

GENDER AND CULTURE INFLUENCES ON LEADERSHIP PERCEPTIONS

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## Dedication

Dedicated to my parents, Liudmila Ivanovna Denisenko and Valeriy Dmitrievich Demin,  
with love and gratitude.

## Acknowledgments

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## Abstract of Dissertation

### GENDER AND CULTURE INFLUENCES ON LEADERSHIP PERCEPTIONS

This study examines how demographic characteristics of culture and gender contribute, in part, to the perceptions of leadership in multi-national organizations. Although gender and culture tend to be salient individual characteristics, few studies have investigated the role of gender in cross-cultural contexts within a leadership perception's framework. The current study examined main effects of gender and the cultural dimensions of power distance, individualism-collectivism, masculinity-femininity, and uncertainty avoidance, as well as interaction patterns of these variables. The study used archival data from a multi-national organization, employing a large sample of respondents. Measurement equivalence across cultures was established. The findings provided support for the influence of power distance, masculinity-femininity, and uncertainty avoidance on leadership perceptions, and partial support for the impact of individualism-collectivism. Further, the study showed that females from high power distance, collectivistic, and feminine cultures perceived their leaders more favorably than females from low power distance, individualistic, or masculine cultures as well as males across all cultures. Practical and statistical significance of the findings, as well as implications for leadership perceptions in international contexts, are discussed.

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## Chapter 1: Introduction

In today's increasingly borderless world economy (Friedman, 2006), effective global practices in the areas of human development lead to a sustainable competitive advantage for multi-national organizations. Globalization encourages knowledge-sharing and movement towards efficiency, diversity, market innovations, enhanced customer service and increased revenues (Rothacher, 2005; Zanfei, 2000).

In addition to creating an expanded pool of opportunities, globalization challenges both researchers and practitioners in the field of human resources to fine-tune their understanding of how the world's complex cultural makeup influences various levels of organizational functioning (Earley & Ang, 2003). The organizations that are able to successfully navigate complex cultural workforce dynamics across multiple geographical locations are the ones who may be able to reap the full benefits of globalization.

With leaders and followers distributed across the globe (Bass & Riggio, 2006), global organizations must learn how to create optimal conditions for diverse employee participation across demographic organizational layers. Understanding the role of diverse employee characteristics in organizational processes is critical, because demographic variables have been shown to influence social relations (Pelled, Xin, & Weiss, 2001), organizational outcomes (Pfeffer, 1983) and employees' use of vertical sources of guidance (Smith & Peterson, 2005).

The current study sought to extend the research on the role of demographic variables in diverse organizations by examining the influence of gender and national cultural values on leadership perceptions. Previous research has found that gender affects leadership emergence, male and female performance self-ratings, evaluation of male and

female leaders, and internal processes of leaders of both genders (Smith, Dugan, & Trompenaars, 1997; Rosen & Jerdee, 1973; Beyer, 1990; Eagly & Karau, 1991, 2002; Lyness & Thompson, 2000). In addition, in practical organizational terms, the role of gender in employee perception of leadership is becoming increasingly important, as a record number of women are entering the workforce (Nakata & Takehiro, 2002; Treas & Widmer, 2000; U.S. Department of Labor, 2008).

Further, while many studies have examined the impact of cultural values on leadership style and behavior (Huo & Von Glinow, 1995; Mendonca & Kanungo, 1994; House, Hanges, Javidan, Dorfman, & Gupta, 2004), few studies have compared the interactive effect of such demographic characteristics as gender and cultural values (Smith & Peterson, 2005). As noted by Smith and Peterson (2005), researchers tend to examine either demographic variables in one-country studies, or control for demographic variables in multi-nation studies. This study attempted to delve deeper into the process of leadership perceptions by exploring both separate and combined effects of subordinates' gender and national culture. Given the complexity of the globalized workplace, such exploration might provide important insights into the nature of leadership perceptions across diverse organizational realities.

Additionally, by placing a focus on followers' perceptions of leadership, this research sought to contribute to a more balanced theory development in leadership studies. There has been a recent call in the research community for the development of follower-centered empirical studies to balance the traditional leader-centric approach to the study of leadership, especially in such areas as followers' perception processes (Miendl, 1995; Shamir, Pillai, Bligh, & Uhl-Bien, 2007). For instance, Lord, Brown and

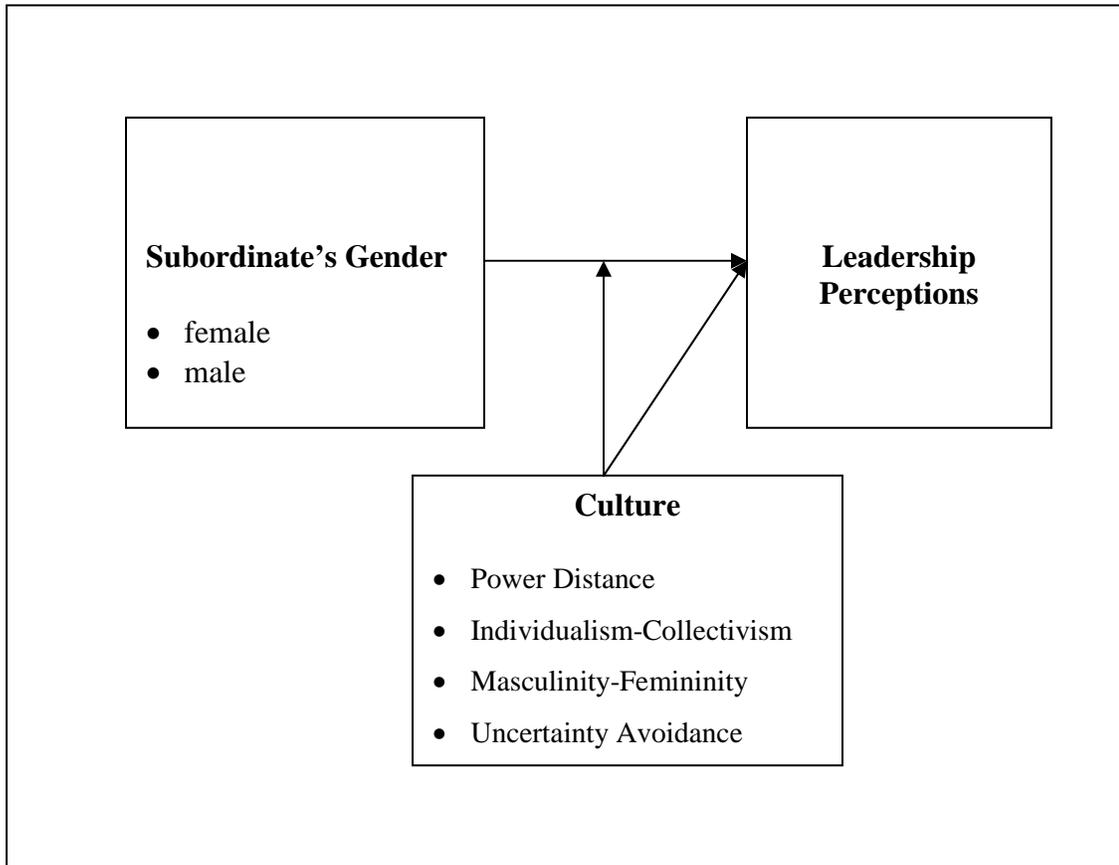
Freiberg note that “The follower remains an underexplored source of variance in understanding leadership processes” (as cited in Shamir, Pillai, Bligh, & Uhl-Bien, 2007, p.167). The present research attempted to answer the call for such “reversal of lenses” in the study of leadership (Shamir et al., 2007) by examining how followers’ demographic characteristics (i.e. gender and culture) influence leadership perceptions.

#### *Purpose and Research Questions*

The purpose of this study was to examine differences in perceptions of leadership by female and male subordinates working in international contexts. The role of culture as a moderator of gender influence on leadership perceptions was explored (refer to Figure 1). Specifically, this study attempted to investigate how gender and culture impact subordinate ratings of leadership in such culturally-distinct countries as the U.S., China, Spain and Austria. Do male and female followers across cultures perceive leaders in the same manner?

The benefit of this study is that it sheds further light onto the role of followers’ characteristics in the process of cross-cultural leadership perceptions. Additionally, it may foster culture-congruent use of organizational practices in international contexts. The findings of the study may help human resource professionals develop culturally-savvy leadership evaluation tools.

Figure 1: Conceptual Model



## Chapter 2: Literature Review

### Use of Ratings in Cross-Cultural Context

The topic of leadership perception cannot be investigated without considering the topic of the use of ratings as a customary organizational practice. This practice has gained popularity and has become an integral feature in human resource development in North America. Use of ratings is an important mechanism employed by organizations to assess leadership perceptions, organizational climate, individual and organizational morale, motivation, job satisfaction, individual and organizational performance (Smither, Reilly, & Buda, 1988; De Leeuw, Hox, & Dillman, 2008; Atwater, Waldman, Ostroff, Robie, & Johnson, 2005). Popular tools involving the use of ratings are surveys, training evaluation ratings and multi-source multi-rater feedback systems.

Pluralism of opinions and open communication have been valued cultural ingredients in the West (Hofstede, 2001). Historically, it has been an accepted notion in North America that high conflict of opinions and low conflict of people may lead to a stabilized people-centered democracy. Thus, it is often assumed in the Western management thought, that an opportunity to express one's views is a universal preference, while in reality it may be substantially culturally-bound (Berry, Poortinga, Segall, & Dasen, 2002; Hofstede, 2001). Examining raters' behavior from a cross-cultural perspective can further a more nuanced theory development and can aid researchers in empirically linking variance in perceptions, as expressed in ratings, to cultural factors.

