition and motivation.

The meta-cognitive literature addresses an understanding of one's cognitive strategies to learn and an ability to regulate these cognitive strategies (Schraw & Dennison, 1994). Meta-cognition has two distinct dimensions: knowledge of cognition and regulation of cognition. The knowledge dimension describes the self and cognitive strategies, how to use these strategies, and when and why to use them. Regulation explains cognitive processes of planning, information management, comprehension, evaluation, and debugging strategies (Schraw & Dennison, 1994). Applying this concept to the cultural context, meta-cognitive CQ is defined as "an individual's cultural consciousness and awareness during interactions with those who have different cultural backgrounds" (Ang, Van Dyne, Koh, & Ng, August 2004, pg. 5).

Thomas (2006) suggests mindfulness as a meta-cognitive strategy that provides a link from cognition to behavior. Based on his theoretical development work, the relationship between cognitive complexity and cultural intelligence is more clearly explicated. Mindfulness facilitates the choice of behaviors by "focusing attention on the knowledge of culture and processes of cultural influence" (Thomas, 2006). This strategy is likened with a post-autonomous stage of cognitive development, in which individuals transform beyond automatic processing and behavior, while becoming more aware of their own cognitive processes, psychological paradoxes, and adopt a more complex and integrated worldview (Cook-Greuter, 1999). Thus, cognitive complexity, or a more differentiated and integrated worldview, enables a meta-cognitive awareness in which individuals may process the cultural influences of the situation and develop a greater behavioral repertoire from which to choose

appropriate behaviors. In the same vein, studies have found that meta-cognitively aware learners have a more strategic approach to learning and perform better than unaware learners (Garner & Alexander, 1989).

Conducting three experiments, Kelemen, Frost, and Weaver (2000) found that meta-cognitive abilities differ across time and task and they are not stable across settings (Kelemen, Frost, & Weaver, 2000). Keleman et al.'s (2000) findings give evidence that meta-cognitive ability is not a general capacity or a trait; rather it varies across tasks and settings. Therefore cognitive CQ is domain specific to cultural knowledge and the awareness of cultural influences on behavior and attitudes. However, meta-cognition has been found to be separate from intelligence and domain knowledge (Schraw & Dennison, 1994). Thus, although awareness of meta-cognition may vary across contexts, as Keleman suggests, such awareness of strategies is qualitatively different from content knowledge of a domain. Research provides evidence that in addition to domain knowledge, the ability to understand one's learning strategies and to regulate and monitor the use of these strategies also influence success in performance (Schraw & Dennison, 1994). Thus, cognitive CQ provides a cognitive ability that allows individuals to learn how to interact with culturally others.

Cognitive CQ is defined as "an individual's knowledge of specific norms, practices, and conventions in different cultural settings" (Ang et al., August 2004). Thomas argues that often this knowledge is reduced to cultural norms in the literature, but that a highly culturally intelligent sojourner may see past the "superficial understanding of cultural dimensions" (Thomas, 2006) as proposed by Hofstede, Schwartz, and Trompenaars, and understand the nuances that are present. Thus, cognitive complexity not only influences the meta-cognitive dimension of cultural intelligence, but it also allows individuals to build more complex

domain knowledge of a culture by providing a schema for integrating cultural norms (or dimensions) with context, history, religion, political structure, and value orientations (Thomas, 2006).

The cognitive component of cultural intelligence may seem to apply to only those cultures for which individuals have knowledge of norms, values, and practices. However, cognitive CQ actually explains how individuals gain cultural knowledge in unfamiliar contexts and incorporate this knowledge into their self-concept (Earley et al., 2007). Earley and Ang (2003) describe cognitive CQ as the ability to understand a context without being constrained by past experiences. Thus, cognitive CQ is knowledge of "what culture is, how it varies, and how it affects behavior" (Thomas, 2006). It also allows individuals to map their behavioral assumptions with those of culturally different others in order to understand which behaviors are appropriate to enact.

Cultural intelligence provides a mechanism for understanding how a more complex way of knowing helps individuals to accept and organize cultural cues and to integrate them into the self-concept. Therefore,

Hypothesis 2: Cognitive complexity will have a positive relationship with cognitive cultural intelligence.

The two dimensions of cultural intelligence presented above explain how individuals learn strategies for acquiring cultural knowledge, regulate their information processing, incorporate cultural knowledge into their self-concepts and meaning making systems, and apply cultural knowledge to culturally appropriate behavior.

Moderation and Mediation in the Global Mindset Model

The proposed process model of global mindset development entails the moderating variable of positivity and the partial mediation of suspending judgment. Positivity moderates the relationship between cultural awareness and cognitive complexity as a positive response to the stresses and psychological discomforts of cultural awareness enhance the likelihood of the expansion of cognitive complexity. Suspending judgment partially mediates the relationship between cognitive complexity and cultural intelligence as

Positivity

In multicultural settings, negative responses to trigger moments can often cause individuals to have a narrow or inflexible cognitive process with regard to the situation (Bartunek, 1988). Positive states, on the other hand, have been found to enable broader cognitive processes (Fredrickson & Branigan, 2005). Therefore, in this study it is hypothesized that positivity, or a positive psychological approach to events, will strengthen the relationship between cultural awareness and cognitive complexity.

Cultural awareness may be accompanied with a level of psychological discomfort or cognitive dissonance as individuals come to the realization that their current mindset or cultural frame of reference is inadequate to properly assess a cross-cultural interaction. As mentioned earlier, some responses may be to reduce psychological discomfort closing off one’s thinking to new perspectives and leading to cognitive simplicity (Tadmor & Tetlock, 2006). However, by adopting a positive approach to the psychological discomfort, expanding cognitive complexity is more likely to occur. Hence, positivity is expected to moderate the relationship between cultural awareness and cognitive complexity.

Evidence for the role of positivity in enhancing relationships between psychological discomfort and broadening perspective taking is found in the positive psychology literature

as well as the positive organizational behavior literature. For instance, both theories of positive emotions (Fredrickson, 2001) and positive psychological capital (Luthans, Luthans, & Luthans, 2004; Luthans, Youssef, & Avolio, 2006) give evidence that positivity utilizes psychological resources that broaden cognitive processes.

The positive emotions literature has a multitude of evidence for the impact of positivity on broadening the mindsets of individuals as well as their capacity to perform (Fredrickson, 2000; Fredrickson & Branigan, 2005; Fredrickson & Losada, 2005). Namely, not only do positive states widen "the array of thoughts" (Fredrickson & Losada, 2005), which is the expansion of cognitive complexity, but they also broaden behavioral repertoires (Fredrickson & Branigan, 2005). The evidence thus far suggests that positive states would lead individuals to greater levels of inquiry, which are essential to resolving paradoxical information that individuals confront in a vastly different cultural context. The broaden and build model (Fredrickson, 2001) gives evidence for positivity undoing the negative effects of events and building long lasting capabilities for thinking more globally (Fredrickson, 2000b; Fredrickson & Joiner, 2002)

With the presence of positivity individuals will more likely adopt new paths into their meaning system, rather than ignore or avoid cues that run counter to their meaning system. Thus, when positivity is high, individuals will have greater resources with which to cope with arousal or psychological discomfort and find alternative pathways to integrating dissonant cognitions with current and new meaning systems. Low levels of positivity, or the near absence of psychological resources to rebound from aversive psychological situations, will influence the dissonance and cognitive complexity relationship in that these individuals will

not find alternative pathways to integrate meaning systems and will maintain a level of cognitive simplicity (Tadmor & Tetlock, 2006).

A positive state in the PsyCap construct is resiliency, which is defined as the ability to bounce back from adversity, stress, or even positive events (Luthans et al., 2007). Luthans, Youssef, and Avolio (2007) describe how resiliency not only enables individuals to overcome adversity, but also to flourish or build broader coping and adaptation capacities. Resiliency provides evidence that positivity assists individuals who face stress from psychological discomfort and can overcome such stress to expand their perspective-taking capacities and to build broader cognitive strategies for sense-making. Resiliency also induces individuals to find comfort outside of their comfort zone and challenge their own assumptions about the way they view the world (Luthans et al., 2007).

Because the experience of interacting across cultures can be stressful, reducing stress, or mustering the capacity for resilience enhances individuals' ability to accept a state of not knowing (a higher order cognitive complexity) and to accept confusion (Brislin et al., 2006). By lowering levels of stress during an interaction in which the participants do not immediately understand each other, one may more calmly sort cues into multiple categories and evaluate the situation from a more integrated perspective (Brislin et al., 2006).

Hope is the will to achieve certain goals as well as the ability to find pathways to successfully achieve goals (Luthans et al., 2007). Often international exposure creates moments in which people discover their mental models are narrow, culturally biased, and insufficient for making sense of paradoxical cues. Hope describes what individuals do with this awareness. With high will power, or motivation, to adjust and high way-power, or the

capacity to find alternative responses, individuals would be expected to incorporate more pathways into their meta-cognitive strategy and broaden their capacity for perspective taking.

Positive emotions and states can "spark dynamic processes with downstream repercussions for growth and resilience (Fredrickson & Losada, 2005)." In this regard, upward spirals of positivity contribute to individuals' abilities to broaden their sense-making capacities and remain open to new stimuli by adopting a state of inquiry (as opposed to advocating) (Fredrickson & Losada, 2005). Thus, positivity broadens people's mindsets (Fredrickson & Losada, 2005) and would be expected to provide individuals with the psychological resources and energy to flourish in different cultural contexts. Flourishing in this context entails capitalizing on the cultural awareness to build greater cognitive complexity.

Hypothesis 3: Positivity will moderate the relationship between cultural awareness and cognitive complexity.

Suspending Judgment

Suspending judgment is a concept that has been discussed often in research streams relating to international research, including cross-cultural research and international strategy and management (Earley & Ang, 2003; Gupta & Govindarajan, 2004; Thomas, 2006; Triandis, 2006). However, to date, the concept has yet to be operationalized. Triandis has highlighted the importance of suspending judgment in a cross-cultural context because the amount of information required for a "correct" judgment is very large. Furthermore, cultural frames tend to influence how individuals assess a situation. For instance, individuals from a collectivistic society on average view behavior as a result of external factors, such as norms

and roles, whereas individualists attribute behavior to internal factors such as personality (Triandis, 2006).

With such differences in how behaviors are assessed across cultures, one must be prepared to suspend judgment until information is available beyond the ethnicity of an individual or the factors of the situation. In addition, individuals must be aware of their own cultural biases in making judgments and be prepared to make judgments beyond these cultural biases. A global mindset allows an individual to consider both cultural paradigms for judging a situation or the behavior of another. As such, individuals who have developed a global mindset are less likely to jump to conclusions by making judgments based on a few clues (Triandis, 2006); rather they collect as much information as possible, paying attention to subtle cues and being aware of nuances relevant to cultural differences.

Suspending judgment may be thought of as the antithesis of stereotyping, or the absence of using stereotypes to make judgments. In a study involving five experiments, Levy, Stroessner, and Dweck (1998) captured the extent to which individuals used stereotypes or suspended judgment by asking participants to list the stereotypes they know to exist about particular ethnic groups. Then participants were asked to rate the extent to which the stereotypes were true. In addition, participants were asked to account for the existence or perpetuation of stereotypes.

Levy et al. found that individuals with an entity or fixed mindset tended to stereotype more readily and explained the existence of stereotypes based on inherent or innate characteristics. In contrast, those with an incremental or malleable mindset tended to suspend judgment of groups and viewed the presence of stereotypes as due to social or environmental causes (Levy, Stroessner, & Dweck, 1998). These results indicate that a broader systems

view of the world and an understanding of the interaction between persons and environments will influence how individuals come to make judgments guided by a global mindset.

In a study conducted by Philips and Ziller (1997), students were asked to review profiles of other students and select with whom they would like to work on a project. The students were also asked to rate each profile based on attractiveness, similarity to themselves, and desirability as a colleague. The goal was to test the hypotheses that individuals, who score high in universal orientation, or non-prejudice, would judge minorities or those less similar to themselves as favorable and would want to interact with them. They found support that judgments of culturally dissimilar others were in fact more favorable for those with a universal orientation. Given the cognitive complexity foundation of a universal orientation as defined by Philips and Ziller, evidence exists that cognitive complexity leads to suspending judgment.

Suspending judgment is the assessment of a situation in the absence of cultural stereotypes, or where the individual can resist in invoking existing stereotypes during the process of development. It partially mediates the relationship between cognitive complexity and cultural intelligence, as individuals with highly differentiated worldviews that are well integrated will recognize the limitation of cultural stereotypes as an information source. Instead, such individuals will rely on the cognitive strategies they have developed for acquiring cultural knowledge and regulating their thought action. In other words, suspending judgment leads to cultural intelligence as meta-cognitive strategies become more salient as a means to gain cultural knowledge rather than the cultural stereotypes that may exist and perpetuate due to popular media, hearsay, and literature based on broad generalizations.

In the presence of greater cognitive complexity, individuals will suspend judgment and not assume that individuals take on the characteristics of their ethnic group, but rather will wait until they can collect more data about individuals. As such, greater cognitive complexity will lead to suspending judgment, which partially mediates the relationship between cognitive complexity and cultural intelligence as described above.

Hypothesis 4a: Cognitive complexity will have a positive relationship with suspending judgment.

Hypothesis 4b: Cognitive complexity will have a positive relationship with cultural intelligence.

Hypothesis 4c: Suspending judgment will partially mediate the relationship between cognitive complexity and cultural intelligence.

To complete the development of the global mindset model, I turn now to describing the outcome of the model; culturally appropriate behavior.

Outcomes of Global Mindset Development

Several outcomes of global mindset have been proposed. For instance, scholars have proposed clearer understanding among culturally different individuals (Triandis, 2006), more effective performance in the context of a multinational corporation (Levy, Beechler, Taylor, & Boyacigiller, 2007), the formulation of strategies more appropriate for a globalizing economy (Bartlett & Ghoshal, 1998; Gupta & Govindarajan, 2004), and leadership that translates to the global scale (Clapp-Smith, Luthans, & Avolio, 2007; Mendenhall, 2001). However, to attain such outcomes, I argue that at the individual level of analysis, appropriate

behavior must be displayed and assessed. Thus, global mindset development leads to the expansion of behavioral repertoires (Fredrickson & Branigan, 2005; Thomas & Inkson, 2004).

Several outcomes of cultural intelligence have been recommended, but few, if any, have been tested. Scholars have recommended that cultural intelligence influences the ability to act appropriately, pay attention to the situation, use isomorphic attributions and appropriate affect (Triandis, 2006), and to adjust to new cultural environments (Earley & Ang, 2003). I agree that each of these outcomes may occur as a result of global mindset development, however, to begin the process of advancing global mindset theory this study starts by testing the relationships proposed by focusing on appropriate behavioral outcomes.