Endorsing the relevance of contextual variables to raters' behavior, researchers have suggested that survey ratings may be susceptible to cultural influences (Harzing,

2006; Ryan, Chan, Ployhart, & Slade, 1999; Johnson et al., 2006). Results of the organizational surveys are frequently used to examine organizational effectiveness, areas in need of further development, or particularly complex areas such as performance appraisal and management effectiveness (Bracken, Timmreck, & Church, 2001; De Leeuw et al., 2008). The basic premise of the use of survey ratings is open, truthful, and objective communication of information by survey respondents. However, ratings of intrinsically evaluative nature are never completely objective and thus are open to differences in interpretations arising from distinct cultural values, norms, goals and motivations (Gillespie, 2005; Herk, Poortinga, & Verhallen, 2004). Thus, the use of survey ratings poses a challenge of accurate interpretation when surveys are administered in international contexts.

To determine whether the results of a cross-cultural survey can be meaningfully interpreted, a researcher must consider a number of factors unique to cross-cultural investigation. First, it is important to consider the impact of cultural beliefs about providing feedback to an organization in the form of a survey. Employees from various national cultures may hold a set of attitudes towards organizational surveys that are quite different from the attitudes held by their U.S. counterparts (Johnson et al., 2006). Additionally, employees from different cultures may hold a different frame of reference about what constitutes an ideal or less than ideal performance (Earley, Gibson, & Chen, 1999). This ideal standard of performance may affect whether employees from different countries will view the performance of their leaders as acceptable or unacceptable. This study proposes that better understanding of the pattern of cultural and demographic

influences on leadership perceptions and subsequent ratings will lead to more meaningful results of organizational surveys administered across cultures.

In order to examine the influence of demographic variables on leadership across cultures, the current research will be presented according to the following outline. First, I will summarize the research on culture (definitions, current frameworks and cultural dimensions). Next, I will review the research on gender and leadership, followed by the discussion of a possible interplay between gender and national culture as applied to the question of leadership perceptions. Further, I will outline the findings on evaluation practices and survey ratings. Finally, I will review how specific cultural dimensions, such as power distance, individualism-collectivism, masculinity-femininity, and uncertainty avoidance influence the use of ratings and how these factors might impact the leadership perceptions.

## Culture

The notion that national culture impacts all levels of human functioning, from individual cognition, to group behavior to organizational outcomes has been well documented (Triandis, 1994, 1995; Adler & Bartholomew, 1992; Hofstede, 2001; House, Javidan, Dorfman, & Sully de Luque, 2006). Culture permeates every layer of human existence, from the broad category of a nation state to the core psychological concept of Self (Triandis, 1989, 1995; Nisbett, 2003; House et al., 2004). Recently, researchers have noted the role of culture in impacting economic prosperity of nations (Phelps, 2007).

### *Definitions of Culture*

The complexity and multi-dimensionality embedded in culture are reflected in various definitions formulated over the past several decades. More than 75 years ago, Barlett (1932) reported the influence of culture on human cognitive functioning, specifically on individual memory processes and on perception of external environment. Triandis (1994) has proposed to view culture as the “human-made part of the environment” (p. 111). Kroeber and Kluckhohn (1952) have suggested that culture is rooted in symbols and may be indicative of future actions. Researchers have emphasized the pervasive unconscious influence of culture on shaping individual world view and on interpretation of internal and external reality (Javidan, Dorfman, Luque, & House, 2006). Rohner (1984) has suggested that culture is an organized system of meanings transmitted intergenerationally and Erez and Earley (1993) have echoed his view by suggesting that culture encompasses shared knowledge as part of the shared system of meaning. One of the most parsimonious and frequently used definitions of culture is the one formulated by Hofstede (1980), in which he refers to culture as a “collective programming of the mind” (p. 25).

Researchers have demonstrated that the system of meaning is imparted on participants of a particular culture from childhood (Hofstede, 1980; 2001; Nisbett, 2003). This influence of culture through the system of what Smith and Peterson (2005) call “primary socialization” affects individuals’ values and behaviors through a variety of experiences across a life-span (Smith & Peterson, 2005; Offermann & Hellmann, 1997; Hofstede, 1980, 2001). Thus, culture prescribes to individual members which norms, principles, values, roles and goals are considered desirable in a given society.

It has been generally agreed upon that cultural values, norms and behaviors are formed by individuals in response to social, political, economic and environmental factors (i.e. geography and climate) (Cohen, 2001). Triandis (1995) has highlighted the adaptive aspect of culture by defining culture as a social group's shared strategy for survival.

Researchers working within an ecological framework of culture have shown that culture can exert substantial influence over individuals' cognitive styles (Berry, 1993). For example, Berry's ecocultural model postulates that variability in individuals' cognitive styles exists in part due to distinct cultural, socio-historical and ecological contexts. Specifically, population density, natural resources and patterns of settlement have been shown to shape the cognitive styles of members of different cultural groups. Also, such variables as social stratification and socialization patterns have been linked to culturally-conditioned cognitive styles (Nimkoff & Middleton, 1960; Zebian & Denny, 2001). For example, Zebian and Denny (2001) have investigated differences in cognitive styles in Canadian population by studying Middle Eastern immigrants to Canada and native-born Euro-Canadians. The authors have found preferences for integrative thinking in Middle-Eastern groups, compared to Euro-Canadians.

### *Cultural Frameworks*

The complexity and malleability of culture called for the development of rigorous scientific approaches for classifying and analyzing cultural construct. In the past 25 years, the cross-cultural researchers made substantial progress in the area of cross-cultural research methodology. One of the key developments in the area of cultural studies was the description of an empirically-based system of dimensions on which countries vary

systematically (Hofstede, 1980, 2001; Schwartz, 2004; Triandis, 1982; Smith, Dugan, & Trompenaars, 1996; House et al., 2004; Inglehart, 1997; Bond et al., 2004). Researchers have noted that classifying cultures along a number of dimensions has provided conceptual framework for scientifically-based cross-cultural investigations, and has shown to be useful in assessing fit between management practices and cultures (Robert, Probst, Martocchio, Drasgow, & Lawler, 2000).

Currently, there exist six prominent comparative models of cultural variability dimensions. The first one, developed by Hofstede (1980, 2001), documents five dimensions of work-related values: power distance, collectivism-individualism, uncertainty avoidance, masculinity-femininity and time orientation. Hofstede's classification has greatly advanced the investigation of cross-cultural phenomena and served as a template for further conceptualizations.

Smith et al. (1996) have offered a somewhat different conceptualization of culture based on the results from 43 countries. The authors have identified two universal value orientations: loyal involvement-utilitarian involvement and conservatism-egalitarian commitment (Smith et al., 1996). Inglehart (1997) has denoted two dimensions of attitudes, values and beliefs. House et al. (2004) have reported cultural dimensions of nine universal leadership values, while Bond et al. (2004) have described two dimensions of social axioms. Schwartz (1992, 1994, 2004) has studied human values in 36 countries to identify six opposite universal dimensions: embeddedness versus autonomy, hierarchy versus egalitarianism and mastery versus harmony.

The closer investigation of the above seemingly distinct cultural frameworks has led some researchers to conclude that the studies show substantial convergence in their

findings (Elenkov & Manev, 2005; Smith & Peterson, 2005). To illustrate the similarities across the studies, Elenkov and Manev (2005) have pointed out that such dimension as, for instance, individualism-collectivism appears to be identified by such cross-cultural theoreticians as Hofstede, Trompenaars and Schwartz (the latter two authors used such denotations as “communitarianism” and “embeddedness-autonomy”). The authors have viewed the consistency in the reported cultural indices as evidence of the validity of the value-based approach to investigating cultural differences.

### *GLOBE Study*

One of the more recent studies of cultural influences on leadership perceptions, Global Leadership and Organizational Behavior research (GLOBE), has investigated data from 17, 000 middle managers from 62 countries (House et al., 2004). Specifically, GLOBE researchers have utilized a Leader Attribute Questionnaire to examine how nine dimensions of culturally endorsed implicit leadership theories (CLTs) are viewed across cultures.

The nine attributes that have been examined by House et al. (2004) are: power distance (i.e. the degree to which people expect power to be unequally shared), uncertainty avoidance (i.e. the extent to which people want to avoid uncertainty), assertiveness (i.e. the degree to which individuals are assertive in social relationships), future orientation (i.e. the degree to which individuals behave in future-oriented actions), gender egalitarianism (i.e. the extent to which gender roles are minimized), performance orientation (i.e. the degree to which achievement is deemed desirable), humane orientation (the extent to which individuals value altruistic qualities of caring, generosity, etc.), societal collectivism (i.e. the degree to which individuals value collective behavior),

in-group collectivism (i.e. the extent to which people express loyalty to their families). The GLOBE researchers have assessed their cultural dimensions in the form of “should be” judgments (i.e. the way things should be) and “what is” judgments (i.e. the way things are).

In effort to shed light on the debate between etic (i.e. universal) and emic (i.e. culturally-specific) approaches to leadership, House and colleagues (2004) have tested which leadership attributes will be universally endorsed across cultures and which attributes will be found universally undesirable. The researchers have found that the charismatic/value-based leadership dimension was viewed as universally effective by respondents across the countries. Other dimensions have been found to enhance leadership in some cultures, while impede leadership effectiveness in other cultures.

Further endorsing the importance of culture in organizational functioning, House et al. (2004) have shown that cultural forces exert a considerable influence over leadership expectations, status and impact. The relevance of GLOBE findings to the research questions examined in the present study (including conceptualization of cultural dimensions as viewed by Hofstede (2001) and GLOBE’s researchers) will be discussed later in this study.

### *Hofstede’s Cultural Dimensions*

The first and most widely used typology of cultural dimensions was formulated by Hofstede (Hofstede, 1980; 2001). In his seminal study on work-related cultural values, Hofstede collected data from 88,000 employees working for a multi-national company (IBM), first from 50 countries (Hofstede, 1984) and later from 16 additional countries. Overall, Hofstede reported data from 66 countries total, encompassing 50 occupational

groups (Hofstede, 2001). Hofstede (1980; 2001) uncovered the five dimensions along which national cultures differ: power distance (PDI), individualism-collectivism (IDV), uncertainty avoidance (UA), masculinity-femininity (MAS), and long-term orientation (LTO).

*Power Distance (PDI).* The power distance dimension is discussed in terms of the degree of disparity in power and authority between individuals in a society. Members of high power distance cultures see inequality as an acceptable part of social order. To the contrary, individuals in low power distance societies value equality and horizontal societal structures over hierarchical distinctions. Power distance is also indicative of the amount of respect and deference between those in superior and subordinate positions, and is associated with the degree of power centralization. For example, in low power distance cultures superiors and subordinates are assumed to have a relatively more egalitarian relationship compared to high power distance cultures. Low power distance cultures allow for easier upward mobility and emphasize initiative and equal opportunities.

*Individualism-Collectivism (IDV).* The second dimension, individualism-collectivism (IDV), is one of the most frequently cited dimensions in cross-cultural research. Individualism refers to the preference for defining one's identity by personal choices and achievements, and for acting in the interests of self and immediate family as opposed to the interests of broader social groups. Contrary to individualism, the concept of collectivism emphasizes group-derived orientation and values group norms, goals and identities. Collectivistic society is also characterized by closer ties between extended family members. It is not uncommon for individuals in such societies to be expected to

take responsibility for the well-being of in-group members. Collectivistic societies value group harmony, while individualistic societies value self-expression.

The measures of individualism and power distance are conceptually linked (Hofstede, 1980; Kimmelmeier et al., 2003) with a moderate-high correlation of ( $r = -.67$ ) reported by Hofstede (1980). Whether the measures have a strong negative relationship in the present sample will be determined in the analytical part of the project.

*Uncertainty Avoidance (UAI)*. Uncertainty avoidance represents the degree to which people in a cultural group focus on planning and the creation of stability and feel threatened by unstructured situations. A high uncertainty society values regulations, laws and policies designed to diminish existential ambiguity.

*Masculinity-femininity (MAS)*. The fourth dimension, masculinity-femininity refers to a relative emphasis on “masculine” values such as competition, power and success, versus “feminine” values such as service, interpersonal harmony and quality of life. According to Hofstede, cultures holding “feminine” values pay more attention to social and environmental concerns, while cultures high on “masculine” values regard such concerns as less important.

*Long-Term Orientation (LTO)*. Recently, Hofstede (2001) has added a fifth dimension, long-term orientation, which refers to the degree to which people’s actions are driven by long-term goals and results, rather than short-term needs for immediate gratification.

This study proposes that four of Hofstede’s dimensions: power distance, individualism-collectivism, masculinity-femininity and uncertainty avoidance may be especially relevant to understanding a pattern of leadership perceptions by male and

female subordinates across cultures. Hofstede (1983) has maintained that individualism and power distance dimensions are likely to be associated with the leadership construct. The construct of leadership is linked to subordinate-supervisory relations, and thus the power distance and individualism-collectivism appear to be relevant for investigation of subordinate ratings across cultures. Additionally, femininity-masculinity dimension may be especially relevant to the investigation of gender-related differences in leadership perceptions across cultures.

The dimension of uncertainty avoidance has been shown to be associated with the issues of innovation, rules, entrepreneurship, and use of technology (Hofstede, 2001). Uncertainty avoidance is also linked to long-term orientation in such areas of employees' lives as managing uncertainty and anxiety about time and future (Hofstede, 2001). Based on Hofstede's theory and considerations of parsimony, the present study will focus on the dimensions that are most likely to relate to moderating influence of culture on the relationship between gender and leadership perceptions. Therefore, the influence of uncertainty avoidance dimension on gender differences in leadership perceptions will be examined in exploratory manner.

Long-term orientation appears to have a weaker conceptual link to the variance in subordinate ratings. Long-term orientation refers mostly to the cultures' interpretation of time and the corresponding rewards for future-oriented behaviors (Hofstede, 2001). Although this dimension may be somewhat relevant to the research question at hand, it will not be examined within this body of work.

### *Evaluation of Hofstede's Framework*

The discussion of Hofstede's (2001) framework would not be complete without an overview and critical evaluation of the current issues surrounding the validity of Hofstede's findings. Hofstede's (2001) classification is the most comprehensive and empirically validated cross-cultural typology (Chiang & Birtch, 2007), as well as the most widely used and cited one (Chandy & Williams, 1994; Søndergaard, 1994; Ryan et al., 1999; Smith et al., 1996). Although Hofstede's framework and methodology have been criticized by some researchers (McSweeney, 2002; Ryan et al., 1999), Hofstede's work has been widely replicated and validated (Hofstede, 2001). Additionally, it has been noted that applying Hofstede's paradigm allows for a ready comparison of the results of new studies with previous research findings (Newman & Nollen, 1996).

Although it has been argued that Hofstede's (1980; 2001) classification may have become outdated due to the dynamic nature of the societal development, it has been shown that cultures tend to be relatively stable on the core dimensions measured by Hofstede (Robert et al., 2000). Some maintain that social changes since the first development of the Hofstede's typology have rendered the findings inadequate for valid cross-cultural research. However, the stability of Hofstede's findings was supported by a recent study by Rudmin, Ferrada-Noli and Skolbekken (2003) who have found that Hofstede's dimensions predict suicide incidence rates across gender and age groups two decades later after the collection of Hofstede's data. The authors have examined the data from the World Health Organization survey and have found that the dimensions of power distance, individualism, uncertainty avoidance and masculinity explain on average 25% of the variance in international rates of suicide. The researchers have postulated that the

surprisingly robust predictive power of Hofstede's dimensions for predicting suicide rates for generations that were not even born when Hofstede collected his data is due to the fact that cultural dimensions tap the fundamental societal values. These values tend to be deeply ingrained in human psyche, exhibiting what the authors called "inertia" (Rudmin et al., 2003, p. 378), or a very slow rate of substantive change.

Additionally, Hofstede's sampling methodology (using only one multi-national organization) has been under criticism (McSweeney, 2002; Søndergaard, 1994). The author himself, though, has maintained that using only one organization helped reduce the unwanted organizational, or industry-level variance and thus produced more meaningful results (Hofstede, 1980). Moreover, later studies have also addressed a methodological concern of convergent validity of Hofstede's (2001) dimensions. For example, a study by Smith et al. (1996) has found three dimensions similar to the dimensions identified by Hofstede: individualism-collectivism, power distance and Confucian work dynamism.

When comparing Hofstede's (2001) dimensions to GLOBE dimensions, Parboteeah, Hoegl, and Cullen (2008) have pointed out that Hofstede's (2001) dimensions seem to tap into the "as is" aspect of culture, compared to GLOBE's (House et al., 2004) "should be" cultural paradigm. Researchers have investigated cross-cultural gender role attitudes using GLOBE (House et al., 2004) and Hofstede's (2001) frameworks, and concluded that the findings "supported the robustness of the Hofstede framework despite the many criticisms leveled against it by the GLOBE group" (Parboteeah et al., 2008, p.14). GLOBE data have been re-analyzed by Hofstede (2006), who has suggested that the nine dimensions reported by GLOBE can be further collapsed

into the five main dimensions, similar to those found by Hofstede (2001). Peterson and Castro (2006) also have pointed out that the societal culture scales used by GLOBE “may be too highly correlated to be considered distinct at the nation level” (Peterson & Castro, 2006, p. 513).

#### *Relationship between National Culture and Organizational Culture*

The question of the link between national culture and organizational culture merits discussion, as organizational survey items are likely to be influenced by organizational view of what is important to organizational success. Similarly to national culture, organizational culture has been viewed as a shared pool of values, beliefs and assumptions held by employees in a single organization. As employees in an organization assign meaning to organizational events, they participate in co-creation of a unified organizational culture (Schneider, 1987).

In a succinct and elegant framework, Schneider (1987) has articulated the core mechanism behind the creation and maintenance of organizational cultural systems. His attraction-selection-attrition (ASA) framework emphasizes the interplay between values held by people and organizational values. Schneider (1987) has suggested that in the course of ASA cycle, an organization attracts people who are likely to have an affinity with a particular organizational environment. Further, such people are likely to be selected into an organization and are likely to be retained by the organization long-term. Those individuals who do not fit within the organizational culture are likely to either leave or be asked to leave. Thus, according to Schneider (1987) ASA cycle serves as a core mechanism to help organization maintain homogeneity.

As follows from ASA framework, the values held by individuals impact the outcome of the ASA cycle. National culture plays a major role in shaping core individual values, intrinsic beliefs, and world outlook. Thus, it appears that national culture might exert an influence on organizational culture through the implicit value systems held by employees. Hofstede (1985) has surmised that organizational culture is affected by national culture through the founders' value systems. This proposition rings true as a founding father would have the most influence on the original value system embedded in a particular organization. The value systems held by the founders, no matter how implicit they are, are bound to affect the organizational design and implementation (Hunter, Morewitz & Costanza, 2006). In the course of its life-cycle, organizational culture is affected by external as well as internal influences, but the cultural foundation laid by the founder would continue to influence organizational values.

Laurent (1983, 1992) has reported a study in which he has surveyed managers working for a single multi-national corporation, but assigned to geographically-dispersed locations. Controlling for demographics, the survey respondents seemed to differ more in their endorsement of managerial practices based on their national culture than on the organizational culture. Laurent (1993) has suggested that organizational culture tends to be less internalized by employees compared to national culture, as the latter has been experienced by individuals for much longer time.

Laurent's (1992) findings go hand in hand with the findings by Offermann and Hellman (1997) who have investigated a link between national culture and organizational culture in relation to the ratings of leaders by subordinates (Offermann & Hellman, 1997). Offermann and Hellman (1997) have utilized a variable "tenure" as a proxy for the

level of identification with organizational culture. The authors have suggested that the longer the tenure, the more likely a leader has internalized the organizational values, and thus the more likely a leadership style of such manager will encompass the behaviors deemed valuable by an organization. Offermann and Hellman (1997) have hypothesized that the effect of organizational culture, although a real presence in organizations, will not be greater than the effect of national culture. In support of their hypotheses, Offermann and Hellman (1997) have found no effect for tenure on leadership behaviors as perceived by subordinates.