Missteps in the face of cultural transitions have been well documented and often used as examples of what can go wrong in cross-cultural business interactions (Cooper, Doucet, & Pratt, 2007; Earley & Ang, 2003; Thomas & Inkson, 2004; Triandis, 1975; Trompenaars & Hampden-Turner, 1998). Often such behavioral examples are used to exemplify what behaviors are inappropriate in certain contexts and the ramifications of such behaviors. The focus of this study is to take a positive approach to explore what can go right in cross-cultural interactions. Thus, I am less concerned with correcting inappropriate behavior and more concerned with finding the avenues to enacting appropriate behavior for positive cross-cultural interactions.

Cooper, Loucet, and Pratt (2007) address the prevalent use, yet elusive definition of “appropriateness” in international research. Cultural orientation scholars have provided dimensions that may be used to anticipate, on average, how individuals from another culture may behave (Hofstede, 2001; Triandis & Gelfand, 1998; Trompenaars & Hampden-Turner,

1998). Assessing appropriateness is subjective and based on normative evaluations (Cooper et al., 2007). As such, Cooper et al. (2007) define appropriateness as the fit between an observed behavior and the behavioral norm of the given context.

It is expected that as a global mindset develops not only will the ability to enact culturally appropriate behavior (the observed behavior of appropriateness) be enhanced; it will also be possible to use a broader cultural frame to assess the appropriateness of others' behavior. To capture these two perspectives of appropriateness, this study uses the behavioral component of cultural intelligence, which describes how individuals adjust their behavior to the context.

Behavioral CQ as proposed by Earley and Ang is a component of cultural intelligence. However, similar to the definition of cultural intelligence proposed by Thomas (2006), I include this component as an outcome of the cognitive aspect of cultural intelligence. Behavioral CQ is a behavioral capacity that allows individuals to "become competent across a wide range of cultural situations" (Thomas, 2006). This capacity is an ability to choose the appropriate behavior for a situation from a well-developed repertoire of intercultural behaviors as well as develop new behaviors to add to an individual's behavioral repertoire. Thus, individuals with high behavioral CQ have the ability to self-regulate or adjust their behavior to exhibit context appropriate gestures, languages and facial expressions (Earley & Ang, 2003). As a component of global mindset theory, the behavioral CQ concept explains how global mindset development allows individuals to observe and understand behavior within unfamiliar environments and adjust their own behavior to develop culturally appropriate interactions.

Thomas notes that this ability to adjust one's behavior is not merely mimicry or adaptive to the environment. Rather, it also includes an understanding of what is expected behaviorally from the individual. As an example, an American expatriate was allowed a grace period with her new co-workers, in which they didn't expect her to know the behavioral norms of the work place in their culture. However, their cues led the expatriate to believe that her behavior was appropriate and she made few adjustments. With time, the grace period ended and the co-workers became resentful that she hadn't used that time to learn what was expected of her. The expatriate, however, was completely unaware of these expectations and found herself flummoxed when negative tension began to appear in interactions with co-workers (Early & Ang, 2003).

This scenario highlights how important it is to understand the expectations of others in terms of behavior as opposed to simply responding to cues or using mimicry. Thomas points out that there are instances in which mimicry creates negative consequences where not adapting one's behavior is more beneficial than adapting. For instance, mimicry may appear insincere. Other aspects of adapting may be inappropriate due to the fine layers of nuance in social etiquette. For instance, Japanese rarely expect westerners to mimic bowing, as mastering this social etiquette and understanding the meaning involved is extremely intricate (Thomas, 2006). Therefore, mimicking a bow could unwittingly offend a Japanese counterpart. Behavioral CQ not only provides the ability to adapt behavior, but the cognitive component that provides an individual with the capacity to understand when and to what level of adapting behavior is appropriate.

Hypothesis 5: *Cultural intelligence will have a positive relationship with culturally appropriate behavior.*

Intensity of Culturally Induced Trigger Moments

To explore the second research question, how global mindset development can be accelerated, this study used varying levels of intensity to uncover the type of interventions that may be utilized to accelerate global mindset. Borrowing form the ethical decision making literature in which the moral intensity of a scenario impacts a decision making process (Jones, 1991), considering the intensity of a cultural situation or trigger moment is relevant to the developmental process of global mindset. While moral intensity deals with six dimensions of intensity that help uncover the seriousness of an ethical dilemma, similarly the intensity of the cultural induced trigger moments also are based on seriousness of the event as a means to elicit levels of intensity. As an example, the Rest (1986) model of ethical decision-making begins with an awareness of an ethical issue. As such, Jones maintains that this awareness is heightened when the intensity of the situation is greater. Intensity may be based on the magnitude of consequences, social consensus, probability of effect, temporal immediacy, proximity, and concentration of effect. Similarly, the global mindset developmental model begins with a level of cultural self-awareness and the greater the intensity of the trigger moment, the greater the awareness of one's own culture becomes. Given this line of logic built on the work of the moral intensity literature, it follows, then, that as the intensity of the culturally induced trigger event increases, so too, will the levels of the four main mediators of the global mindset model. Therefore, I hypothesize:

Hypothesis 6a: *At greater levels of scenario intensity the increase of cultural self-awareness over time will be greater than at lower levels of scenario intensity.*

Hypothesis 6b: *At greater levels of scenario intensity the increase of cognitive complexity over time will be greater than at lower levels of scenario intensity.*

Hypothesis 6c: *At greater levels of scenario intensity the increase of cognitive cultural intelligence over time will be greater than at lower levels of scenario intensity.*

Hypothesis 6d: *At greater levels of scenario intensity the increase of cultural appropriate behavior over time will be greater than at lower levels of scenario intensity.*

Summary, Integration and Conclusion

The emerging concept of global mindset has led many scholars and practitioners to opine the ideal mindset for effectiveness in a global economy. Multinationals have experienced many difficulties, costs, and failures in their expansion efforts due to a lack of a global mindset among their leaders and employees. Despite multiple proposals of what a global mindset is, the construct has yet to be tested and validated. In addition, scant attention has focused on a means to develop a global mindset. Therefore, this dissertation addresses a gap in the literature of testing how a global mindset can be developed. I have presented a process model that tests the relationships of components of global mindset that have been

proposed by a handful of scholars (Clapp-Smith et al., 2007; Gupta & Govindarajan, 2002; Levy et al., 2007). By testing how cultural self-awareness, cognitive complexity, positivity, suspending judgment and cultural intelligence relate to each other, I hope to further understand how these constructs contribute to a theory of global mindset development. In this regard, a tremendous gap in the extant literature will be filled. In addition, this study will more generally show the impact of meaning systems in cross-cultural scenarios and how individuals may move beyond applying cultural knowledge on superficial syndromes or dimensions of culture. The validation of global mindset development will provide multinationals with tools to help leaders and followers map their own cultural frames of reference and navigate those of culturally different others to achieve appropriate behavior across multiple cultural transitions.

As the first study to test these relationships and provide evidence for the validity of global mindset development, no precedence exists for this particular theory. I therefore turn to the methods chapter to outline how the hypotheses will be tested.

CHAPTER 3: METHODS

This study provides a first empirical glimpse at the development of global mindset as well as a first test of a model of the global mindset components that have been suggested by many scholars (Clapp-Smith et al., 2007; Gupta & Govindarajan, 2002; Levy et al., 2007). To address testing the development of global mindset, the current study design was between group repeated measures design. Participants were presented with a scenario that places them in a leadership challenge that is embedded in a global context. This served as a culturally induced trigger as depicted in the hypothesized model. Four groups were compared based on the intensity of the trigger. A pilot study was run to pre-test, select and refine the cultural triggers. Below I describe the pilot, the sample, the procedures, and power analysis followed by the measures for the study variables and data analysis to be utilized.

Context of Study

As mentioned in chapter 2, cultural trigger moments are highly influenced by the context. In addition, several scholars have highlighted the importance of context in developing and testing theories in leadership and organizational behavior (Avolio, 2007; Johns, 2006). By maintaining a consistent cultural context across the trigger conditions, effects due to the context will be uniform. Therefore, to gain a greater understanding of the boundary conditions of developing global mindset, this study adopts a Muslim cultural context.

The turn of the century has seen increased interaction between Muslim and Western societies. While negative geo-political events jump very quickly to mind, positive economic events also contribute tremendously to the increased interaction. For instance, in the recent

credit crisis in the United States that revealed banks' exposure to sub prime lending, many banks looked to investors from Muslim societies to bail them out. Cash flowed to Citibank from Abu Dhabi and to UBS from an unidentified Middle Eastern investor (Reilly & Karnitschnig, 2007).

The context of Muslim culture is interesting in the current geo-political and economic climate, for as many missteps that show a lack of sensitivity towards Muslim values, and vice versa, countless business relationships are forming among Western and Muslim companies. Thus, the relevance of the Muslim context is not limited to understanding how to stabilize Iraq and Afghanistan, but to understand how to use cultural knowledge as Muslim and Western economies become more intertwined in the future. There are one billion Muslims, many of whom do not live in the Middle East. For instance, Indonesia is 86% Muslim, Malaysia's population is 60% Muslim, and 13% of the Indian population is Muslim. Therefore, the context of the trigger events of this study is based on Muslim culture, which interacts with Western culture in many instances apart from Middles Eastern relations.

Given the need for understanding Muslim values and learning how to reconcile them with Western values, and the heightened interactions with individuals from Muslim societies, exploring this context for the present study is timely. Misunderstandings may be alleviated by increased cultural self-awareness, which in turn may lead to greater cognitive complexity, cultural intelligence, suspending judgment, and ultimately, culturally appropriate behavior. Such development with regard to Muslim culture may impact future political and economic synergy between the West and Muslim World, as well as reduce unnecessary ideological conflict.

Development of Intervention

The trigger moments serve as the intervention for this study. Initially, eight trigger moments were developed. Five represented a work context and three a non-work context. The pilot study, described below, was used to test, refine and select the most appropriate triggers for the main study.

The five work related triggers were developed based on data from the Gallup World Poll. Data were used that describe the extent to which Muslims feel they can do their best at work, someone encourages their development at work, they feel that they are treated with respect, what Muslims admire about the West, and the role of the face veil with Muslim integration into European society. The triggers are in the form of a mock blog, in which a blogger begins a thread about issues with his multi-cultural team. Other bloggers provide references to the Gallup data and articles from the Financial Times to frame the cultural workplace issue.

Each scenario was read by subject matter experts and ranked according to intensity. Then, intensity was further strengthened by editing the scenarios to reflect financial consequences of the multicultural teams' effectiveness in progression according to the subject matter experts' rankings. Thus, the order of intensity was 1. Someone encourages development at work; 2. Ability to do best at work; 3. Feel respected; 4. What Muslims admire about the West; and 5. European response to the Face Veil.

Pilot Study

A pilot study was conducted to test, select, and refine the scenarios that served as cultural trigger moments at varying degrees of intensity. It also served to test measures that

were developed for this study. Five scenarios had been developed. To define the intensity of the triggers, I borrowed from the moral intensity literature (Jones, 1991) in which intensity varies based on 6 dimensions which include magnitude of consequences, proximity, social consensus, temporal immediacy, concentration of effect, and probability of effect. For this study, intensity of the trigger events were manipulated in the degree of magnitude of consequences and concentration of effect.

Sample. The pilot was conducted with a subset of alumni from a private Southwestern international management MBA program and by using a snowball sample of working adults. The subset of alumni yielded 73 useable cases for time 1, but heavy attrition to time 2 exposed some issues with the study design. As such, only 25 respondents returned to complete time 2. Therefore, refinements were made to shorten the time 1 survey, which was so long that participants were unwilling to return for time 2. This survey reduction entailed reducing the number of qualitative responses as well as reducing some quantitative measures, such as cultural self-awareness and cultural psychological capital. The snowball sample included 83 useable cases from time 1 and 22 useable cases form time 2. These low time 2 response rates made comparisons over time difficult, as cell sizes were far too small to be meaningful. However, the samples did allow for analysis of the intensity measure (manipulation check) and for running an EFA with the cultural self-awareness measure and a CFA with the cultural psychological capital measure.

Procedure. Participants were randomly assigned to one of the five conditions. Participants completed the measures described below, read the scenario, and completed the surveys one week following the trigger. A difference resulted among some of the 5 scenarios. Upon closer inspection of the individual items for moral intensity, a clear pattern emerged for the

scenarios. Thus, the conclusion followed to focus to revise the scenarios to increase the difference in intensity across the five items. One scenario, the face veil scenario, posed problems as results across the two samples were inconsistent and no pattern emerged. Therefore, the number of scenarios was reduced to four and revised to strengthen the differences between the four. These revised scenarios were further pilot tested with a group of MBA students from the same Southwestern International MBA program the alumni were associated with.

Sample for Main Study

To date, studies addressing issues of global leadership or cross-cultural effectiveness focus on samples of expatriates or working adults with international responsibilities and experiences. Such characteristics are indeed important for testing the current model, however, they are limiting. Global mindset is a capacity that is critical for individuals working in an international capacity. However, it also is important for a broader population, especially as nations' populations diversify in terms of cultural values/orientations.

The sample was alumni of a graduate school of international management. This particular sample was expected to already possess a certain level of global mindset, as not only does the curriculum of the school target global mindset as an outcome upon graduation, but many alumni select into international careers that expose them to the further development of global mindset. Due to the responsibilities of many alumni, global mindset will also be expected to be important to successfully carrying out their jobs. As such, it is expected that the global mindset intervention will resonate with this particular sample in terms of its relevance. Although their current level of global mindset and ability to enact culturally appropriate behaviors may be high, it is expected that the intervention will still have a

significant impact on their cognitive complexity, cultural intelligence, and ability to suspend judgment. The alumni were recruited by e-mail via the alumni directory. An e-mail with the URL for the study was distributed to 5000 alumni. It was assumed for many alumni their address listed in the directory was either not current or one they do not use frequently, as well as for many, the initial e-mail landed in junk mail folders. Therefore, of the 5000, 236 usable responses resulted from the recruitment. To increase the likelihood of an adequate power for both time 1 and time 2, a snowball strategy was also used to augment the sample. The criteria of this recruitment were working adults with some level of experience working in a global context. Of those who had usable data for time 1 and completed the time 2 survey, a total sample of 114 was achieved. The time 1 sample (N=236) was used to test the first five hypotheses and the sample that completed both time 1 and time 2 (N=114) was used to hypotheses 6a-6d.

The sample did indeed capture a level of global experience. In terms of country of residence, 35 countries were represented in the complete time 1 sample (N=236) and 23 countries in the sample with both time 1 and time 2 data. On average, respondents had visited 9 countries in past 5 years in the complete time 1 sample (N=236) and 7 countries in the completed time 1 and time 2 sample (N=114). Respondents had lived abroad for 5.5 (N=236) and 5.9 (N=114) years at some point in their lives, and 63% (N=236) and 58% (N=114) reported having advanced second language abilities. Only 2% of the sample were Muslim. The average age was 40. 4 (N=236) and 41.1 (N=114) and average years of work experience were 16.6 (N=236) and 17.7 (N=114). All frequencies and means are presented in tables 1 and 2.