Other studies have found a connection between organizational culture and national culture (Janssens, Brett, & Smith, 1995; Morris, Davis, & Allen, 1994). Thus, some organizational values have been found to be associated with individualism-collectivism dimension of national culture. For example, corporate safety policies have been linked to the levels of individualism-collectivism (Janssens, Brett, & Smith, 1995). Additionally, Morris et al. (1994) have found that entrepreneurial organizational values were associated with moderate levels of individualism. These findings suggest that organizational culture is influenced to some extent by the national culture in which a particular organization is embedded. In the present study, the potential confounding influence of organizational culture will be controlled through the use of data from a single multi-national organization, thus reducing unwanted variance on organizational level.

In the next section, I will discuss gender differences in leadership perceptions and possible interplay between gender and culture in international contexts.

## Gender, Culture and Leadership

Just as globalization highlights the future opportunities and complexities of a culturally-diverse world, the question of gender differences illuminates the prominent shift occurring in a global societal mind-set. Psychologists, sociologists, and organizational scientists alike have noted a current trend of increasing numbers of women entering the workforce, both in the U.S. and internationally (Nakata & Takehiro, 2002; Panayotova & Brayfield, 1997; Treas & Widmer, 2000). According to the U.S. Department of Labor, a record 68 million women were employed in the U.S. in 2008 (U.S. Department of Labor, 2008). Women are also projected to account for 49% of the increase in total labor force growth between 2004 and 2016 (U.S. Department of Labor, 2008). These two trends – globalization of the labor markets and increased representation of women in the workforce – will undoubtedly influence the way organizations are structured and operate.

Higher participation of women in labor markets, coupled with the globalization of the workforce, brought about an increase of demographical diversity in organizational environments. Organizations that want to achieve competitive advantage will need to learn how to make optimal use of diverse human resources. To successfully incorporate the complexities of organizational diversity, management researchers and practitioners need to have a clear understanding of the impact of such demographic variables as gender and culture on perceptions of leadership.

The vast body of organizational literature focuses on perceptions and formal evaluations of male and female leaders (Bass & Riggio, 2006; Eagly, Makhijani, & Klonsky, 1992; Eagly & Mladinic, 1989; Bass & Avolio, 1993; Eagly, Johannesen-

Schmidt, & Van Engen, 2003). This is an important issue, as the organizations should strive to afford equal opportunities in advancement, responsibilities and pay to both genders. However, some researchers have noted that in the U.S. and globally more women are employed in entry-level and mid-level organizational positions, and not in supervisory positions (Hofstede, 1998). Therefore, many women who constitute the present global workforce tend to hold the roles of followers and fewer hold the roles of leaders (Blau & Kahn, 2007).

Researchers have recognized the critical importance of followers to organizational success, as it is the followers who carry out daily vital activities of organizations (Uhl-Bien & Pillai, 2007). Uhl-Bien and Pillai (2007) have noted: “While an immense amount of work has focused on leadership, we know surprisingly little about followership. Leadership has traditionally been considered in isolation, as if the behavior of followers were irrelevant” (p. 194). In the area of gender differences, LaPlante and Ambady (2002) also have stated that many studies have examined male and female leaders, while “much less work has been amassed concerning gender differences between male and female subordinates” (p. 2439).

Female followers may be called upon to evaluate their current leaders and organizational leadership effectiveness. Some of these women likely wish to move into leadership roles in their organizations, and at some point may become coaches and mentors to other female and male followers in organizations; therefore, it is important to study the way female followers perceive their leaders. Recently, there has been a call to organizational researchers “to generate theories and empirical investigations of followership (Dixon & Westbrook, 2003), develop follower-competency-based

approaches in practice (Latour & Rast, 2004), and better theoretically specify and empirically assess the role of followers in the leadership process (Howell & Shamir, 2005)” (Uhl-Bein & Pillai, 2007, p. 205). This study answers the call by examining the leadership perceptions of male and female followers across cultures. It is suggested that understanding the gender and cultural differences in perceptions of leadership may help shed the light on how to provide better opportunities for female followers in international contexts.

Additionally, researchers have noted that relatively few studies have investigated the interplay between gender and cultural influences in the area of perception of leadership (Paris, 2003; Gaines et al., 1997; Smith & Peterson, 2005). Gaines et al. (1997) have stated that “studies of cultural values tend to deemphasize gender in favor of race/ethnicity and nationality, as predictors” (p.1462). Even though demographic variables have important impact on a variety of organizational outcomes (Pfeffer, 1983), there is a dearth of studies examining the impact of demographic variables across nations (Smith & Peterson, 2005). According to Smith and Peterson (2005), organizational research tends to examine the demographic variables in single nation contexts, or simply use the demographic variables to control for unwanted effects in cross-national studies. The present study will contribute to the pool of cross-cultural knowledge by exploring gender as a demographic variable in cross-cultural context. Prior to examining the interaction between gender and culture in leadership perceptions, this study will give an overview of gender issues in organizations.

## *Gender in Organizations*

Despite the increased number of women employed by organizations worldwide, female employees still remain at a disadvantage at the workplace (Blau & Kahn, 2007; Ely & Padavic, 2007; Westphal & Stern, 2007; Eagly et al., 1992; Lyness & Thompson, 2000). For instance, women are reported to earn less than men for the same employment positions; thus, the median weekly earnings of women who were employed full-time were 81 percent of men's salary in 2006 in the United States (U.S. Department of Labor, 2008). This trend is not unique to the United States. Women in other countries are reported to face the same challenge of unequal pay. For instance, in a multi-national study, Stickney and Konrad (2007) found that in 26 out of the 28 countries examined in the study (with the exception of Mexico and Slovenia), married women were found to earn significantly less than married men after accounting for age, number of children in the household, education, hours worked and occupational differences.

In Europe, according to the Commission of the European Communities (2009), women earn on average 17.4% less than men for every hour worked. In addition to lower salaries and limited employment opportunities, women also face greater difficulties in reaching leadership positions, both in the United States (Westphal & Stern, 2007; Lyness & Thompson, 2000; Eagly & Karau, 2002) and globally (Commission of the European Communities, 2009).

Even though much research has been done in this area, some researchers have warned that for a present-day organization, gender inequalities remains "a practical and significant problem" (Hogue & Lord, 2007, p. 370). Hogue and Lord (2007) have noted that gender bias restricts relationship development within an organization, and thus

disrupts the ideal functioning of organizational human system. An organization that is out of balance in regards to its human capital will be less likely to achieve its maximum performance level (Hogue & Lord, 2007).

### *Implicit Leadership and Gender Stereotypes*

Schein (2001) has suggested an explanation for the gender bias in terms of a mismatch between the implicit leadership prototypes and female gender roles. A similar explanation is provided by the gender-congruency concept (Eagly et al., 1992), which defines gender-role congruency in terms of a fit between gender-role expectations and leadership qualities and actions. Eagly (1987) describes gender roles as socially-defined expectations about individuals' patterns of behavior based on their salient gender characteristics. According to gender role distribution theory, individuals learn about gender roles by observing what kind of tasks males and females tend to occupy themselves with at work and at home (Eagly & Steffen, 1984). Valian (1998) has observed that traditionally, women tend to be assigned domestic roles, while men are likely to be assigned work-related roles.

In the Western world, the leadership role is often colored by a stereotype of a leader as a "hero." Leaders are expected to be decisive, tough, competent and action-oriented – the traits that are traditionally associated with male stereotypes (Offermann, Kennedy, & Wirtz, 1994; Epitropaki & Martin, 2004). Some researchers have called this Western leadership paradigm "heroic individualism" (Bailey, 2006), indicating that the concept of leadership in the West is linked to both the concept of masculinity and the concept of individualism. Contrary to the "leader as a hero" and "male as a leader" stereotypes, the prevailing stereotypes of females portrait women as warm, nurturing and

interdependent. Females are said to be more communally-oriented, valuing relationships and social connectivity (Eagly & Steffen, 1984; Hogue & Lord, 2007).

The influence of implicit stereotyping is ubiquitous and has been documented in other fields as well. For example, in a related study of gender stereotypes in negotiations, Kray, Thompson and Galinsky (2001) asked a sample of MBA students to write brief essays about potential advantages that women and men have in negotiations. The analysis of the essays revealed that women were likely to be depicted as cooperative, emotional and relationship-oriented, while men were described as assertive and able to stand firm against compromise; these latter qualities were viewed as more advantageous in negotiations. The researchers confirmed that people tend to categorize men and women into distinct stereotyped categories and to view men as more successful in competitive pursuits.

#### *Agency and Communion*

Gerber (1988) has observed that male stereotypes often depict men in agentic terms (e.g. influential, confident and independent), while women are depicted in communal terms (e.g. relations-oriented and accommodating). In an experimental study of gender stereotypes, Gerber (1988) asked one hundred and fifty-seven participants to rate men and women said to be “leaders” in their families. Gerber (1988) has found that leaders were seen as more agentic and less communal, while followers were seen as more communal and less agentic. Gerber (1988) has concluded that implicit views about leader-follower dichotomy are related to perceived agency and communion.

Agency and communion, two fundamental modes of human existence, have also been linked to gender role socialization (Bakan, 1966; Cross & Madson, 1997). Bakan

(1966) was one of the first researchers to conceptualize gender differences in terms of agency and communion. He has noted that men are viewed as possessing agentic qualities, while women are considered to have communal tendencies (Bakan, 1966). Individuals operating within the agentic framework exhibit self-enhancement, self-assertion, self-protection, instrumentality and self-control. Whereas individuals possessing communal qualities are characterized by the desire for relatedness, cooperation, connections, and concern for the group (Bakan, 1966; Cross & Madson, 1997; Buss, 1981). Some have suggested that the reason men tend to engage in agentic types of behaviors and women tend to prefer communal orientation can be related to the evolution of the division of labor (Williams & Best, 1990). Differences in agentic versus communal tendencies of men and women have also been documented by Baumeister and Sommer (1997), who have noted that men tend to identify with large (i.e. less personal) social units and tend to be higher in social dominance orientation (Sidanius & Pratto, 2001; Van Vugt, De Cremer, & Janssen, 2007), compared to women.

Bakan (1966) has maintained that although both men and women possess certain degree of agency and communion, agency is “more characteristically masculine”, while communion is “more characteristically feminine” (p.110). Agentic qualities allow an individual to master the situations and exert influence through self-assertive behavior (Buss, 1981; Gerber, 1988). The communal orientation, on the other hand, involves concern for the well-being of others, desire to preserve group harmony and focus on union and accommodation (Bakan, 1966; Buss, 1981; Cross & Madson, 1997). For example, in a study by Buss (1981), men and women were asked to judge dominant acts according to their social desirability. Female raters judged dominant acts as more

desirable when they were communal, group-oriented behaviors (e.g. introducing a speaker at a meeting), while male raters judged self-assertive and self-enhancing acts as more desirable.

In a similar vein, organizational researchers have found that, compared to men, women tend to focus more on responsibility and care (Gilligan, 1982), be more collaborative (Maier, 1999), more likely to use participative (Eagly & Johnson, 1990) and transformational (Bass & Riggio, 2006) leadership styles, and to create more cooperative work climate (Loden, 1985).

Some researchers have suggested that agency and communion tap into the fundamental question of self-construal, i.e. to what extent men and women regard the self as related to others (Kemmelmeyer & Oyserman, 2001). Like individualists, men are reported to possess a concept of independent self; they tend to view themselves as independent entities, focusing on individualistic concerns such as self-assertion and self-determination (Kemmelmeyer & Oyserman, 2001). Goethals, Messick, and Allison (1991) have also found that men tend to view themselves as more unique and unlike others.

On the other hand, women have been found to view themselves as interdependent and connected to others (Cross & Madson, 1997; Gilligan, 1982; Helgeson, 1994). This interdependent view of self that women in general tend to exhibit, is conceptually similar to the collectivists' view of self. Researchers have suggested that the interdependent self-construal is what enables women to be more accommodating, nurturing and sensitive to others' needs (Gerber, 1988; Gilligan, 1982).

Research on communication further supports male and female differences related to the agency-communion paradigm, with women using less forward, more interpersonally sensitive manner of speech, while men using more assertive and forward-types of requests (Howard & Bray 1988; Tannen, 2001). Researchers have also found that when compared to women, men tend to exhibit a higher proclivity for self-enhancement. For example, compared to women, men have been found to be more confident about their performance and more vocal about their accomplishments (Beyer, 1990).

Communal orientation may prompt women to place high value on the quality of organizational relations, including interactions with leaders. For example, Konrad, Corrigall, Lieb, and Richie (2000) have reported that, compared to men, women place higher value on good supervision. According to their findings, men report earnings and responsibility as very important to them, while women tend to report professional growth and good supervision as desirable organizational characteristics. LaPlante and Ambady (2002) suggest that the differences in expectations may be linked to the differences in perceptions. For example, a study by Sauser and York (1978) has found that even though women were paid substantially less than men in similar positions, they tend to be equally or more satisfied than men with their payments. It appears women may set lower expectations in regards to work-related rewards.

Gender differences in perceptions have been also reported in the area of leadership ratings. Overall, females have been found to be more lenient raters as a group (Bass & Avolio, 1989). For example, Bass and Riggio (2006) have reported that female raters were more likely to give more favorable ratings on the Multifactor Leadership

Questionnaire (MLQ) assessments of both male and female leaders. It is plausible that females tend to rate social objects (including their leaders) more leniently due to their communal orientation, as opposed to agentic orientation.

In particular, the interpersonal sensitivity, inter-relatedness, and the desire to preserve harmony may in part account for the tendency of women to give more favorable ratings. Additionally, researchers have documented the tendency of men to emphasize agentic qualities across situations (Bakan, 1966; Buss, 1981). It is possible that compared to women, men may not view a rating situation within a relations-oriented context, but within the agentic context of self-assertion and self-enhancement.

Based on the body of research in which women have been shown to have more communal orientation than men, and previous studies showing that US women often give higher leadership ratings, the present study proposes that similar results may be found with women cross-culturally:

*H1: Across all nations, females will give higher leadership ratings compared to males.*

### *Gender and Culture Influences on Leadership Perceptions*

Present research will extend the previous findings on gender differences in ratings by exploring the rating behavior across cultures, as well as specifically in cultures that differ on cultural dimensions of power distance, individualism-collectivism, masculinity-femininity, and uncertainty avoidance.

Smith and Peterson (2005) link gender to primary socialization experiences in the same way as culture is a primary socialization experience. The notion of gender is linked

to the notion of culture through the same social construction mechanism whereby individuals are socialized into a world view shared by their societal groups (Kemmelmeyer & Oyserman, 2001). The shared identities created by the groups of people along demographic characteristics, such as gender, age, and national origin impact individuals' values and behaviors across situations.

House et al. (2004) explored gender effects by testing whether men and women rated dimensions of culturally-implicit leadership theories (CLTs) differently across 30 countries. The authors found that overall, men rated self-protective leadership significantly higher than did women, while women rated team-oriented leadership, participative leadership and charismatic/value-based leadership significantly higher than did men. There were no significant differences found for autonomous and humane-oriented leadership. When investigating gender by culture interaction, the authors found significant interactions on all dimensions except humane-oriented leadership (House et al., 2004). However, the authors (House et al., 2004) did not provide any data as to the specific culture-level dimensions that may be linked to the above results, referring a reader to a study of such moderators by Paris (2003).

Paris (2003), using the GLOBE data from 17 countries (1,166 male and 465 female mid-level managers) has explored two cultural moderators: power distance and gender egalitarianism, as conceptualized by GLOBE. Specifically, the author has examined whether culturally endorsed implicit leadership theories (CLTs) are generalizable to both male and female managers (Paris, 2003). The dimensions used in the study by Paris (2003) were: charisma/value-based leadership, humane oriented, team oriented, autonomous, participative and self-protective.

The researcher has examined whether male and female managers agree as to what leader attributes contribute to or impede outstanding leadership. Paris (2003) has found that females consider participative leadership to be more important contributor to outstanding leadership than did male managers. Gender egalitarianism has also been found to moderate the relationship between the importance of participative leadership and gender, and power distance has moderated the relationship between gender and team orientation and autonomy (Paris, 2003).

One limitation of Paris's (2003) work is that the study has examined only two moderators: power distance and gender egalitarian dimensions of culture, as defined by GLOBE. Further, Paris (2003) has used the "values" scale as opposed to the "practice" scale of GLOBE dimensions. GLOBE's societal "values" scale is based on a "should be" response format (House et al., 2004), which assesses the perceptions of the ideal degree of a particular cultural value in a society.

For comparison, the GLOBE power distance "values" dimension is not correlated with Hofstede's power distance index for the IBM data used in the present study ( $r=.003$ , non-significant) (House et al., 2004). Additionally, according to GLOBE researchers, gender egalitarianism values measure used in GLOBE study and the study of gender by culture interaction by Paris (2003) is unrelated to Hofstede's (1980, 1998, 2001) measure of masculinity-femininity, ( $r=-.02$ ,  $p>.10$ ) (House et al., 2004).

The present research proposes to extend the previous findings on gender and culture influences on leadership perceptions (House et al., 2004; Paris, 2003), by using Hofstede's (1980; 2001) framework of national cultural values. Specifically, the study will investigate how cultural dimensions identified by Hofstede (1980; 2001), (i.e. power

distance, individualism-collectivism, masculinity-femininity, and uncertainty avoidance) moderate the relationship between gender and leadership perceptions.

Further, this study will investigate the impact of demographic variables on the leadership perceptions within international context. To the best of the knowledge of the author of the current study, leadership perceptions have not been examined in relation to the interactive effects of gender and culture in multi-national contexts, using Hofstede's framework and a large sample size of males and females. Hogue and Lord (2007) have suggested that the influence of gender on leadership is multi-faceted, operating simultaneously on multiple organizational planes and affecting complex networks of interdependent relationships. Thus, it is important to view the effect of gender on leadership from all angles. While Paris (2003) has examined the views of mid-level managers, the present study proposes to focus on subordinates, in line with the follower-centric perspective to the study of leadership. Moreover, the present study will use followers' ratings of actual leaders, compared to the managers' ratings of "ideal" leadership qualities used in the study by Paris (2003).

By exploring the moderating effect of culture on gender in leadership perceptions, this study also aims at exploring a possible global trend of the convergence of work-related gender attitudes. Socialization may play a role in reported differences between females and males in leadership domain across cultures. However, it seems that the traditional gender socialization has been under re-conceptualization in some societies. Although women, as a group, tend to be more communal, in some cultures there is an increasing trend of women adopting more agentic qualities in the public sphere (Echabe & Castro, 1999; Moore, 1999).

For example, Echabe and Castro (1999) have found that women expressed higher preference for masculine traits as “ideal traits” in connection with professional activities. However, since Echabe and Castro (1999) have conducted their research in the U.S., it is possible that the findings reflect the convergence of male and female attitudes in workplace only in a Western context. Women may be motivated to enact masculine behaviors in order to overcome the unfavorable stereotypical perceptions of women as less agentic than men.

The feminist movement in the West brought about changes in the political, public and work-related spheres in Western world. There exists evidence documenting a societal shift towards more egalitarian gender-role attitudes for both men and women over time (Ciabattari, 2001). In the United States, gender equality may be more accepted in the workplace due to the public and legal pressures exerted on companies to uphold gender equality. Therefore, it is reasonable to expect that males and females will adopt similar work-related attitudes in the Western world compared to non-Western regions.