Procedure

The study was a between group pre- and post-test repeated measures design, in which participants completed survey measures, received the intervention in the form of a cultural trigger event and were asked to complete the same measures one week later.

The entire study took place online. All participants were contacted by e-mail and received a URL for the study. Upon visiting the URL, the participants first viewed an informed consent page. Similar to the pilot study, participants were randomly assigned to one of the four conditions of trigger intensity. After confirming their consent to participate in the study, participants completed survey items that capture a baseline for the global mindset variables. Thus, items measured cultural self-awareness, positivity, cognitive complexity, suspending judgment, and cultural intelligence. In addition, participants completed items pertaining to their personal background information such as whether they currently live abroad or have at some point in the past. Upon completing the surveys, one of the four triggers was presented to the participants. The trigger appeared in the form of a weblog in which a cross-cultural dilemma was discussed among bloggers. The participant contributed to the discussion at the end of the blog. In order to avoid common method bias, a temporal separation was utilized as suggested by Podsakoff, MacKenzie and Podsakoff (2003). Thus, participants were contacted after 1 week following the trigger event, to complete survey measures for cultural self-awareness, cognitive complexity, cultural intelligence, suspending judgment and culturally appropriate behavior. On average, participants responded to this request and completed time 2 measures 10 days after completing time 1.

Measures

Cultural Self-Awareness. To capture cultural self-awareness, a 9-item questionnaire had been developed for this study and tested in the pilot study. Three items were open-ended and were used to help identify the extent to which item stems were capturing the content domain of cultural self-awareness and to determine if additional items needed to be developed. The remaining six items ask participants to rate on a Likert-type scale, ranging from 1 to 7, the extent to which the items described them. Examples include "I am conscious of how my culture influences my understanding of normal behavior" (see Appendix A for complete list of items). These items were pilot tested and reduced to 5 items. For the main study, Cronbach Alphas for time 1 and time 2 were *0.855* and *0.875*, respectively (see table 3 for all study reliabilities).

Cognitive Complexity. Because cognitive complexity is a construct that has a complicated theoretical foundation and has been measured in many disciplines using different coding techniques, I have used a triangulation strategy to assess cognitive complexity. Cognitive complexity has been found to be domain specific. Therefore, measures of cognitive complexity must apply to the content of global mindset, as opposed to using sentence completion stems that do not apply to the a cross-cultural context. In the triangulation scheme, I used a survey measure, as well as coded qualitative responses of the participants for levels of cognitive complexity. Below I describe both methodologies.

The survey measure is a subscale of the empathy measure developed by Davis (1980) and is called Perspective-taking. Davis defines perspective taking as the "tendency to spontaneously adopt the psychological point of view of others" (Davis, 1983: 114). This definition falls in line with the overall concept of cognitive complexity derived from Kegan

and described in chapter two. In order to capture this construct, then, 8 items were used on a 5-point Likert-type scale, where 0 indicated the item does not describe the participant well and 4 indicated that it describes the participant very well. Examples of items include, “Before criticizing somebody, I try to imagine how I would feel if I were in their place” (Davis, 1980). The Cronbach alphas for time 1 and time 2 were *0.701* and *0.614*, respectively. The complete instrument may be reviewed in Appendix A.

The second method to capture respondent’s level of cognitive complexity was coding the responses that participants provided prior to experiencing the trigger event. Cognitive complexity was captured qualitatively and coded according to the guidelines presented by Baker-Brown, Ballard, Bluck, deVries, Suedfeld, and Tetlock (1992). Two open-ended sentence stems that pertain to the context of the study were presented to participants. They were allotted ample space to complete the statement. Two coders, who are blind to the hypotheses, were trained to code the protocols. The guidelines provide a scaling system from 1 to 7 in which 1 represents an absence of both differentiation and integration, 3 a moderate level of differentiation, 5 a moderate level of both differentiation and integration, and 7 a high level of both differentiation and integration. See Appendix A for the sentence stems.

Their inter-rater reliability was 70% and 76% respectively for the two sentence stems. This falls within the guidelines of Baker-Brown et al (1992) that the raters should reach inter-rater reliability of 70% or higher. In the event of a disagreement, the raters resolved their disagreement by discussing their varying interpretations and agreed upon a score to represent the particular response.

Suspending Judgment. Because suspending judgment has yet to be operationalized, I used two instruments to serve as proxies to measure the construct. The international personality item pool (IPIP) (Goldberg, Johnson, Eber, Hogan, Ashton. Cloninger, & Gough, 2006) provides 9 items that capture open-mindedness in the face of judgment. Items include "I make decisions only after I have all of the facts" and "I am a firm believer in thinking things through." These items were rated on a 5-point Likert-type scale with reported reliabilities of *0.80*. In this study, Cronbach Alphas for time 1 and time were *0.832* and *0.788*, respectively.

The second proxy instrument was the balanced processing dimension of the authentic leadership development questionnaire (Avolio et al, 2008). This 3-item subscale "refers to leaders who show that they objectively analyze all relevant data before coming to a decision" (Walumbwa et al, 2008: 95). Inherent in this objective analysis of relevant data is the process of suspending judgment. Items include "I solicit views that challenge my deeply held positions" and "I listen carefully to different points of view before coming to conclusions." Although reported reliabilities for balanced processing have been at *0.76* (Walumbwa et al), in this study, Cronbach alphas for time 1 and time 2 were *0.589* and *0.641* respectively.

Cultural Intelligence. An instrument to measure cultural intelligence has been developed by Ang et al (2004) and tested in terms of its relationship with personality (Ang, Van Dyne, & Koh, 2006), as well as with performance, cultural judgment, cultural adaptation, and decision making (Ang et al., 2007). Six items tap the dimension of cognitive CQ with an internal reliability coefficient of *0.84* (Ang et al., 2006). Sample items include "I know the legal and economic systems of other cultures (cognitive CQ)." Responses to the 6 items for cultural

intelligence are measured on a 7-point Likert-type scale, in which 1 = strongly disagree and 7 = strongly agree. Cultural Intelligence had an internal reliability coefficient of *0.884* in time 1 and *0.911* in time 2. A complete list of the items used can be found in Appendix A.

Positivity. To capture positivity, a measure from positive psychology and positive organizational behavior was used: positive psychological capital (PsyCap) (Luthans, Avolio, Avey, & Norman, 2007). A measurement for positive psychological capital (PsyCap) has been developed and validated for the workplace (Luthans et al., 2007). Because PsyCap is situation specific, items needed to be adapted to reflect the situation that applies to global mindset. As such, the workplace PsyCap items were modified to reflect cultural PsyCap and tested in the pilot. Examples include "I feel confident analyzing an unfamiliar culture to understand how I should behave (Efficacy)," "When in another country, I think that I can obtain goals that are important to me (Hope)," "I usually manage difficulties one way or another when traveling abroad (Resiliency)," and "I always look on the bright side of things regarding what I experience in other cultures (Optimism)." In total, 26 items had been developed and were reduced to 16 based on a factor analysis and reliability analysis from the pilot results. Items are measured on a 6-point Likert-type scale, where 1=strongly disagree and 6=strongly agree and achieved an internal reliability coefficient of *0.949* in time 1 and *0.954* in time 2.

Culturally Appropriate Behavior. To measure the outcome variable of culturally appropriate behavior, the items that measure the behavioral dimension of cultural intelligence were used. As noted in chapter 2, cultural intelligence is comprised of four dimensions. Thomas notes

that behavior is an outcome for the cognitive elements of cultural intelligence. I have thus chosen to use the items that Ang et al (2004) have found to reflect the behavioral dimension of CQ. Behavioral CQ is measured with five items on a 7-point Likert scale. Items of behavioral CQ that represent culturally appropriate behavior include "I change my non-verbal behavior when a cross-cultural situation requires it." The Cronbach's Alphas for time 1 and time 2 were *0.874* and *0.900*, respectively.

Covariates. Background information of the study participants is important to control for personal characteristics. Thus, participants were asked to complete information about their nationality, residency, and descriptors of their past cultural exposure. For instance, participants answered questions about experiences living and working abroad, second language ability, and frequency of international travel. For the purposes of conducting a more parsimonious analysis, a formative construct called international experience was developed. This includes the number of countries visited in the past 5 years, the amount of time spent living abroad, and the level of second language ability. In addition, given the sensitive nature of the context of the study, participants were also asked about their relations to and understanding of the Muslim world. All items may be reviewed in Appendix A.

Manipulation Check. To track the perceived intensity of the culturally induced trigger events, 6 items were selected and adapted from McMahon & Harvey (2006) to capture the seriousness of the scenario. Items were rated by the participants on a Likert-type scale in which 1 represented Strongly Disagree and 7 Strongly Agree. Sample items include "The

negative consequences (if any) of the scenario will be very serious" and "the weight of the problem in the blog is heavy."

Conclusion

The above-described methods outline how the study hypotheses were tested using four conditions of intensity for cultural trigger moments. These triggers were expected to initiate the developmental process of global mindset that would ultimately influence behavior to become more culturally appropriate. In addition to testing the study hypotheses, this design will shed light on interventions that may be used to accelerate global mindset development.

While this study has a number of strengths, some limitations and delimitations do exist. For instance, the context of Muslim culture is a very broad context. Although it is a boundary condition of the study, Muslim is nonetheless a very broad and varied classification of culture. Muslim denotes a religious belief in Islam, similarly to classifying a Christian culture. Many cultural values are represented within a Muslim culture. Sectarian violence in Iraq provides an indicator of how varied values are, as elsewhere in the Middle East. Multiply this variation by several national boundaries and it is easy to understand how simplistic of a classification "Muslim" is.

A strength, that may also have some limitations associated with it, is the level of intensity of the trigger events. It is important to recognize that cultural triggers occur at varying levels of intensity, however, defining the levels of intensity does not have a theoretical tradition in the literature, and as such, must be defined here. In addition, as much

as intensity may be manipulated, it is ultimately the perception of the participant that determines the true level of intensity.

Finally, while this study uses several validated instruments to measure the constructs of interest, for a few constructs, such as cultural self-awareness, items had to be developed for this study. To off-set this limitation, the measures were tested in the pilot study to provide a level of validation for the measures. In addition, by using qualitative methods to triangulate, I was able to assess whether the content domain of interest was in fact captured with the survey instruments.

In conclusion, this study provides a first empirical glimpse at the process of developing a global mindset and understanding how to accelerate this process.

CHAPTER 4: RESULTS

Correlations among the study variables are presented in tables 4-6. Table 4 provides the correlations of the complete time 1 sample (N=236), which represents all time 1 responses prior to receiving the intervention. Tables 5 and 6 provide time 1and time 2 correlations of the sample that had useable data for both time 1 and time 2 (N=114). In other words, this sample represents those respondents who completed both time periods and the time 2 data represents responses after participants received the intervention.

Table 4 highlights that most of study variables for the full time one sample (N=236) were correlated at either moderate (around .30) or high levels (around.50) and were found to be significant. Exceptions to this are the qualitative measure of cognitive complexity, which was only found to be correlated with positive psychological capital (*r=0.15*), open-mindedness, which was not correlated with cultural self-awareness and had lower correlations with cognitive cultural intelligence and behavioral cultural intelligence (*r=0.13* and *r=0.18*, respectively). In addition, perspective-taking and cognitive cultural intelligence were correlated below moderate levels (*r=0.16*).

Insert Table 4 about here

The same trend appears with the data from time one that represents only those participants who returned to complete time 2 (N=114) is presented in table 5. Once again all study variables, except the qualitative measure of cognitive complexity, were correlated at moderate (*r=0.30*) or high (*r=0.50*) levels and were significant. The qualitative measure of cognitive complexity did not correlate with positive psychological capital with this sample.

However, open-mindedness, as with the entire time 1 sample, was not correlated with cultural self-awareness, but was otherwise highly correlated with cognitive cultural intelligence (*r=0.428*) and behavioral cultural intelligence (*r=0.621*).

Insert Table 5 about here

Table 6 indicates that the same pattern of correlations was found for the same sample in their time 2 responses (N=114). The only difference between time 1 and time 2 was that open-mindedness was correlated with cultural self-awareness (*r=0.259*).

Insert Table 6 about here

The relatively high correlations provide some preliminary support for the respective hypotheses, with the exception of positivity moderating the relationship between cultural self-awareness (H3) and the partial mediation of suspending judgment (H4c). While such correlations provide some evidence, they are certainly not sufficient for testing these hypotheses or for capturing the full hypothetical model. As such, each hypothesis will be explored in greater detail using regression analysis. These series of analyses will deal with the complete time one sample prior to intervention, as hypotheses 1-5 address relationships of global mindset that do not take into consideration the intervention. Following these analyses, a series of structural equations will be presented to confirm the findings of the regressions and to test the overall fit of the time 1 data prior to the intervention. The a series

of ANOVAs will be presented to address hypothesis 6, which does account for the intervention and renders the four conditions and two time periods relevant for analysis.

Regression Analyses for Hypotheses 1-5

Hypothesis 1 dealt with the relationship between cultural self-awareness and cognitive complexity. Table 4 highlights that although the qualitative measure of cognitive complexity did not have a significant relationship with cultural self-awareness, the quantitative measure of cognitive complexity (perspective-taking) was significantly correlated with cultural self-awareness at $r=.27$. A regression analysis was run to determine if cultural self-awareness predicted cognitive complexity when controlling for demographic variables. Table 7 provides summaries of 4 model tests that included in the first step gender as a predictor of perspective-taking, followed by gender and age, then international experience before finally adding cultural self-awareness. Results show that the only significant predictor of perspective-taking was cultural self-awareness with a beta weight of *0.24*. The R^2 for the full model with 4 predictors was significant at *0.07*. Given these results, hypothesis 1 was supported.

Insert Table 7 about here

Hypothesis 2 predicted that cognitive complexity would be positively related to cognitive cultural intelligence. Once again, the qualitative measure of cognitive complexity was not significantly correlated with cognitive cultural intelligence, but the quantitative measure of perspective-taking was at $r=0.18, p < .01$. Next, I examined a step-wise

regression analysis with cognitive complexity was a predictor of cognitive cultural intelligence controlling for the three demographic variables noted above. Unlike the results for hypothesis 1, two of the three covariates contributed to the model predicting cognitive cultural intelligence. These variables were international experience and gender (women tended to have higher levels of cognitive cultural intelligence). Age did not contribute significantly to the model. When perspective-taking was added to the model, it accounted for additional unique variance, with a significant beta weight of $0.18, p = .01$. The overall R^2 for the full model (3 covariates and perspective-taking as predictors) was $R^2 = 0.15, p < .001$ representing a significant R^2 change from the nested model that included just the covariates. Given these results, hypothesis 2 was supported.

Insert Table 8 about here

Support was not found for hypothesis 3, which predicted that positivity would moderate the relationship between cultural self-awareness and cognitive complexity. Following the guidelines put forth by Baron and Kenney (1986), a model including the main effects of the constructs was first analyzed. As shown in table 9, both positivity and cultural self-awareness contributed to the model and together accounted for 10% of the variance, which produced a significant $R^2 = 0.10, p < .001$. Adding the interaction term did not create a significant R^2 change nor did the interaction make a unique contribution to the model above the main effects of positivity and cultural self-awareness. Figure 3 also highlights the lack of support for hypothesis 3, in which the interaction is not present.

Insert Table 9 and Figure 3 about here

Next, I tested hypothesis 4, which specified that suspending judgment would partially mediate the relationship between cognitive complexity and cognitive cultural intelligence. Baron and Kenny (1986) suggest three regression models to test this relationship and these are reflected in the series of hypotheses comprising hypothesis 4. Each of the following hypotheses was tested using two different proxies for suspending judgment: open-mindedness and balanced processing. The first model (H4a) involved regressing the mediator (suspending judgment) on the independent variable (cognitive complexity). This hypothesis was supported with both proxies as reflected in tables 10 and 11. Open-mindedness as the criterion variable yielded an $R^2=0.11$, $F=30.11$, $p<0.001$. In this model, perspective taking, the proxy for cognitive complexity, had a significant beta of 0.34 ($p<0.001$). Balanced processing was used as the second proxy for suspending judgment (see table 11) and yielded $R^2=0.15$, $F=40.48$, $p<0.001$. Perspective-taking had a beta weight of 0.38 ($p<0.001$).

Insert Tables 10 and 11 about here

The second regression model recommended by Baron and Kenny (1986) to test hypothesis 4b involved regressing the dependent variable (cognitive cultural intelligence) on the independent variable (cognitive complexity). This relationship is also reflected above in hypothesis 2 but is included in table 10 and 11 for the purpose of following the steps

recommended by Baron and Kenny for testing mediation. Just as reported for hypothesis 2, there was also support provided for hypothesis 4b. Both tables 10 and 11 report an overall $R^2=0.03, F=7.505, p=0.01$.

The third regression model involved regressing the dependant variable (cognitive cultural intelligence) on both the mediator, as well as the independent variable. In order to test for partial mediation, in this third regression model the mediator must contribute to the model and the effect of the independent variable must be less in the third regression model than in the second (Baron & Kenny, 1986: 1177). As seen in table 10, using open-mindedness as the proxy for suspending judgment, this condition was not fulfilled, as open-mindedness did not contribute to the model $(\beta=0.08, p=0.22)$. However, with balanced processing as the proxy for suspending judgment this condition was fulfilled. Baron and Kenny (1986) suggest "perfect mediation holds if the independent variable has no effect when the mediator is controlled" (1177). In this case, perspective-taking had a beta of 0.05 $(p=0.44)$, thus full mediation was found. However, the hypothesized relationship was partial mediation and as such neither proxy for suspending judgment supported the hypothesized relationship of partial mediation. However, balanced processing had a full mediation effect.

Hypothesis 5 was supported, in that cognitive cultural intelligence had a positive relationship with culturally appropriate behavior. Table 4 reports a significant correlation between these two variables of $r=0.34, p < .001$. The nested models shown in table 12 provide further evidence that cognitive cultural intelligence was the only significant predictor of culturally appropriate behavior when the other covariates were taken into consideration. The fourth model presented in table 12 that has all four predictors included was significant

with an $R^2=16$, $p < 0.001$. The beta weight for cognitive cultural intelligence was *0.38* ($p<0.001$), rendering it the only significant contributor to the model.

Insert Table 12 about here

The above regression analyses show support for the three direct relationships that were hypothesized; a positive relationship between cultural self-awareness and cognitive complexity, a positive relationship between cognitive complexity and cognitive cultural intelligence, and a positive relationship between cognitive cultural intelligence and culturally appropriate behavior. However, the interaction of positivity and cultural self-awareness and the mediation effect of suspending judgment were not supported. To further investigate these results, taking the supported main effects model into account, a series of structural equation models were run to first test the measurement model and second to test the substantive model. Results of these analyses are presented below again using the full time 1 data sample (N=236), which captures data prior to the intervention, and as such is intervention-neutral.

Results of Structural Equation Modeling of Time Data

The regression results above provide evidence that the hypothesized main effects were supported, whereas the indirect and interaction effects were not. The next round of analyses was aimed at understanding the overall model fit of the supported main effects model. Similar to the regressions above, these series of structural equations consider the process model of global mindset development with responses from participants prior to

receiving the intervention. Therefore, these analyses utilize the full time 1 sample (N=236). The first step is to explore the measurement model of the main effects variables followed by hypothesized or substantive model tests. The interaction and mediation effects are not included in this step given the lack of support for these relationships from the above analyses. The measurement and structural models are aimed at confirming the results found above by considering the fit of the entire model as opposed to the step-wise regressions that were tested above.

Andersen and Gerbing (1988) suggest to evaluate structural models, a two-step approach is necessary to first establish that constructs are properly measured before evaluating whether their structural relationships are supported and provide appropriate model fit. Therefore, I began by testing a model comprising the main effects reported above in the regression analyses. These tests included cultural self-awareness, cognitive complexity as indicated by perspective-taking, cognitive cultural intelligence, and culturally appropriate behavior. The overall measurement model fit was acceptable according to Hu & Bentler's guidelines. These guidelines indicate that when two of the three Comparative Fit Indices including the CFI, RMSEA and SRMR, exceed fit thresholds, then the model may be considered to have acceptable fit. Initially, I ran a confirmatory factor analysis (CFA) of all main effects variables, which yielded a Chi Square of *395.167, CFI = 0.930, RMSEA=0.051*, and *SRMR=0.053* (see Table 13 for measurement and structural model results). Given these results, the RMSEA and SRMR were in accordance with recommended fit levels (each below *0.06* and *0.08*, respectively), although the CFI was slightly below the common cutoff of *0.95*, but still within an acceptable range.

Insert Table 13 about here

While this initial fit of the measurement model is acceptable according to Hu and Bentler (1999), modification indices suggest that additional model improvement could be attained if two indicators from the cognitive cultural intelligence measure are correlated. These two indicators share a similar stem: “I know the rules….” which may explain why something other than the latent construct accounts for their variance. As such, I allowed these two indicators to correlate. By all accounts, this adjustment improved model fit. Table 13 shows that the test of the Chi Square difference was significant. In addition, the CFI came within a closer range of the suggested cutoff with a value of *0.949*. The RMSEA also improved as the value shifted from a *0.051 to 0.043* after the adjustment. The SRMR remained the same.

Once again, the modifications suggested an additional adjustment; to correlate two items from the culturally appropriate behavior measure, which begin with the same wording and address changing verbal behavior (item1) and changing non-verbal behavior (item 2). Similar to the two indicators correlated above, these two are theoretically justifiable to be correlated with each other because they share common wording, which may account for variance above the latent construct. The resulting fit of this measurement model had a significant Chi-Square difference and each fit index, including the CFI, was well within the suggested cutoffs. Table 13 presents the summary of the fit indices and shows the *CFI=0.955*. With appropriate fit established and no theoretically appropriate recommendations from the modification indices, the measurement model of the main effects variables is satisfactory.

The next step recommended by Anderson and Gerbing (1988) is to test the structural model. The initial main effects model is presented in figure 4 and shows the results of perspective-taking regressed on cultural self-awareness, cognitive cultural intelligence regressed on perspective-taking, and culturally appropriate behavior regressed on cognitive cultural intelligence. Just as the regression analyses above provided support for these hypothesized relationships, the structural model also found the paths to be significant, confirming the findings above. The overall fit for the structural model, as shown in both table 13 and summarized in figure 4 show the fit to be appropriate as two fit indexes, CFI and RMSEA, are within or, in the case of the CFI, very close to the suggested cutoff (Hu & Bentler, 1999). However, the SRMR moved outside of the recommended cutoff of .08 to .091. Reviewing the modification indices to understand why the SRMR changed, a very interesting, and at first glance, perplexing relationship was suggested. A sizable improvement in fit to the model would occur if cultural self-awareness were regressed on culturally appropriate behavior. Initially, this seemed out of line with the hypothesized model, however, upon further reflection, it became clear that this relationship supported the theory presented by many scholars that global mindset development is an ongoing, recursive process. In fact, Gupta and Govindarajan (2004) have suggested that the process is a series of S-curves that, although not linear, initiate new levels of awareness as global mindset becomes more advanced. Intrigued and excited about this prospect, I tested this model, although not hypothesized. The results in table 13 and figure 5 show that this additional relationship indeed improved the fit of the structural model to fall within acceptable ranges including the CFI=0.951, RMSEA=0.042, and the SRMR=0.061.

Insert Figures 4 & 5 about here

Although the regression analyses and structural models help test the hypothesized relationships of global mindset development, the cross-sectional data does little to shed light on the second research question regarding the development of global mindset over time. As such, the next series of analyses address the change in variables from time 1 to time two and the impact of the 4 conditions on this change. These analyses serve as a test of hypothesis 6.

Findings Testing Time 1 versus Time 2

Data were collected at two separate time periods to examine the change in global mindset. An initial paired samples t-tests (see table 14) indicated that only 2 of the study variables had significant mean differences from time 1 to time 2. These were behavioral cultural intelligence and meta-cognitive awareness. By reviewing the descriptive statistics for these variables, it was clear that the change in means was in an unexpected direction with scores in time 1 being higher than time 2. While unexpected, this may be explained simply by some level of priming, in which participants become more aware of their capabilities and provide a truer score in the second time period.

These initial results do not bode well for the hypothesized relationships that for each of the main effects variables in the hypothesized model (cultural self-awareness, cognitive complexity, cognitive cultural intelligence and culturally appropriate behavior) the change from time 1 to time 2 would be greater at greater levels of intensity. Without a main effect of change over time, differences across the four intervention conditions are unlikely.

Nonetheless, I ran repeated measures ANOVA to explore if the intervention had an effect at varying levels of intensity.

Table 15 presents the results testing hypothesis 6. The finding indicate that hypotheses 6a through 6d were not supported in that there was no significant changes found over time for any of the main variables at greater levels of intensity. There was a main effect for time with the dependent variable of culturally appropriate behavior, but as described above, this was in the unexpected direction, as the dependent variable decreased in value from time 1 to time 2. However, because a main effect was present, I ran a post-hoc analysis and found a simple effect in which the second condition, based on respect, was significantly different from the fourth condition, based on what the West admires about the Muslim World (see table 16).

Insert Tables 15 & 16 about here

Discussion

The purpose of this study was to explore two research questions: what are the relationships that contribute to global mindset and how can global mindset be developed? The first set of hypotheses (Hypotheses 1-5) address the first research question with regards to examining which variables contribute to global mindset. Of the five hypothesized relationships, three were supported. Namely, the direct effects of cultural self-awareness with cognitive complexity, cognitive complexity with suspending judgment and cognitive cultural intelligence, and cognitive cultural intelligence with culturally appropriate behavior were all

supported. Support was not found for the moderation effect of positivity with the relationship between cultural self-awareness and cognitive complexity or for the partial mediation effect of suspending judgment.

Support for hypothesis 1, that cultural self-awareness had a positive relationship with cognitive complexity, highlights how important cultural frames of reference are for making meaning of the world around us. Research focusing on self-concept development has highlighted that cultural contexts provide the frames that contribute to developing cognitive systems (Markus & Kitayama, 2003:281; Kitayama et al., 2003). As individuals transition between multiple cultures, their awareness of the influence of their home culture becomes more salient and flawed assumptions are often exposed. This cultural self-awareness often allows for the use of multiple cultural lenses, as individuals become aware of their own cultural paradigm and realize that there are other cultural perspectives that may be used to make sense of the world. As such, increased cultural self-awareness induces greater levels of perspective taking and allows individuals to expand the categories or the dimensions they use to make sense of the world represented by higher cognitive complexity. Many scholars have suggested this link exists (Gupta and Govindarajan, 2004; Tadmor & Tetlock, 2006) and this study provides one of the first empirical tests of this relationship and evidence that the relationship between cultural self-awareness and cognitive complexity is moderately strong.

Hypothesis two was also supported, indicating that cognitive complexity has a positive relationship with cognitive cultural intelligence. As individuals transition from a cognitively simplistic view of the world to a more systems-based perspective, they are able to recognize nuances that are present in cultural cues that may not have been apparent at lower levels of cognitive complexity. This increased level of cognitive categorization and ability to

recognize complex relationships gives individuals the capacity to utilize cultural nuances to increase their cognitive cultural intelligence, or cultural knowledge within and between various cultural contexts. This capacity is important, as cognitive cultural intelligence is not simply becoming a student of one culture prior to interacting with it, but rather it represents the means by which one may acquire cultural knowledge and regulate cognitive strategies for attaining cultural knowledge (Ang et al., 2004). In other words, a Frommer's guide to any culture is useful, but impractical for today's global environment in which leaders are traversing cultural boundaries often, without necessarily leaving their desks. As such, the capability to regulate cognitive strategies in the midst of cross-cultural interaction is critical for effectively influencing a diverse cultural group. Finding significance for hypothesis two indicates that we can prepare leaders to expand their cognitive cultural intelligence by helping them developing more complex cognitive categorization systems.

After testing the two main effects that were considered to be within the boundaries of global mindset (the outcome of global mindset development will be discussed under hypothesis 5), I hypothesized a moderation and a partial mediation effect. Hypothesis 3 stated that positivity would moderate the relationship between cultural self-awareness and cognitive complexity. This hypothesis was not supported. The theoretical development of this hypothesis suggested that as individuals became aware of their assumptions, and the potential limitations of their cultural frame, they may experience some level of dissonance or psychological discomfort. In order to reduce this discomfort, individuals need to come to terms with incongruent cognitions, which they may do by dismissing new cognitions or adjusting their perspective to accept the validity of the new cognitions. Tadmor and Tetlock (2006) argue that dismissing new cognitions or cultural cues maintains a path of cognitive

simplicity whereas adopting new cognitions increases cognitive complexity by creating new categories for understanding the world. This proposed relationship was established in finding support for hypothesis 1, in that cultural self-awareness predicts cognitive complexity. However, I argued with hypothesis 3 that the more positivity individuals introduced into this cognitive development cycle, the more likely they would reduce psychological discomfort through accepting other worldviews. Conversely, in the presence of greater negativity, individuals would dismiss the paradigms and hold on to the old and familiar as a means of understanding the world. The broaden and build model (Fredrikson, 2001; Fredrickson & Losada, 2005) provides support for this notion that positivity increases the ability to broaden one's mindset and to be more inquisitive and open to new possibilities. Although the hypothesized moderation effect was not supported, the test of moderation did uncover that a direct relationship of positivity was present with cognitive complexity and added a unique predictive contribution to the model that included cultural self-awareness. Therefore, future theoretical adjustments to the global mindset model may consider the direct relationship of positivity on cognitive complexity, as well as the possibility that positivity moderates other relationships in the model, such as the link between cognitive cultural intelligence and culturally appropriate behavior. Certainly, work by Ang et al. would support the notion that positivity, particularly self-efficacy, could play a role in enhancing this relationship.