The current study suggests that in individualistic, low power distance countries such as the US there will be a smaller gap between leadership evaluations by male and female subordinates. In other words, men and women in the above cultures are likely to evaluate their leaders in similar ways, compared to cultures low on individualism and high on power distance.

The communal tendency of women to focus on group well-being (Buss, 1981), and interpersonal sensitivity (Cross & Madson, 1997) is conceptually similar to the tendency by members of collectivistic cultures to preserve group harmony (Triandis, 1989). This study hypothesizes that the differences in male and female self-construals

(Kemmelmeyer & Oyserman, 2001) as either independent (i.e. “agentic”), or interdependent (i.e. “communal”), will interact with the individualistic-collectivistic culture to influence how men and women rate their leaders in international contexts.

Based on the body of work on gender and cultural differences discussed above, this study suggests the following:

*H2: Individualism-collectivism will moderate the relationship between gender and leadership such that in cultures low on individualism, females will give higher ratings than males; in cultures high on individualism, both females and males will give similar ratings of leadership.*

Additionally, the present study hypothesizes that there will be an interplay between gender and the hierarchical status differentials found in high power distance cultures, to influence women from high power distance cultures to give higher ratings compared to men in high power distance cultures, and compared to both women and men in low power distance cultures.

LaPlante and Ambady (2002) have stressed that, historically, women have been considered a low status group in human society. In similar fashion, Lykes (1985) has suggested that the examination of women’s experiences reveals that the concept of female self should be viewed as rooted in social contexts characterized by inequalities of power. Uhl-Bien and Pillai (2007) have observed that “individuals in lower hierarchical rank demonstrate strong propensity to distort messages to those in higher positions (Dansereau & Markham, 1987), and they may filter or frame their communications...to make it more positive in content (Back et al., 1950)” (Uhl-Bien & Pillai, 2007, p.198).

Accordingly, the present study hypothesizes the following:

*H3: Power distance will moderate the relationship between gender and leadership ratings such that females in high power distance cultures will give higher leadership ratings compared to males; in low power distance cultures, both males and females will give similar leadership ratings.*

Further, as noted previously, research suggests that women tend to be more socially-oriented than men, while men tend to be more agentic and task-oriented (Cross & Madson, 1997; Wood & Karten, 1986) compared to women. Accordingly, the present research hypothesizes that gender will interact with masculinity-femininity cultural dimension such, that:

*H4: Masculinity-femininity will moderate the relationship between gender and leadership such that in cultures low on masculinity, females will give higher ratings than males; in cultures high on masculinity, both females and males will give similar leadership ratings*

Finally, as the influence of uncertainty avoidance on the relationship between gender and leadership ratings will be examined in an exploratory fashion, the following non-directional hypothesis is proposed:

*H5: Uncertainty Avoidance will moderate the relationship between gender and leadership perceptions.*

As will be discussed below, a number of factors intervene to affect leadership ratings by men and women in multi-national organizations. These variables influencing the leadership ratings in cross-cultural contexts will be reviewed next.

## Culture Influence on Evaluation Process

Leadership perception and evaluation is a dynamic social process influenced by socio-cultural environment, gender socialization, and role expectations. The concept of leadership perception is closely related to the concept of leadership ratings (e.g. leniency) and underlying implicit motivations. From a theoretical point of view, the concept of perceptions is linked to the concept of ratings through personal (e.g. implicit judgments) and contextual (e.g. cultural values) variables. Although traditionally these two concepts have been associated with different aspects of industrial-organizational psychology, this paper will attempt to provide an integrative overview of these two important psychological processes.

It is proposed in the current study that cultural differences may impact leadership perceptions and thus contribute to subsequent leadership ratings' variance. Bretz, Milkovich, and Read (1992) have observed that current performance evaluation systems used by organizations were developed in the West and may be culturally bound. In a more recent study, Gillespie (2005) has examined whether feedback ratings were equivalent across national cultures and found that employees in international locations of the same multinational company interpreted and responded to the same survey differently. Although it has been suggested that national culture influences ratings of managerial effectiveness, relatively few researchers have systematically explored the link between culture and evaluative ratings in surveys (Hofstede, 1991; Bretz et al., 1992; Vance, McClaine, Boje, & Stage, 1992; Milliman et al., 1998).

Fletcher and Perry (2001) have warned that the cultural differences between a person who provides the ratings and the "target" of the ratings may negatively impact the

outcomes of the evaluation process in several areas. Specifically, the authors have suggested that cultural differences may result in negative reactions to the evaluation process and in diminished quality of employee and employer relationship.

Some researchers have emphasized that in order to dissect the mechanism of employee perceptions and subsequent evaluative ratings, one must consider the personal characteristics of the raters (e.g. beliefs, values, opinions, personality) and the context in which such ratings are obtained (Tziner, Murphy & Cleveland, 2005). Culture construct encompasses the differences in context (e.g. rewards system, consequences, customary approaches, traditions in cultures at different levels of PD and IND) and raters (culturally-conditioned cognitive styles, comfort with ratings, values/beliefs about leadership, and beliefs about supervisory-subordinate relationships). The present section will discuss how such dimensions of culture as power distance, individualism-collectivism, femininity-masculinity, and uncertainty avoidance impact employee perceptions and subsequent ratings.

#### *Power Distance Dimension and Leadership Evaluation*

As discussed above, the fundamental issue reflected in power distance dimension is acceptance of inequality. Hofstede (2001) has noted that “This inequality is usually formalized in boss-subordinate relationships.” (p.82). According to Hofstede’s definition of power distance, “Power Distance is a measure of the interpersonal power or influence between Boss (B) and subordinate (S) as perceived by the less powerful of the two, S...” (Hofstede, 2001, p.83). Thus, it can be hypothesized that ratings of supervisors by subordinates will be most affected by power distance dimension of national culture.

Individuals from high power distance culture do not customarily expect to rate their supervisors and may be uncomfortable with the process.

In high power distance societies, organizational power tends to be centralized and employees at lower levels of hierarchy tend to be dependent on their supervisors. As a rule, in such cultures, evaluative ratings are usually given by immediate supervisors who have relatively more power embedded in their positions than their subordinates.

Individuals in high power distance cultures are more likely to accept the authority based on position or seniority and are more likely to expect that loyalty to current authority will be valued and rewarded, compared to individuals in low power distance cultures who would expect more power-sharing and participative decision-making. For example, research has found that in such high power distance countries as Malaysia, Indonesia and Hong Kong, managers tended to consider seniority and loyalty when evaluating performance, while in the U.S. (a medium-low power distance country), managers based their evaluations on more performance-related criteria (Entrekin & Chung, 2001; Mamman, Sulaiman, & Fadel, 1996). Offermann and Hellmann (1997) have found that supervisors from low power distance cultures and low uncertainty avoidance cultures were rated by their followers as more approachable and more likely to delegate power.

*Motivation to Provide Survey Responses.* Researchers have found that motivation plays an important role in the way an employee will respond to the request of filling out a survey. One of the motivational factors determined by the culture could be a decision to participate in a survey. Employees in high power distance cultures may decide to engage in the survey simply because this is what their manager has asked them to do. In contrast,

employees in a low power distance culture may give responses on an organizational survey as a way of expressing one's own unique opinions and views. Thus, employees in high power distance cultures may be reluctant to express their truthful opinions about their leadership, while employees in low power distance cultures may be more likely to express their own perceptions.

*Ratings' Characteristic.* One of the features of a high power distance culture that follows from the centralization of power is that employees do not expect that unfair, negative judgments by their supervisors can be appealed (Fletcher & Perry, 2001). When no such possibility exists, the costs of giving unfavorable ratings may simply outweigh the desire to express one's opinions. Thus, subordinates in high power distance cultures may be hesitant to provide low ratings. Research has supported this proposition.

According to Hofstede (2001), cultures that are classified high on power distance and uncertainty avoidance and low on individualism and masculinity, are likely to provide more lenient and less varied ratings, compared to cultures that are classified as low on the power distance and uncertainty avoidance and high on individualism and masculinity. A viable explanation for the "leniency bias" is that the lenient ratings can be viewed by subordinates as an insurance policy to protect them against any negative outcomes that might come from judging their superiors unfavorably.

Brutus et al., (2001) have reported that in China (a country with a relatively high PDI level), "The politics of evaluations were intense." (p. 15). The authors have found that the need to preserve harmony leads to rating inflation among Chinese raters, while another cultural tendency referred to as "Golden Mean" ("Zhong Rong" in Chinese) leads to a lack of differentiation between raters. In Slovakia (a country scoring at the extreme

high end of PDI), the authors have found that “Negative feedback from one’s superior is seen as an order or a sentence, feedback from subordinates as lack of loyalty.” (p. 16). Raters in Slovakia were not comfortable with the evaluation process and did not have faith in the anonymity promised to the raters and in the stated use of the ratings.

To the contrary, employees who hold low power distance beliefs assume they have a right to expect any misjudgments on the part of their supervisors to be disputed and corrected. This difference in approach to abuse of power can be tracked on the organizational level as well. For example, organizations in the low power distance cultures often install formal mechanisms (e.g. Office of Mediation) to support potential appeals on behalf of employees, concerning possible abuses of power within an organization.

As mentioned above, organizations frequently use surveys to evaluate individual and organizational outcomes. Surveys frequently use raters across multiple levels of organizational hierarchy (i.e. top management, supervisors, and subordinates). Due to the inherent anti-centralized nature of a survey process, it can be expected that power distance dimension will be especially relevant to the variability in evaluative ratings in international contexts.

One mechanism through which power distance cultural dimension can impact effectiveness of survey ratings is through the raters’ reactions to and their comfort with the process. When survey tools are transferred to a high power distance culture, the process can meet with a resistance by employees. Raters may be uncomfortable with the idea that individuals at the lower levels of power are deemed qualified to evaluate those holding higher levels of authority (e.g. top management, immediate supervisor). Thus,

Gregersen, Hite, and Black (1996) have noted that in Latin America (a region relatively high on power distance dimension) obtaining feedback from subordinates is unacceptable and unlikely. Ramamoorthy and Carroll (1998) have suggested that as a result of incongruence between the intrinsic cultural value and transferred practices, raters may view such practice as potentially undermining leadership authority. Raters from high power distance cultures may react negatively to what may seem to be a re-distribution of evaluative power to parties other than a supervisor (e.g. subordinates and peers).