The other hypothesis that was not supported was the partial mediation of suspending judgment on the relationship between cognitive complexity and cognitive cultural intelligence (Hypothesis 4). As the antithesis to stereotyping, suspending judgment is the act of collecting as much data as possible before assessing a situation. Individuals from collectivistic cultures tend to perceive behavior as a function of external factors whereas

individualistic cultures tend to view it based more on internal locus of factors, such as personality, as a means of describing why behaviors occur. The more individuals suspend their judgment, they can make more room for understanding other cultural perspectives for understanding a situation, while leaving themselves more space for observing additional cues. In addition, because suspending judgment is the converse of stereotyping, as individuals gain greater cognitive complexity, or dimensionality in their view of the world, stereotypes become less relevant and finer grained categories are used to examine and interpret situations. As opposed to understanding Muslim vs. non-Muslim and associating broad stereotypes with this dyadic approach, one may see a European Muslim, Middle Eastern Muslim, and Asian Muslim as distinctly different categories. Or they may see greater differentiation between British and French Muslims, Malaysian, Indonesian, and Indian Muslims. In other words, stereotypes begin to break down at finer levels of differentiation, and the ability, then to suspend judgment becomes easier as cognitive complexity increases. Hypothesis 4a does support this proposed conceptual relationship, in that cognitive complexity was a significant predictor of suspending judgment for both proxies of the construct: balanced processing and open-mindedness. Hypothesis 4b, a duplicate of hypothesis 2, was also supported. However, hypothesis 4c, which suggested that suspending judgment partially mediates the relationship between cognitive complexity and cognitive cultural intelligence, was not supported. Open-mindedness did not have a significant relationship with cognitive cultural intelligence and balanced processing fully mediated the relationship.

Although the evidence found for hypothesis 4a does offer initial evidence for the role of suspending judgment in global mindset development, the lack of support for partial

mediation indicates that further theorizing is necessary to advance our understanding regarding the construct of suspending judgment. One potential explanation for the findings presented here is that open-mindedness, although a very interesting variable, may not serve as an adequate proxy for the content domain of suspending judgment. The findings with balanced processing are interesting and allude to a future research direction of considering other relationships that balanced processing may have within the global mindset framework, such as a moderation effect or a direct effect with constructs such as culturally appropriate behavior.

The final hypothesis addressing the first set of research questions and the third direct relationship in the model was hypothesis 5: where I proposed a positive relationship between cognitive cultural intelligence and culturally appropriate behavior, the outcome variable of global mindset development. This hypothesis was supported.

Culturally appropriate behavior is somewhat elusive in how it is defined in the literature and in many instances is highly subjective. However, for this study I defined it as the fit between an observed behavior and the behavioral norm of a given context (Cooper et al., 2007). Behavioral cultural intelligence aligns with this definition nicely as it deals with the ability of individuals to adapt their behavior to fit the norms of the context (Ang et al., 2007). The fact that cognitive cultural intelligence had a positive relationship with culturally appropriate behavior is somewhat intuitive, as a level of understanding about cultural norms is necessary before an individual can appropriately adjust behavior to fit with norms.

The analyses that tested the individual hypotheses were useful in identifying which relationships were supported by this study and which were not. However, they left little room for understanding the overall fit of the hypothesized model. Therefore, I ran a series of

structural equations, as suggested by Andersen and Gerbing (1988), which first tested the measurement model followed by the structural model. These analyses were useful for confirming the findings that the hypothesized direct relationships were supported. Because the indirect and interaction effects were not supported in the nested regression models, I did not include them in the tests of the structural equation model.

These analyses not only confirmed my preliminary findings, they also uncovered a relationship that was not hypothesized but is highly supported by the literature. The process model confirmed that cultural self-awareness had a relationship with cognitive complexity, which in turn had a positive relationship with cognitive cultural intelligence, which then predicted culturally appropriate behavior. The modification indices suggested a model improvement of adding a relationship between culturally appropriate behavior and cultural self-awareness. In doing so, a marked improvement in model fit was observed. This finding highlights a concept that much of the literature suggests: that global mindset is not a one-time linear process. Rather, each iteration is expected to loop back to the beginning of the process and continues to further develop global mindset. Gupta and Govindarajan (2004) call this an S-curve of development. However, several scholars in the area of self-concept research would also argue that as individuals increase their behavioral repertoires, or try on new selves, they continue to learn more about their self-concept and how various aspects of their context then influence how they perceive themselves. In this case, the context is crossing new cultures, and Markus and Kitayama (2003) describe many instances in which this process influences how we understand ourselves and the role of our culture in interpreting ourselves, especially when we experience other cultures. This finding provides tremendous support for

the continual process of global mindset development that many scholars have suggested, but have yet to empirically explore.

The second phase of analyses addressed the second research question and hypothesis 6: exploring how global mindset may be developed. Hypotheses 6a through 6d suggested that for the four central constructs, cultural self-awareness, cognitive complexity, cognitive cultural intelligence, culturally appropriate behavior, the change in each variable from time 1 to time 2 would be greater at higher levels of intensity. None of these four sub-hypotheses were supported as none of the variables, with the exception of culturally appropriate behavior, produced a significant change from time one to time two. In the case of culturally appropriate behavior, the change was in the unexpected direction from time 1 to time two. Although initially discouraging, two potential explanations exist for these results. The first is that the very complex nature of observing change in global mindset cognitive processes may require a time frame that allows space for interventions to take hold over a substantial time horizon. The average passage of time for participants from time 1 to time two was 10 days and may not have been sufficient for the intervention to elicit any changes in thinking. An additional time horizon may have allowed for changes to occur.

The second explanation, which addresses the issue of the unexpected direction of change from time 1 to time 2, is that the intervention may have initiated a level of self-awareness that caused participants to provide a more realistic estimate of how they scored on cultural self-awareness, cognitive complexity, cognitive cultural intelligence and particularly, culturally appropriate behavior. After experiencing one of the four conditions, perhaps the outcome was a greater awareness that one may not be as culturally aware as initially believed.

Limitations

The lack of change from time 1 to time 2 left little room to understand any processes that may explain how global mindset can be developed. One clear temptation is to immediately jump to the conclusion that the intervention was ineffective. While this may very well be, it is also a convenient conclusion and one that may be premature. Another possible explanation could be an inadvertent flaw in the design of the study. Participants were asked to complete time two surveys after 7 days of completing the time 1 surveys and also experiencing the intervention. As mentioned above, on average, participants completed the time 2 surveys after 10 days. This may be a time period that is too brief for any real effects to take hold and one could argue that after 10 days, the survey possibly served more as a booster than as a true indicator of development. Indeed, one could argue that the variables involved in global mindset are so complex that they require months if not years to incubate and manifest as true changes. As such, a longer time horizon may provide for more interesting results in future studies.

A final explanation for the lack of significance in the change over time may simply be an issue of statistical power. With an overall sample size of 114 for both time 1 and time 2, the cell size was on average only 28.5 across the four conditions. The smaller than hoped for sample may have limited my ability to examine the impact of the experimental manipulations on study variables over time. Furthermore, the high attrition rate from time 1 to time 2 may have also produced a more biased and restricted sample. As such, it is difficult to maintain the sampling across both time periods was truly random, although random assignment was used at the onset of the study. This means that we may not have been able to maintain

continuing equivalence. Tables 1 and 2 provide sample characteristics of both the entire time 1 sample as well as the sample that completed both time 1 and time 2. These demographic indicators show some changes in sample characteristics as attrition occurred.

Furthermore, given the sample characteristics of alumni from an International MBA program that represent 23 countries of residence, have lived abroad on average for 5.5 years in the case of the entire time sample, 5.9 years with the sample that completed time 1 and time 2, and have advanced second language proficiency, it is possible that a ceiling effect exists with this sample and may account for a lack of change in the short term on the study variables. The sample was expected to be relatively sophisticated with regard to global mindset and demographic variables (tables 1 and 2) as well as the descriptive statistics of the study variables presented in table 17, indicate that this sample did indeed have a high level of international exposure and had relatively high scores on the study variables. As such, manipulating these variables to increase with a short intervention may be less feasible than with a sample that did not already have some level of global mindset proficiency.

Insert Table 17 about here

With regard to the lack of support for the hypothesized moderation and mediation effects a number of possibilities may serve as explanations. The interaction may simply not exist, but rather the role of positivity may have a more direct effect with the study variables. The test of moderation did indeed indicate that a direct relationship between positivity and

cognitive complexity was present and this should be considered in future theorizing of global mindset development.

As for the hypothesized mediation effects, reliabilities indicated that the balanced processing proxy may not have been an appropriate measure for the construct of suspending judgment. Conversely, the open-mindedness measure did have appropriate reliability coefficients, the proxy nonetheless may not have fully captured the appropriate content domain. In other words, despite indicators that open-mindedness was a reliable measure, the lack of support for the hypothesized relationship with this particular measure may provide evidence that the proxy did not truly capture the construct of interest. However, open-mindedness may account for a different relationship within the model and further theorizing may consider whether it has a more direct relationship with culturally appropriate behavior.

One interesting observation, although not statistically grounded, was that the condition with the smallest participant return rate was the condition that described whether the Muslim employee had the opportunity to do his or her best at work. Conversely, the condition with the highest participant return rate was the most intense condition describing what Americans admire about the Muslim World and vice versa. This pattern may indicate that the more intense scenario sparked interest among study participants than the less intense conditions and may, as a result, have a more meaningful impact on the participants. In other words, those who were assigned to the most intense condition were likely more engaged in the development process and as a result, were more likely to follow through and continue the developmental cycle.

Given this possibility, future iterations of this study may consider this single condition as the intervention and use a control group to test the difference between an

intervention and no intervention. Such a design would address two issues that came to light during this particular study. The first issue is the question of sample size. Rather than diluting a sample across 4 conditions and thus having cell sizes that may be too small to be meaningful, thus reducing statistical power, by concentrating a sample into two conditions may help determine whether an intervention strategy has an impact. The second issue that the new design may address is the question of priming during time one. In other words, it help to answer if the intervention influences changes over time, or whether the survey in time 1 provides enough priming on global mindset issues that they, too, begin a process of change. Therefore, the future study may explore whether the intervention accelerates global mindset development above and beyond the priming power of the survey items. Such a study would also need to utilize a longer time horizon between time 1 and time 2 and possibly add a third data collection period to address the issue discussed above with regard to study variables decreasing from time 1 to time 2. The third collection period may provide a truer indication of changes in cognitive processes over time.

Practical Implications

This study provides several practical implications for global and cross-cultural leadership practice. The world economy is so intertwined that a poor lending decision made in the Midwest of the United States, can reverberate through the world and impact the micro lending opportunities of a rural entrepreneur in Bangladesh. As the world flattens, shrinks and becomes more crowded (Friedman, 2008), individuals come into contact with other cultures on a regular basis. How individuals chose to respond to these interactions can create tremendous personal and organizational opportunities, but may also end in failure. A global

mindset provides leaders with the ability to turn cultural interactions into global opportunities. Global mindset is the engine of effective global leadership, as it deals with not only the “what” of global leadership, but also the “how.” In other words, research has already provided evidence over the years regarding what different cultures view as contributing to effective leadership (House et al. 2004; Bass, 1997). For instance, aspects of transformational leadership appear to be virtually universal (House et al. 2004; Bass, 1997). Such knowledge begs the question of why 85% of Fortune 500 companies believe they have a shortage of the appropriate global leadership skills (Gregersen, Morrison & Black, 1998). While transformational leadership may be universal, the meaning and manifestation of the leadership behavior associated with this higher order construct may not be. In other words, to behave in a transformational manner in a new cultural context may require an adjustment to behavior to be perceived as transformational in the new context. Global mindset development allows such leaders to understand the nuanced nature of subtle behavioral adjustments to fit the context. Therefore, as global mindset develops, leaders become more adept at recognizing and understanding the cues around them and incorporating those cues into their behavioral repertoires.

By finding evidence of the variables that provide direct links to culturally appropriate behavior, we can begin to develop intervention strategies that address each stage of global mindset development, starting with cultural self-awareness, adding on cognitive complexity, and finally, focusing on cognitive cultural intelligence. Although the intervention used in this study did not appear to effectively manipulate these variables, a series of interventions that pinpoint each variable individually may be more successful at accelerating global mindset development. In addition, given the direct relationship that positivity had with cognitive

complexity, interventions that have been shown to work with this construct (Luthans, Avey, Avolio, Norman, & Combs, 2006) may be immediately utilized to build this capacity for the cultural context.

Particularly interesting for developing global leaders was the finding of the continual nature of global mindset development in that the process appears to loop back from culturally appropriate behavior to cultural self-awareness. This indicates that interventions should not be one-time, 2-hour seminars, but rather they should take an approach of providing boosters that allow leaders to continually explore and reflect on the impact of culture on their understanding of the world (cultural self-awareness) as well as to more directly reflect on aspects of their own cognitive complexity.

Certainly, as individuals gain exposure to more cultures, they begin to see that all Europeans or Americans or Asians or Latinos do not look or behave alike (Clapp-Smith & Hughes, 2007). Rather, they begin to understand just how different Japan is from China or that all Middle easterners are not Muslim, or that Islamic financing is a new opportunity for doing business. As leaders learn more culturally appropriate behaviors to add to their repertoires, they will better understand that their culture may influence the idea that all Asians look alike, particularly if they grew up amusing about the Sixteen Candles character, Long Duk Dong. They may recognize that their culture had influenced this faulty stereotype and begin to see beyond it.

Overall, the findings of this study help us to understand how we can begin to develop leaders to be more successful in the increasing global economy. The technology boom as well as the current financial crisis offer evidence that every corner of the globe is somehow impacted by or influences individuals in all parts of the world. Greg Mortensen’s best selling

novel about his experiences building schools in rural Pakistan, indicates that even villages that do not contribute to the global economy through trade with other parts of the world, nonetheless impact the world economy. He argues that when education is not available in rural villages, fundamentalist Islam fills a void that balanced education would otherwise fill, which leads young impressionable men to follow a path of extremism (Mortensen & Relin, 2006). By recognizing how intertwined we are and that issues in other parts of the world do affect us as individuals as well as our organizations, we may take a broader perspective in understanding not only others but also ourselves. Leaders who have this mindset have left their mark on the world. For example, Professor Muhammad Yunus founded the micro financing organization the Grameen Bank to "create economic and social development from below" and to help large population groups break out of poverty (Nobel Prize Announcement, 2006). Both Mortensen and Yunus applied and further developed their global mindsets to serve as truly global leaders, founding organizations that impact the lives of many from several parts of the world and provide a positive engine to globalization. The leaders who continually develop their global mindsets not only attain personal success and success for their organizations, but also are more likely to contribute to a more sustainable form of globalization. By understanding how to develop these leaders, this study provides a first step towards building a global economy that provides a positive opportunity for all members.

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Figure 1: Theoretical Model of the Process of Global Mindset Development

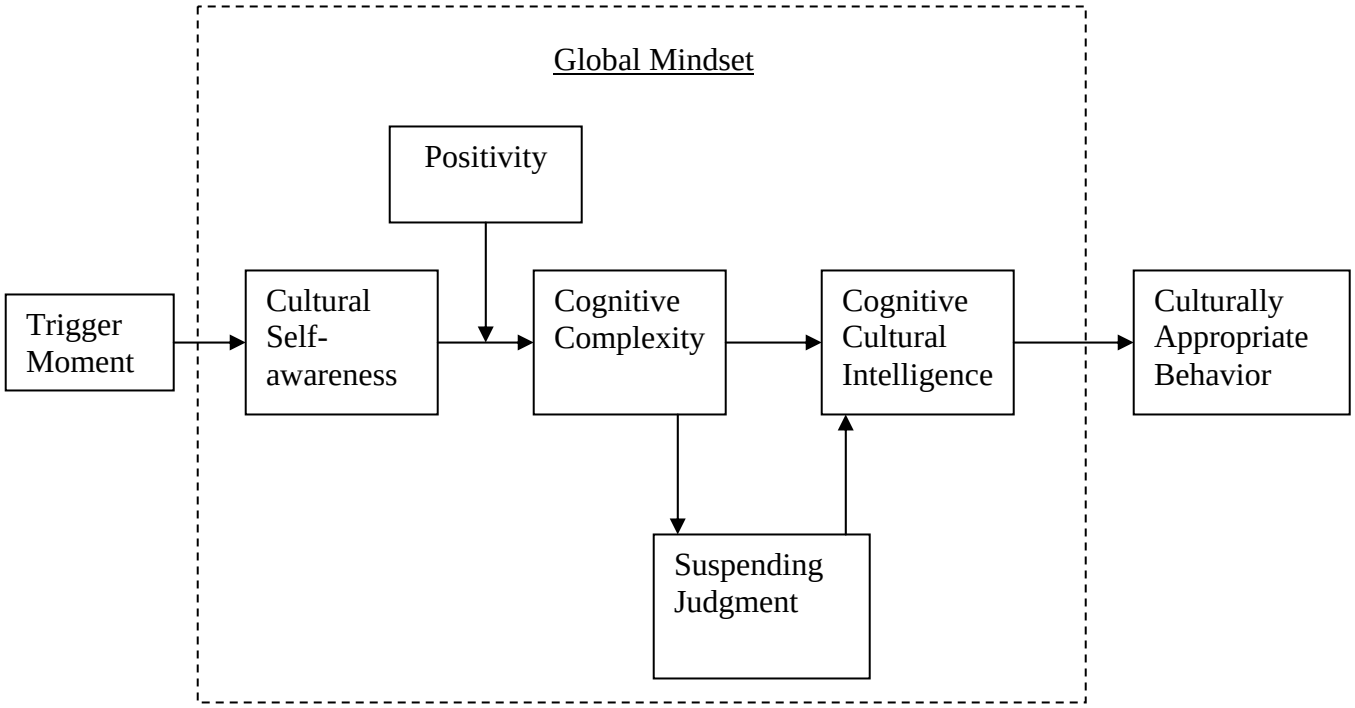
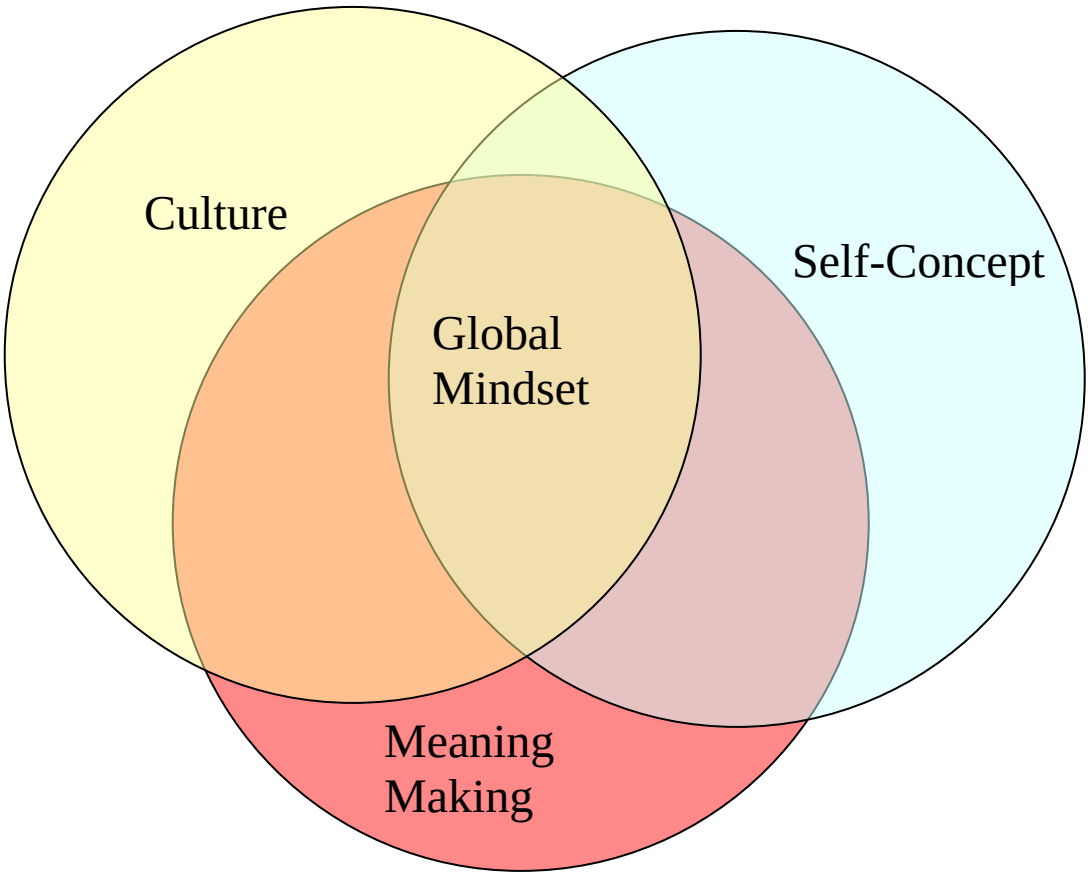


Figure 2: Conceptual Pillars of Global Mindset



APPENDIX A: MEASURES

Cultural Self-Awareness

Directions: The following questions deal with aspects of your own national culture and how it impacts you. Culture is defined as the norms and values of a nation. When "my culture" appears in the question, consider the national culture of the country where you have spent the majority of your life. For instance, if you were raised in the United States, please consider "American" culture as your culture. Select the answer that BEST describes you AS YOU REALLY ARE (1=strongly disagree; 7=strongly agree).

Final version for Main Study

1. I am conscious of the influence of my culture in the way I see the world.
2. I am conscious of how my culture influences my understanding of normal behavior.
3. I am conscious of the social cues that exist in my own culture.
4. I understand how culture influences the expectations I have of others.
5. I think about how culturally different others may perceive my behavior.

Removed after EFA from Pilot data:

1. I frequently question why certain values are important to me.
2. My cultural background is something that I think about often.
3. I often discuss my cultural background with friends and family.
4. I have a good understanding of my own culture.

Answer the following by using as much space as you need: (Pilot Only)

1. Describe how your culture influences the way you think.
2. Describe a time when you questioned the cultural meaning of a historical event?
3. How has your culture influenced your value system?
4. Under what circumstances are you more aware of cultural differences between you and others?

Perspective-taking

Taken from Davis, Mark H, (1980) A Multidimensional Approach to Individual Differences in Empathy. *JSAS Catalog of Selected Documents in Psychology, 10, 85-104*
(Alpha coefficients: Males, .75; Females, .78)

Directions: On a scale of 0 to 4, Rate the extent to which the following statements describe where 0 = does not describe me well and 4 = describes me very well

1. Before criticizing somebody, I try to imagine how I would feel if I were in their place.
2. If I'm sure I'm right about something, I don't waste much time listening to other people's arguments. (R)
3. I sometimes try to understand my friends better by imagining how things look from their perspective.
4. I believe that there are two sides to every question and try to look at them both.
5. I sometimes find it difficult to see things form the "other guy's" point of view. (R)
6. I try to look at everybody's side of a disagreement before I make a decision.
7. When I'm upset at someone, I usually try to "put myself in his shoes" for a while.
8. It's rare that some issue is ever black and white – usually the truth is somewhere in between.

Qualitative Assessment of Cultural Cognitive Complexity

Directions: Below are two stems that provide the beginning of a statement. Please complete the statement as you see fit. You may make the statement as long or as short as necessary.

1. Business, Islam and democracy….
2. For business relations, Muslims' views of the West…

Open-mindedness

Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., & Gough, H. C. (2006). The International Personality Item Pool and the future of public-domain personality measures. *Journal of Research in Personality, 40,* 84-96. *(Alpha = .80)*

Directions: Please rate how accurately each statement describes you. Describe yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as you are, and roughly your same age. (1=Very Inaccurate, 5=Very Accurate)

1. I try to identify the reasons for my actions.
2. I make decisions only after I have all of the facts.
3. I am valued by others for my objectivity.
4. I am a firm believer in thinking things through.
5. I weigh the pro's and the con's.
6. I try to have good reasons for my important decisions.
7. I am valued by my friends for my good judgment.
8. I don't think about different possibilities when making decisions.
9. I don't tend to think things through critically.

Balanced Processing

Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S., & Peterson, S. J. (2008). Authentic leadership: development and analysis of a multidimensional theory-based measure, *Journal of Management 34, 89-126*

Directions: The following items refer to your style, as you perceive it. Please judge how frequently each statement fits your style. (0=Not at All, 4=Frequently, if not Always

1. I solicit views that challenge my deeply held positions.
2. I analyze relevant data before coming to a decision.
3. I listen carefully to different points of view before coming to conclusions.

Cultural Intelligence

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.

Directions: Indicate how much you agree or disagree that each statement below describes you. . (1=strongly disagree; 7=strongly agree).

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.

Metacognitive Awareness

Adapted from Schraw, G., Dennison, R.S. (1994). Assessing metacognitive awareness. *Contemporary Educational Psychology,* 19, 460-475.

Directions: Indicate how much you agree or disagree that each statement below describes you. (1=strongly disagree; 7=strongly agree).

1. I try to use learning strategies that have worked in the past.
2. I understand my intellectual strengths and weaknesses.
3. I am good at organizing information.
4. I have a specific purpose for each strategy I use.
5. I use different learning strategies depending on the situation.
6. I periodically review to help me understand important relationships.
7. I find myself pausing regularly to check my comprehension.
8. I ask myself if I have considered all options after I solve a problem.
9. I know when each strategy I use will be most effective.
10. I consciously focus my attention on important information.
11. I ask others for help when I don't understand something.
12. I focus on the meaning and significance of new information.
13. I reevaluate my assumptions when I get confused.
14. I ask myself if I learned as much as I could have after I finish a task.
15. I set specific goals before I begin a task.
16. I think of several ways to solve a problem and choose the best one.

Cultural Positive Psychological Capital

Adapted from Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Psychological capital: Measurement and relationship with performance and satisfaction. Personnel Psychology.

Directions: Please indicate the extent to which you agree or disagree with the follow statement using the scale below from strongly disagree to strongly agree. Also note that cross-cultural experiences are not limited to being in a foreign country. For example, think about cross-cultural interactions you have had in your home country if you have not been in a different country. (1 = Strongly disagree, 6 = strongly agree)

1. There are lots of ways around any problem that I face when in another culture. (HOPE)
2. I feel confident that I can find my way around in a culture other than my own. (EFF)
3. Even when things are tough, I can perform quite well in other cultures. (RESIL)
4. I feel confident analyzing an unfamiliar culture to understand how I should behave. (EFF)
5. I feel confident contributing to discussions about issues when I'm interacting with people from other cultures. (EFF)
6. I am confident that I can perform effectively on many different tasks even in other cultures. (EFF)
7. Right now I see myself as being pretty successful when I'm in another culture. (HOPE)
8. I can think of many ways to reach my goals when I'm a different culture. (HOPE)
9. I usually manage difficulties one way or another when in another culture. (RESIL)
10. When in another culture, I think that I can obtain goals that are important to me. (HOPE)
11. I can be "on my own" so to speak in another culture if I have to. (RESIL)
12. I can get through difficult times in another culture because I've experienced difficulty before. (RESIL)
13. I always look on the bright side of things regarding what I experience in other cultures. (OPT)
14. I'm optimistic about what will happen to me in the future as it pertains to interacting with people from cultures other than my own. (OPT)
15. When interacting with people from a different culture, and things are uncertain, I usually expect the best. (OPT)
16. I approach being in other cultures as if "things will turn out for the best." (OPT)

Behavioral Cultural Intelligence

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.

Directions: Indicate how much you agree or disagree that each statement below describes you. . (1=strongly disagree; 7=strongly agree).

1. I change my verbal behavior (e.g., accent, tone) when a cross-cultural interaction requires it.
2. I change my non-verbal behavior when a cross-cultural situation requires it.
3. I use pause and silence differently to suit different cross-cultural situations.
4. I vary the rate of my speaking when a cross-cultural situation requires it.
5. I alter my facial expressions when a cross-cultural interaction requires it.

Background Information (T1 only)

1. Nationality
2. Religion
3. Country of Residence
4. Gender
5. Years of work experience
6. Age
7. Highest education level achieved
8. How many countries have you visited in the past five years?
9. Do you speak a second language? Fluently?
10. Have you ever/do you work/live abroad? How long?
11. Are you Muslim?
12. Do have any Muslim family members? What is their relation to you?
13. Do you have any friends or colleagues who are Muslim?
14. How would you classify your understanding of Muslim culture?
15. Have you ever done business with a company from a predominantly Muslim country?
16. When you think of Muslim culture, what images does it evoke for you? (ask at both T1 & T2)
17. Please describe one cross-cultural experience that has impacted how you view the world.