In a more recent study, Nash (2005) has found that in higher power distance cultures the concept of feedback was still fairly new. Compared to individuals from high power distance cultures, individuals from low power distance cultures were more comfortable with the idea of regular feedback (Nash, 2005). Similarly, Fletcher, and Perry (2001) have reported that in low power distance cultures, multi-rater feedback systems are viewed as more appropriate, as compared to cultures with high power distance beliefs. Fletcher and Baldry (1999) have noted that the multi-source, multi-rater feedback process enjoyed a longer history in the West, compared to other parts of the world. The acceptance of such practice may be due to the fact that employees in low power distance cultures view evaluative ratings as an opportunity to diminish power differential between supervisors and subordinates.

Power distance dimension differences may also affect the self-evaluations. For example, Farh, Dobbins, and Cheng (1991) have found a “modesty bias” among the ratings by workers in Taiwan, a country that ranks high on power distance. However, Yu and Murphy (1993) failed to replicate the findings by Farh, Dobbings, and Cheng (1991). The failure to find a “modesty bias” in a high power distance culture could be due to the

fact that the country used in their study, China, ranked lower on power distance dimension compared to Taiwan. It is possible that “modesty bias” can be found only in the countries ranked at the very high level of power distance. Contrary to the “modesty bias” found in high power distance cultures, managers in low power distance cultures are likely to exhibit leniency bias. Mount (1984) has found that in the U.S., subordinates tend to rate their manager less favorably than does the manager himself, or do the manager’s superiors.

*Coaching Feedback.* Additionally, the difference in subordinate ratings in high power distance cultures compared to low power distance cultures could stem from the difference in the nature of interaction between a subordinate and a supervisor. For example, Huo and Von Glinow (1995) have noted that in high power distance cultures, the supervisors are less likely to provide coaching to subordinates. Another researcher has observed that in Asia (generally, a region associated with high power distance culture), there is little attention being paid to the coaching and development of employees (Brutus et al., 2001).

As a matter of fact, researchers have reported distinct variability in how different cultures view the significance of giving and receiving feedback. Nash (2005) has found, for example, that individuals from low power distance cultures express desire to have the 360-degree feedback process repeated at regular intervals. Further, individuals from low power distance culture expressed a wish for better post-feedback coaching. Nash (2005) has hypothesized that individuals in low power distance culture view coaching as part of normal interaction between a subordinate and a supervisor, and are more likely to use the feedback to improve their career-related performance.

*Power Distance and Participative Environment.* As discussed above, organizations that foster a participative climate can expect their employees to provide more accurate ratings on organizational surveys. In low power distance cultures, employees are more likely to expect and welcome participative management style from their supervisors. Although feedback is still most often initiated by a superior, employees in lower power distance cultures may be more likely to voice their disagreements with supervisory assessments.

Contrary to low power distance cultures, employees in high power distance cultures tend to refrain from openly asking for feedback. It is customary in such cultures for employees to wait for a supervisor to initiate an evaluation process (Triandis, 1989). When employees in high power distance cultures have been encouraged to get involved in the decision-making process, such attempts have not met success. For example, researchers reported evidence of less employee involvement in evaluation process in the following regions and countries high on power distance: Latin America (Triandis, 1989), Malaysia (Vance et al., 1992) and Russia (Elenkov, 1998).

For instance, attempts to transplant the participatory Western-style organizational climate to Russia were not effective (Elenkov, 1998). Researchers have found that Russian managerial culture was not compatible with North American efforts to involve subordinates into the evaluation process. Participative style is characterized by joint problem-solving and two-way communication. Some researchers noted the fundamental incompatibility of hierarchy-based cultural values of high power distance with a participative style (Mendonca & Kanungo, 1990). Interestingly, Hofstede (2001) has noted that subordinates in high power distance cultures tend to exhibit polarization into

dependent or counter-dependent reactions towards hierarchical, organizational systems. The employees in low power distance cultures tend to react more favorably to a “consultative” leadership style. Thus, it is reasonable to expect that employees in low power distance cultures will be less likely to inflate their ratings, as they are more comfortable with the idea that their opinions will be taken into consideration by the company’s management.

Ralston et al. (2001) have reported the preference for “hard,” upward influence tactics in Hong Kong and Mexico, countries that are both relatively high on power distance and low on individualism. These findings support the earlier evidence by Wexley and Klimoski (1984), who have reported that during evaluation process, managers with more directive style (a style more likely to be used in high power distance cultures) preferred to use the “tell and sell” or “tell and listen” approach. Ralston et al. (2001) also have reported that the managers from the U.S. and Netherlands (countries scoring medium to low on power distance) reported “soft” influence strategies as more desirable, such as joint-problem solving. It is possible that the importance of power distance in Eastern and Latin cultures may play a role in the preference for “hard” versus “soft” influence tactics.

*Task versus Context Environmental Characteristic.* Hofstede (2001) has observed that one can compare results of his multi-national survey to findings reported by seminal Ohio State studies (Stoghill & Coons, 1957) on “consideration” and “initiating structure.” According to Hofstede (2001), a high power distance environment is characterized by activities targeted more at “initiating structure” and less at “consideration.” This idea parallels the findings of Bochner and Hesketh (1994), who have reported higher task

orientation among employees in higher power distance cultures. Fletcher and Perry (2001) have suggested that the tendency to place high value on task-oriented behaviors, may prompt the individuals from high power distance cultures to rate task accomplishments higher than would individuals from lower power distance cultures. The greater cultural emphasis placed on task-related activities may impact the subordinate ratings among employees of different cultural orientations.

The possibility that employees in high power distance environments pay more attention to “initiating structure” activities than to “consideration” activities may explain such unexpected findings as the ones observed by Early and Stubblebine (1989). The authors have reported evidence that U.S. employees (who identify with low-medium power distance culture) are more open to receiving evaluation feedback from their managers, while English employees (who tend to have higher power distance beliefs than American workers) are less trusting of such feedback and less accepting of perceived sources of influence.

It is possible that in high power distance cultures (e.g. Russia), more attention is paid to the job descriptions and structural mechanisms, than in low PDI cultures, and employees are evaluated on their technical competence, based on how they fulfill a formal job description, not based on how the supervisor feels the subordinate fulfills her role. In other words, the roles themselves might be more clear-cut and less ambiguous in higher power distance cultures. Employees in high power distance cultures may receive feedback on whether they are performing well by estimating how well they carry out their formally specified functions, which can then make additional feedback from the supervisor seem superfluous.

The body of work on power distance and ratings reviewed in this chapter suggests the following:

*H6: Employees in high power distance cultures will rate their leaders higher, compared to employees in low power distance cultures.*

#### *Individualism/Collectivism and Leadership Evaluation*

Another key element that may be also relevant to the variance in leadership ratings across cultures is the individualism-collectivism dimension. This study proposes that people in collectivistic cultures are more likely to give higher ratings because they are more concerned with the harmonious relationships among in-group members, compared to people in individualistic societies (Triandis, 1989; Kitayama et al., 1997). Employees from collectivistic cultures may be motivated to preserve harmony with the immediate manager and the organization they affiliate with, as the manager and the organization may be viewed as an important part of the employees' interdependent lives. It has been observed that there are fundamental differences in how employees from different cultures may view a process of providing evaluative ratings. The notion that evaluation at its core is an objective process is more likely to be held by members of individualistic cultures (Fletcher & Perry, 2001).

*Influence of Self-Concept on Ratings across Cultures.* In recent years, researchers have underscored the fundamental differences in how individuals from different cultures construct their self-concepts. The two classifications that have been suggested by researchers are: interdependent view of self versus independent view of self. The category of independent self is similar to the notion of individualism and the category of interdependent self conceptually overlaps with the notion of collectivism. Collectivism

refers to the cultural view, which stresses closer ties between the self and one's in-group. Members of collective societies hold interdependent self-concept and are more inclined to be guided by loyalty to their community (Triandis, 1995).

To understand how individualism/collectivism dimension may exert an influence on the process of providing ratings, one must first understand the basis for distinction between the two dimensions. The Western (i.e. individualistic) style of thought embodies the value of "individual distinctiveness," while the Eastern (i.e. collectivistic) style of thought embodies the value of "harmonious social relations." Nisbett (2003) has found fundamental differences in perceptions between Asian populations (characterized by interdependent self-concept) and Western populations (characterized by independent self-concept), in regards to use of contextual versus dispositional explanations of behavior. People from the interdependent culture, are less likely to commit the fundamental attribution error, i.e. they are more likely to take situational factors into account and are less likely to make dispositional attributions (Markus & Kitayama, 1991; Nisbett, 2003).

As has been pointed out by Markus and Kitayama (1991), the social cognition of those with interdependent selves is characterized by the acute awareness of emotions, reactions, and behaviors of socially-relevant others. The actions of individuals in interdependent cultures are likely to be explained as "situationally-bound" and to include the context of the situation. It can be hypothesized that in collectivistic cultures, subordinates may have a tendency to give somewhat lenient ratings, because employees will be more likely to appreciate the complexity of their supervisor's job demands.

In contrast to the individuals with interdependent ideas of self, individuals of more individualistic orientation may focus exclusively on the individual achievements and

may disregard contextual factors when providing evaluative ratings (Triandis, 1989). Additionally, the participants in interdependent cultures are less likely to express negative emotions and motives (e.g. anger). This could explain why, in some developing countries (e.g. Kenya) that tend to score low on individualism, workers tend not to actively voice their opinions and participate in discussions during performance appraisal interviews (Seddon, 1987). Mendonca and Kanungo (1990) have noted that people in developing societies (who tend to score low on individualism) place higher priority on relationships generated through employment than on job-related achievements. Thus, it can be hypothesized that individuals in collectivistic countries may be reluctant to evaluate supervisors for fear of potentially damaging a useful relationship; or, if they feel they have to give ratings, they may soften the negative evaluation and will be more likely to give somewhat lenient ratings.