Manipulation Check

Adapted from McMahon & Harvey (2006). An analysis of the factor structure of Jones' moral intensity construct. Journal of Business Ethics, 64: 381-404.

Directions: Rate the extent to which you agree or disagree with the following statements as they pertain to the blog you just read.(1=Strongly Disagree, 7=Strongly Agree)

1. The negative consequences (if any) of the scenario will be very serious.
2. The scenario is likely to cause harm.
3. The blog portrays a serious situation for the organization.
4. The dilemma the bloggers present is trivial. (R)
5. The weight of the problem in the blog is heavy.
6. The issue discussed in the blog is critical to the success of the project.

APPENDIX B: TRIGGER SCENARIOS

Condition 1: Encourages Development

GLOBAL LEADERS

Welcome to the discussion board designed to help executives share their ideas about managing multicultural workplaces. Start a new thread or contribute to an existing thread below:

Wednesday, September 17, 2008
Preparing for cross-cultural work team
I am now part of a multi-cultural strategic team that is tasked with finding growth opportunities for the company by determining how to introduce products into new markets. We have a really talented group, but our initial organizing meeting in Chicago turned out to be problematic in terms of how the group interacted with each other. I think the discomfort in the group was due in large part to a women who is Muslim.
Posted by strategyguru at 2:04

---

5 Comments

Corneroffice said…
Why was that an issue?
September 17, 2008 2:44 PM

Strategy Guru said…
I'm not really sure. She seemed ill-at-ease with the group and the group didn't know how to react. **Each time our Muslim colleague tried to add to the conversation, her contribution was ignored.** Other members either cut her off before she could make a point, or simply went on with a completely different point after she offered input. **She commented to me later that she saw this strategy project as a great personal opportunity but she was afraid no one in the group would welcome or encourage her participation in the project.**
September 17, 2008 3:28 PM

Dataminer said…
I'm not surprised that your colleague felt that way. There is an interesting article based on data from the Gallup Poll. It shows that **Muslims in London report that in comparison to British respondents, it is less likely that someone at work encourages their development. In fact, 56% of the London Muslims reported being encouraged versus 64% of British respondents.** There was also an article in the Financial Times about Muslims integrating into Great Britain that concluded that after 50 years of being in Europe, Muslims have a high jobless rate, perform worse on the job market than native

Europeans, and are viewed with suspicion. Check out these two articles:
http://search.ft.com/ftArticle?queryText=Muslims+in+Europe%2C+workplace&y=0&aje=false&x=0&id=070820000620&ct=0

http://search.ft.com/ftArticle?queryText=Europe+can+feel+at+home&y=0&aje=false&x=0&id=070916004326&ct=0

September 17, 2008 3:56 PM

Strategy Guru said…
I think that does help me to understand my colleague's comments, but how do I reconcile this? I've never been in a situation where someone's religious beliefs from another culture that is so different than ours influenced the work environment. I feel like the group needs to get beyond this and achieve a professional comfort level in order to come up with a viable strategy for our company.

Our team is responsible for developing a strategy to add 1 additional percentage point to our company's growth. That translates into $4 million in the first year of rollout.

I'm already seeing this discomfort among the group getting in the way of our productivity.
September 17, 2008 4:12 PM

Corner office said…
The Gallup information intrigued me, so I went to their website and found some more data that could help you. Gallup asked people in 134 countries if "religion is an important part of your daily life." For countries representing the Muslim world, those responding yes ranged from 99% in Indonesia to 74% in Iran. What do you think the response was in the US? 68%...pretty close to Iran, so the value of religion in our daily lives isn't that far off, but there are differences.
September 17, 2008 4:32 PM

Condition 2: Respect

GLOBAL LEADERS

Welcome to the discussion board designed to help executives share their ideas about managing multicultural workplaces. Start a new thread or contribute to an existing thread below:

Wednesday, September 17, 2008
Preparing for cross-cultural work team
I am now part of a multi-cultural strategic team that is tasked with finding growth opportunities for the company by determining how to introduce products into new markets. We have a really talented group, but our initial organizing meeting in Chicago turned out to be problematic in terms of how the group interacted with each other. I think the discomfort in the group was due in large part to a couple of team members who are Muslim.
Posted by strategyguru at 2:04

---

5 Comments

Corneroffice said…
Why was that an issue?
September 17, 2008 2:44 PM

Strategy Guru said…
I'm not really sure. The whole group seemed ill-at-ease and I don't know why. **Each time our Muslim colleagues tried to add to the conversation, their contribution was ignored.** Other members either cut them off before they could make a point, or simply when on with a completely different point after they offered input. Later, **I overheard the two Muslims talking about feeling a lack of respect from the group.**
September 17, 2008 3:28 PM

Dataminer said…
I'm not surprised that your colleagues feel that way. There is an interesting article based on data from the Gallup Poll. It shows that **in comparison to British respondents, a significantly smaller number of Muslims in London (68%) report that they were treated with respect all day the day before the survey. In contrast, 90% of British respondents reported being treated with respect all day.** In addition, **London Muslims were twice as likely to have experienced religious discrimination.** There was also an article in the Financial Times about Muslims integrating into Great Britain that concluded that after 50 years of being in Europe, Muslims have a high jobless rate, perform worse on the job market than native Europeans, and are viewed with suspicion. Check out these two articles:

<A HREF="http://search.ft.com/ftArticle?queryText=Muslims+in+Europe%2C+workplace&y=0&aje=false&x=0&id=070820000620&ct=0" REL="nofollow"> Religious fault line in Europe </A>

<A HREF="http://search.ft.com/ftArticle?queryText=Europe+can+feel+at+home&y=0&aje=false&x=0&id=070916004326&ct=0" REL="nofollow">Europe can feel at home with 16m Muslims</A>
September 17, 2008 3:56 PM

Strategy Guru said…
I think that does help me to understand my colleague's comments, but how do I reconcile this? I've never been in a situation where someone's religious beliefs from another culture that is so different than ours influenced the work environment. I feel like the group needs to get beyond this and achieve a professional comfort level in order to come up with a viable strategy for our company.

Our team is responsible for developing a strategy to add 2 additional percentage points to our company's growth. That translates into $8 million in the first year of rollout.

I'm already seeing this discomfort among the group getting in the way of our productivity.
September 17, 2008 4:12 PM

Corner office said…
The Gallup information intrigued me, so I went to their website and found some more data that could help you. Gallup asked people in 134 countries if "religion is an important part of your daily life." For countries representing the Muslim world, those responding yes ranged from 99% in Indonesia to 74% in Iran. What do you think the response was in the US? 68%...pretty close to Iran, so the value of religion in our daily lives isn't that far off, but there are differences.
September 17, 2008 4:32 PM

Condition 3: Best at Work

GLOBAL LEADERS

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Posted by strategyguru at 2:04

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5 Comments

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Why was that an issue?
September 17, 2008 2:44 PM

Strategy Guru said…
I'm not really sure. She just seemed ill-at-ease and the group didn't know how to react. **Each time our Muslim colleague tried to add to the conversation, her contribution was ignored.** Other members either cut her off before she could make a point, or simply went on with a completely different point after she offered input. **She commented to me later that she wanted to be sure that she could contribute to the strategy based on her knowledge and business experience and not be type cast because of her culture or religion.**
September 17, 2008 3:28 PM

Dataminer said…
I'm not surprised that your colleague felt that way. There is an interesting article based on data from the Gallup Poll. It shows that **in comparison to British respondents, a significantly smaller number of Muslims in London (69%) report that they have the opportunity to do what they do best at work. In contrast, 78% of British respondents reported having such opportunities.** You wonder why they are feeling they can't contribute their best. There was also an article in the Financial Times about Muslims integrating into Great Britain that concluded that after 50 years of being in Europe, Muslims have a high jobless rate, perform worse on the job market than native Europeans, and are viewed with suspicion. Check out these two articles:

<A HREF="http://search.ft.com/ftArticle?queryText=Muslims+in+Europe%2C+workplace&y=0&aje=false&x=0&id=070820000620&ct=0" REL="nofollow"> Religious fault line in Europe </A>

<A HREF="http://search.ft.com/ftArticle?queryText=Europe+can+feel+at+home&y=0&aje=false&x=0&id=070916004326&ct=0" REL="nofollow">Europe can feel at home with 16m Muslims</A>
September 17, 2008 3:56 PM

Strategy Guru said…
I think that does help me to understand my colleague's comments, but how do I reconcile this? I've never been in a situation where someone's religious beliefs from another culture that is so different than ours influenced the work environment. I feel like the group needs to get beyond this and achieve a professional comfort level in order to come up with a viable strategy for our company.

Our team is responsible for developing a strategy to add 3 additional percentage points to our company's growth. That translates into $12 million in the first year of rollout.

I'm already seeing this discomfort among the group getting in the way of our productivity.
September 17, 2008 4:12 PM

Corner office said…
The Gallup information intrigued me, so I went to their website and found some more data that could help you. Gallup asked people in 134 countries if "religion is an important part of your daily life." For countries representing the Muslim world, those responding yes ranged from 99% in Indonesia to 74% in Iran. What do you think the response was in the US? 68%...pretty close to Iran, so the value of religion in our daily lives isn't that far off, but there are differences.
September 17, 2008 4:32 PM

Condition 4: Admire about the West

GLOBAL LEADERS

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Preparing for cross-cultural work team
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Posted by strategyguru at 2:04

---

5 Comments

Corneroffice said…
Why was that an issue?
September 17, 2008 2:44 PM

Strategy Guru said…
I'm not really sure. The whole group seemed ill-at-ease and I don't know why. **Each time our Muslim colleagues tried to add to the conversation, their contribution was ignored.** Other members either cut them off before they could make a point, or simply went on with a completely different point after they offered input. Later, I overheard a couple of **Americans talking about why Muslims would live in a democracy where liberty and freedom of speech are important.**
September 17, 2008 3:28 PM

Dataminer said…
I'm not surprised that your colleagues said that. There is an interesting article based on data from the Gallup Poll. **It states that when asked what they admire about the Muslim world, more than 50% of Americans responded to the open-ended question that they admired nothing or that they did not know**. But when Muslims were asked what they admire about the West, the majority responded that they admire "liberty, a fair political system equality, and respect for human values." There was also an article in the Financial Times about Muslims integrating into Great Britain that concluded that after 50 years of being in Europe, Muslims have a high jobless rate, perform worse on the job market than native Europeans, and are viewed with suspicion. Check out these two articles:

<A HREF="http://search.ft.com/ftArticle?queryText=Muslims+in+Europe%2C+workplace&y=0&aje=false&x=0&id=070820000620&ct=0" REL="nofollow"> Religious fault line in Europe </A>

<A HREF="http://search.ft.com/ftArticle?queryText=Europe+can+feel+at+home&y=0&aje=false&x=0&id=070916004326&ct=0" REL="nofollow">Europe can feel at home with 16m Muslims</A>
September 17, 2008 3:56 PM

Strategy Guru said…
I think that does help me to understand my colleague's comments, but how do I reconcile this? I've never been in a situation where someone's religious beliefs from another culture that is so different than ours influenced the work environment. I feel like the group needs to get beyond this and achieve a professional comfort level in order to come up with a viable strategy for our company.

Our team is responsible for developing a strategy to add 4 additional percentage points to our company's growth. That translates into $16 million in the first year of rollout.

I'm already seeing this discomfort among the group getting in the way of our productivity.
September 17, 2008 4:12 PM

Corner office said…
The Gallup information intrigued me, so I went to their website and found some more data that could help you. Gallup asked people in 134 countries if "religion is an important part of your daily life." For countries representing the Muslim world, those responding yes ranged from 99% in Indonesia to 74% in Iran. What do you think the response was in the US? 68%...pretty close to Iran, so the value of religion in our daily lives isn't that far off, but there are differences.
September 17, 2008 4:32 PM

APPENDIX C: RESULTS

Table 1. Sample Means

Survey Question	Mean for Entire Time 1 Sample N=236	Mean for Time 1 & 2 Sample N=114
How many countries have you visited in the past 5 years?	8.9	7.0
How long have you lived abroad at any given point in your life?	5.5	5.9
What is your age?	40.4	41.1
How many years of full time work experience do you have?	16.6	17.7

Table 2. Frequency of Second Language Ability

Level	Percent for Entire Time 1 Sample N=236	Percent for Time 1 & 2 Sample N=114
Novice	10	15
Intermediate	23	26
Advanced	63	58

Table 3. Reliabilities of Measures

	Time 1 (N=236)	Time 1 (N=114)	Time 2 (N=114)
Cultural Awareness	0.84	0.855	0.875
Open-Mindedness	0.819	0.832	0.788
Balanced Processing	0.619	0.589	0.641
Perspective-Taking	0.725	0.701	0.614
Cognitive Cultural Intelligence	0.862	0.884	0.911
MetaCognitive Awareness	0.899	0.894	0.884
Cultural PsyCap	0.933	0.94	0.954
Behavioral CQ	0.843	0.874	0.9

Table 4. Correlations of Study Variables from Entire Time 1 Sample

	Cultural Self-Awareness	Cognitive Complexity	Perspective-Taking	Positive Psychological Capital	Balanced Processing	Open-Mindedness	Cognitive Cultural Intelligence	Meta-cognitive Awareness
Cultural Self-Awareness	1							
Cognitive Complexity	0.04	1						
Perspective-Taking	0.27**	0.07	1					
Positive Psychological Capital	0.34**	0.15*	0.23**	1				
Balanced Processing	0.33**	0.01	0.38**	0.42**	1			
Open-Mindedness	0.11	0.04	0.34**	0.21**	0.44**	1		
Cognitive Cultural Intelligence	0.24**	0.09	0.18**	0.48**	0.35**	0.13*	1	
Metacognitive Awareness	0.29**	0.07	0.31**	0.47**	0.58**	0.50**	0.25**	1
Behavioral Cultural Intelligence	0.33**	0.12	0.28**	0.60**	0.33**	0.18*	0.34**	0.37**

N=236

* Correlation is significant at 0.05 level
** Correlation is significant at 0.01 level

Table 5. Correlations of Study Variables from Time 1 Reduced Sample

	Cultural Self-Awareness	Cognitive Complexity	Perspective-Taking	Psychological Capital	Balanced Processing	Open-Mindedness	Cognitive Cultural Intelligence	Meta-cognitive Awareness
Cultural Self-Awareness	1							
Cognitive Complexity	.002	1						
Perspective-Taking	.449**	-.058	1					
Psychological Capital	.361**	.080	.382**	1				
Balanced Processing	.392**	-.088	.615**	.443**	1			
Open-Mindedness	.179	.094	.476**	.415**	.631**	1		
Cognitive Cultural Intelligence	.454**	.166	.330**	.636**	.428**	.323**	1	
Meta-cognitive Awareness	.266**	-.041	.334**	.507**	.547**	.586**	.392**	1
Behavioral Cultural Intelligence	.336**	.105	.368**	.621**	.317**	.273**	.554**	.418**

**Correlations significant at 0.01 level

N=114

Table 6. Correlations of Study Variables from Time 2 Sample

	Cultural Self-Awareness	Cognitive Complexity	Perspective-Taking	Psychological Capital	Balanced Processing	Open-Mindedness	Cognitive Cultural Intelligence	Meta-cognitive Awareness
Cultural Self-Awareness	1							
Cognitive Complexity	.061	1						
Perspective-Taking	.373**	-.055	1					
Psychological Capital	.453**	.062	.365**	1				
Balanced Processing	.420**	-.057	.340**	.496**	1			
Open-Mindedness	.259**	-.165	.353**	.298**	.477**	1		
Cognitive Cultural Intelligence	.443**	.035	.338**	.626**	.482**	.380**	1	
Meta-cognitive Awareness	.521**	-.155	.394**	.527**	.641**	.483**	.578**	1
Behavioral Cultural Intelligence	.555**	.083	.437**	.620**	.501**	.296**	.633**	.620**

**Correlations significant at 0.01 level

N=114

Table 7. Hypothesis 1: Perspective-Taking Regressed on Cultural Self-Awareness

		Model Summary			Model Coefficients	
Model	Predictors	R Square	R Square Change	Sig. F Change	β	Sig
1		0.01	0.01	0.15		
	Gender				0.11	0.15
2		0.01	0.00	0.81		
	Gender				0.11	0.15
	Age				0.02	0.81
3		0.01	0.00	0.65		
	Gender				0.11	0.15
	Age				0.02	0.83
	International Experience				0.03	0.65
4		0.07	0.05	0.00		
	Gender				0.11	0.13
	Age				0.00	0.97
	International Experience				-0.02	0.85
	Cultural Self-Awareness				0.24	0.00

N=236

Table 8. Hypothesis 2: Cognitive Cultural Intelligence Regressed on Perspective-taking

		Model Summary			Model Coefficients	
Model	Predictors	R Square	R Square Change	Sig. F Change	β	Sig
1		0.03	0.03	0.02		
	Gender				0.18	0.02
2		0.04	0.01	0.22		
	Gender				0.16	0.03
	Age				-0.09	0.22
3		0.12	0.08	0.00		
	Gender				0.16	0.03
	Age				-0.11	0.14
	International Experience				0.28	0.00
4		0.15	0.03	0.01		
	Gender				0.14	0.05
	Age				-0.11	0.13
	International Experience				0.28	0.00
	Perspective-taking				0.18	0.01

N=236

Table 9. Hypothesis 3: Moderation Effect of Positivity

		Model Summary			Model Coefficients	
Model	Predictors	R Square	R Square Change	Sig. F Change	β	Sig
1		0.10	0.10	0.00		
	Positivity				0.15	0.02
	Cultural Self-Awareness				0.22	0.00
2		0.10	0.00	0.31		
	Positivity				0.13	0.06
	Cultural Self-Awareness				0.24	0.00
	Interaction				-0.07	0.31

N=236

Figure 3. Moderation Effect of Positivity on the Relationship between Cultural Self-awareness and Cognitive Complexity

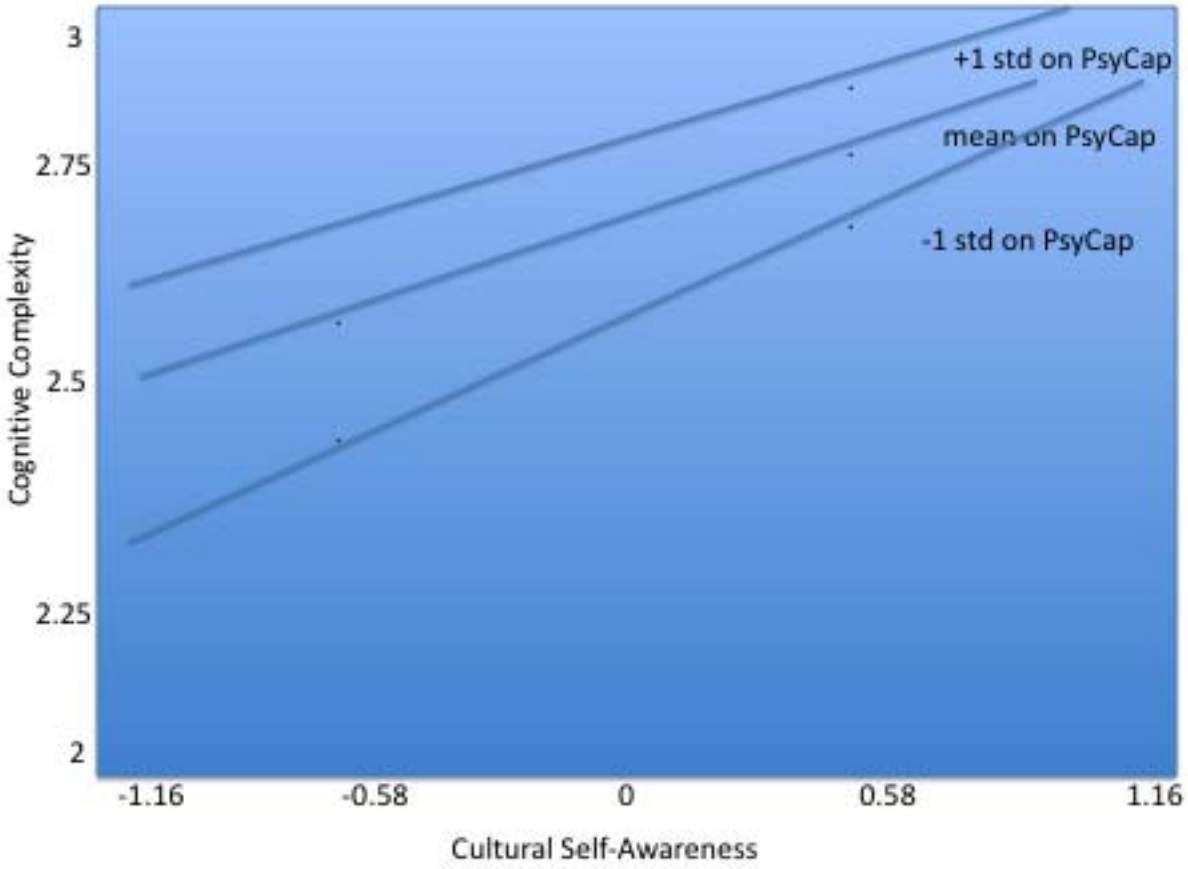


Table 10. Hypothesis 4: Partial Mediation Effect of Suspending Judgment: Open-mindedness as Proxy

		Model Summary			Model Coefficients	
Model	Predictors	R Square	F-Statistic	Sig. F	β	Sig
1 - H4a		0.11	30.11	0.00		
Mediator regressed on IV	Perspective-taking				0.34	0.00
2 - H4b		0.03	7.505	0.01		
DV regressed on IV	Perspective-taking				0.18	0.01
3 - H4c		0.04	4.51	0.01		
	Perspective-taking				0.15	0.03
DV regressed on mediator and IV	Open-mindedness				0.08	0.22

N=236

Table 11. Hypothesis 4: Partial Mediation Effect of Suspending Judgment: Balanced Processing as Proxy

		Model Summary			Model Coefficients	
Model	Predictors	R Square	F-Statistic	Sig. F	β	Sig
1 - H4a		0.15	40.48	0.00		
Mediator regressed on IV	Perspective-taking				0.38	0.00
2 - H4b		0.03	7.505	0.01		
DV regressed on IV	Perspective-taking				0.18	0.01
3 - H4c		0.12	16.065	0.00		
	Perspective-taking				0.05	0.44
DV regressed on mediator and IV	Balanced Processing				0.33	0.00

N=236

Table 12. Hypothesis 5: Behavioral Cultural Intelligence Regressed on Cognitive Cultural intelligence

		Model Summary			Model Coefficients	
Model	Predictors	R Square	R Square Change	Sig. F Change	β	Sig
1		0.02	0.02	0.06		
	Gender				0.14	0.06
2		0.02	0.00	0.82		
	Gender				0.14	0.07
	Age				-0.02	0.82
3		0.03	0.01	0.11		
	Gender				0.14	0.07
	Age				-0.02	0.76
	International Experience				0.12	0.11
4		0.16	0.13	0.00		
	Gender				0.08	0.29
	Age				0.02	0.81
	International Experience				0.01	0.88
	Cognitive Cultural Intelligence				0.38	0.00

N=236

Table 13. Time 1 Results of CFA and Main Effects Structural Model

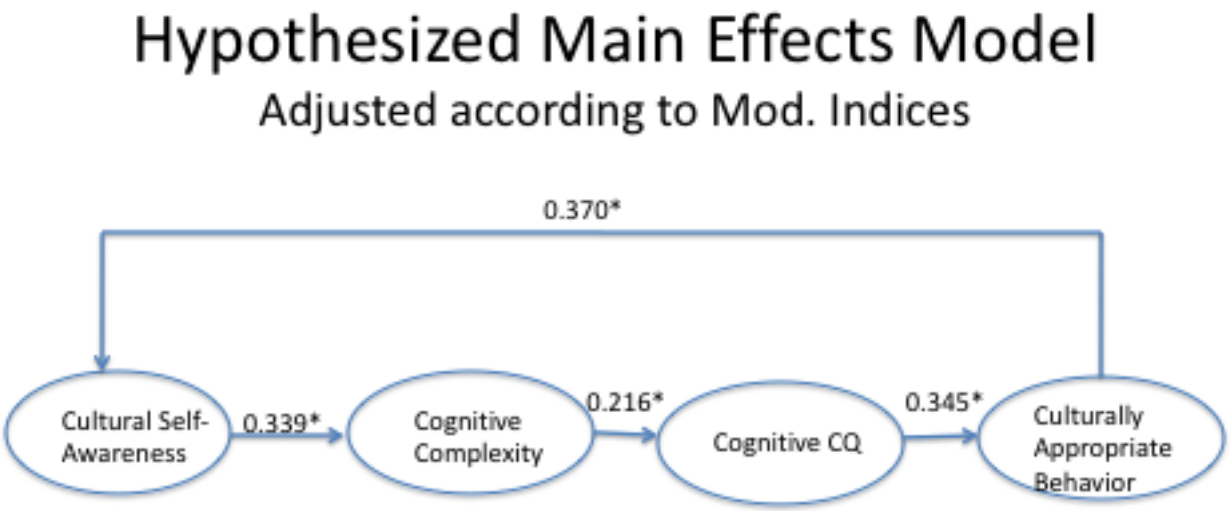
	Chi Square	Degrees of Freedom	Chi-Square Change	CFI	RMSEA	SRMR
Measurement Model with all main effects variables	395.167	246		0.93	0.051	0.053
Measurement Model with all main effects variables with 2 Cognitive CQ indicators correlated	352.664	245	42.503	0.949	0.043	0.053
Measurement Model with all main effects variables with 2 Culturally Appropriate Behavior indicators correlated	338.401	244	14.263	0.955	0.04	0.053
Structural Model of hypothesized main effects	373.776	247	-35.375	0.94	0.047	0.091
Structural Model of hypothesized main effects with cultural self-awareness regressed on culturally appropriate behavior	349.747	246	24.029	0.951	0.042	0.061

Figure 4

Hypothesized Main Effects Model

Chi Square	373.776
Degrees of Freedom	247
CFI	0.94
RMSEA	0.047
SRMR	0.091

Figure 5



Chi Square	349.747
Degrees of Freedom	246
CFI	0.951
RMSEA	0.042
SRMR	0.061

Table 14. Descriptive Statistics and Paired Samples T-tests

	Time 1 Mean	Time 2 Mean	Mean Differences (Time 1 - Time 2)	Sig. (2-tailed)
Cultural Self-Awareness	6.02	5.92	0.09	0.262
Perspective-Taking	2.98	3.00	-0.02	0.626
Qualitative Cognitive Complexity	3.00	2.93	0.07	0.622
Positivity	4.95	4.89	0.05	0.189
Cognitive CQ	5.02	4.92	0.10	0.135
Open-Mindedness	4.21	4.18	0.03	0.324
Balanced Processing	3.01	2.95	0.05	0.306
Behavioral CQ	5.68	5.48	0.20	0.001
Metacognitive Awareness	5.50	4.00	1.49	0.000

Table 15. Hypothesis 6: Repeated Measures ANOVA

DV	**Main effect for Time**		**Main effect for Condition**		**Interaction effect for Time*Condition**	
	F-Stat	*P-value*	*F-Stat*	*P-value*	*F-Stat*	*P-value*
H6a - Cultural Self-awareness	1.178	0.28	0.86	0.464	0.249	0.862
H6b - Perspective-taking	0.26	0.61	1.57	0.20	0.08	0.97
H6c - Cognitive Cultural Intelligence	1.83	0.18	2.26	0.09	0.90	0.44
H6d - Culturally Appropriate Behavior	12.5	0.0	2.0	0.1	1.0	0.4

Table 16. Post-Hoc Analysis for Culturally Appropriate Behavior as DV

(I) Condition	(J) Condition	Mean Difference (I-J)
Encourages Development	Respect	0.38
	Do best at work	0.02
	Admire about the Muslim World	-0.18
Respect	Encourages Development	-0.38
	Do best at work	-0.37
	Admire about the Muslim World	-.57(*)
Do best at work	Encourages Development	-0.02
	Respect	0.37
	Admire about the Muslim World	-0.20
Admire about the Muslim World	Encourages Development	0.18
	Respect	.57(*)
	Do best at work	0.20

Table 17. Comparison of Samples across Study Variables

		Entire Time Sample (N=236)		Reduced Time 1 (N=114)		Time 2 (N=114)	
	Range of Scale	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Cultural Self-Awareness	1 to 7	6.05	0.80	6.02	0.87	5.92	0.77
Perspective-Taking	0 to 4	2.64	0.41	2.98	0.52	3.00	0.45
Cognitive Complexity	1 to 7	3.07	1.21	3.01	1.20	2.93	1.04
Positive Psychological Capital	1 to 6	4.97	0.58	4.95	0.63	4.89	0.64
Balanced Processing	0 to 4	3.06	0.57	3.01	0.55	2.95	0.60
Open-Mindedness	1 to 5	3.66	0.32	4.21	0.51	4.18	0.49
Cognitive Cultural Intelligence	1 to 7	5.17	0.92	5.02	1.07	4.92	1.03
Meta-cognitive Awareness	1 to 7	5.60	0.67	5.50	0.68	4.00	0.43
Behavioral Cultural Intelligence	1 to 7	5.77	0.83	5.68	0.93	5.48	0.99