*Goals and Motivation for Providing Ratings.* Representatives of interdependent (collectivistic) cultures hold relatively more elaborate knowledge about others, compared to knowledge about the self. Markus and Kitayama (1991) have pointed out that respondents with interdependent views of themselves might ponder the goals and motivations of the person who administers the survey and what kind of relationship they have with this person. One of the reasons for such extended attention to the relational and contextual part of the survey process might be the fact that in collectivistic cultures, people view their actions as dependent on the actions and motivations of the relevant others. Markus and Kitayama (1991) have concluded that when asked to provide ratings on a survey, respondents from collectivistic culture might ask themselves: what are

potential ramifications of answering in one way or another in respect to my relationship with this person?

This tendency might be especially pronounced when subordinates in collectivistic cultures are asked to rate their supervisors. For example, Liu (1986) has found that Chinese were expected to be loyal towards their superiors. Similarly, it has been found that in Japanese and Chinese cultures, which tend to be somewhat collectivistic, there is an implicit psychological imperative of “respecting/obeying” one’s supervisor. Researchers have documented the tendency of people from collectivistic cultures to view their supervisors as a legitimate source of feedback (Greller & Herold, 1975) and trust the supervisors with providing informative evaluations (Early, 1986), not the other way around.

To the contrary, while individuals in collectivistic cultures may decide to fill out a survey because their supervisor expects them to fill it out, or because all their colleagues have completed the survey, the employees with independent views of self may be guided by a different set of motivations. For example, in the U.S., a country at the extreme end of individualism, employees are used to being asked to answer an array of surveys, ranging from teamwork, to organizational morale, to performance assessments and job satisfaction. Organizations in the U.S. encourage the employees to provide honest feedback on the surveys, emphasizing that their opinions matter (Atwater, Waldman, Ostroff, Robie, & Johnson, 2005). Given the large use of surveys in the U.S., employees in the U.S. may be more accustomed to completing surveys and rating their leaders. Organizational environments in the U.S. are generally characterized by shared understanding among employees that their opinions matter and that making managers

aware of how they are perceived by employees is a valuable organizational practice (Atwater et al., 2005).

*Organizational Climate and Environment.* Individuals with interdependent orientations have an implicit capacity to monitor their in-group climate, paying careful attention to preservation of harmony between group members. This inclination to view their co-workers as a highly interdependent community in a relatively collectivistic society, no doubt has influenced the differences in human resource management practices between individualistic and collectivistic cultures. For example, in Russia (a country high on collectivism), employees tend to expect and value team-based performance evaluations (Elenkov, 1998). Similarly, in Japan, management practices tend to focus on group performance, while in the U.S., most of the human resource practices target the improvement and evaluation of individual performance (Erez, 1994).

Further, in a meta-analytical study of conformity, Bond and Smith (1996) have found that members of collectivistic societies were more affected by a majority opinion than those who identified with individualistic orientation. The tendency to be influenced by the majority may impact how people from collectivistic cultures approach the process of providing ratings. There may be less variability in ratings in collectivistic cultures, as the respondents may simply decide to investigate and side with the views expressed by the majority. That is, they may collude in giving similar ratings.

Researchers have noted the influence of culture on the expectations surrounding evaluation process. It is not unusual for the evaluation feedback in North America to be delivered in a blunt manner, with the expectation that an employee will dispute or negotiate the evaluation if needed (Fletcher & Perry, 2001). Elenkov (1998) has

compared the preferences for the feedback characteristics in Russian (highly collectivistic) culture and the U.S. (highly individualistic) culture. The author has observed that the prevalent assumption in the U.S. was that honest and direct evaluations will result in performance improvement; however, to communicate feedback in Russia in a blunt and direct manner could be detrimental to performance. It appears that such evaluation is seen as disruptive of a group's cohesiveness and may cause the loss of face (Hofstede, 1991). Additionally, unfavorable, direct feedback is assumed to result in diminished organizational commitment and loyalty and thus, is something to be avoided in Russian collectivistic culture. It appears that in collectivistic cultures, which tend to reward member cooperation (Rosenstein, 1985), commitment, and loyalty (Seddon, 1987), any requests for providing evaluative ratings (even in the form of organizational surveys) will likely be viewed with caution.

As a matter of fact, collectivists may try to use the evaluation process to increase organizational commitment among employees. As such, raters from collectivistic cultures may focus on minimizing differences between in-group members, either out of sense of obligation or to defer to in-group authority (Oyserman, Coon, & Kimmelmeier, 2002; Triandis, 1989). Additionally, respondents may show greater in-group bias when giving evaluative ratings. This tendency among respondents from collectivistic cultures may result in lenient ratings.

Consistent with this observation, Japanese (who tend to identify with collectivistic orientation) were reported to engage in self-criticism and self-improvement following a perceived failure in performance (Kitayama et al., 1997). Thus, feedback-givers in

collectivistic cultures may refrain from publicly expressing their views and from giving evaluations that are too direct, or less than favorable.

These differences on the key cultural dimension of individualism and collectivism are expected to produce differences among subordinate ratings in employees in international contexts. Specifically, the differences on cultural dimensions may affect the leniency of subordinate ratings.

Accordingly, the following hypothesis can be postulated:

*H7: Employees in cultures low on individualism will give higher leadership ratings compared to employees in cultures high on individualism.*

#### *Masculinity-Femininity and Leadership Evaluation*

Hofstede's dimension of masculinity-femininity deals with the way societies view such domains as achievement, competition, and aggressive action, compared to community development, social networks and environmental concerns. The former concepts are associated with stereotypically "masculine" pursuits, while the latter concepts are associated with "feminine" values. The mere fact that Hofstede (1984) has anchored this dimension at the polar end-points of masculinity and femininity suggests that he recognized the possibility of gender-related differences embedded in cultural values. Hofstede's masculinity-femininity index also indicates that countries vary on this dimension and this dimension is an important indicator of a cultural value system of a given nation.

The precise influence of masculinity-femininity dimension on male and female ratings of leadership is unclear. In a nutshell, Hofstede's (2001) distinction between masculinity dimension and femininity dimension refers to the distinction between task-

focused mode and relations-focused orientation. As discussed previously in the gender-related section of this study, men tend to be more reserved (Bakan, 1966) and task-oriented (Cross & Madson, 1997; Wood & Karten, 1986), while women tend to be more communal and socially-aware (Cross & Madson, 1997; Bakan, 1966). Masculine cultures value achievement and tend to advocate more distinction between gender roles (Hofstede, 2001). Feminine cultures value social connectedness and tend to discourage the differences between men and women in public and private spheres. The present study argues that men and women, from a culture high on masculinity dimension (i.e. that assigns more distinct gender roles to men and women), will give different evaluative ratings of leadership. In a culture high on femininity (i.e. that differentiates less between rigid gender roles), both men and women will be likely to give similar ratings of the leadership.

Chang (1999) has suggested that cultural dimension of masculinity-femininity can be linked to Eagly's gender role distribution theory, which addresses gender differences on a micro-level. The author has noted that masculinity and femininity dimensions are not substantively equal. Femininity is a broader dimension, capable of encompassing varied gender-role differentiation, while masculinity dimension presumes a clear-cut gender role distribution (Chang, 1999).

Hofstede (1980) has found that worldwide, for women, cooperation, physical conditions of the workplace, and subordinate-supervisory relations are important, while men place more importance on earnings, training, and advancement opportunities. The author has maintained that gender and culture are linked through the process of social construction. Gender identities are first instilled in boys and girls by their parents, and

later are maintained by such social systems as schools, universities, organizations, and societies at large. Hofstede (1980) has stressed that all these institutions are culturally-bound, and thus, gender construction is culturally-bound. Masculine and feminine countries interpret gender equality somewhat differently. In masculine countries, gender equality means giving women access to the positions held by men (e.g. executives, managerial, etc.) or, in other words, it is equality at the workplace. In feminine countries, gender equality also taps into a home-life domain, where men are expected to take an active interest in both home and work domains.

Value of modesty in feminine cultures (Hofstede, 1998) may be related to individuals in feminine cultures giving higher ratings to others (e.g. supervisors) as a self-effacing “modest” strategy. Hofstede (1998) has maintained that masculine cultures support ego-boosting values; therefore, it is likely that members of masculine cultures will tend to rate their supervisors less favorably, thus, in an indirect way, boosting their own standing and demonstrating assertiveness. For example, in a cross-cultural study of literacy skills across several age groups (respondents were aged 16-65) conducted by Organization for Economic Cooperation and Development (OECD) (Hofstede, 1998), respondents were asked to self-rate their test performance. The test performance was also rated objectively for all the participants. It was found that respondents from masculine countries gave themselves significantly higher self-ratings on their test performance, compared to respondents from feminine countries, even when the respondents obtained the same test scores.

The results of the OECD study can be explained by the fact that in masculine cultures, both genders (men and women) are socialized toward assertiveness,

ambitiousness, and achievement, as compared to modesty. In feminine cultures, the opposite is true (Hofstede, 1998). Both men and women are socialized against excessive ambitiousness and competitiveness and towards modesty. In feminine cultures “Excellence is something one keeps to oneself.” (Hofstede, 1998, p.85); however, Hofstede also mentions that the gender gap is larger in masculine cultures, and women in masculine cultures who want to advance their careers choose sometimes to undertake assertiveness training, which is not a popular option in feminine cultures.

The core values comprising the masculinity-femininity dimension suggest that it is reasonable to expect an association between masculinity-femininity scores and the subordinates’ evaluations of leaders. Masculinity-femininity are likely to influence individual perceptions and ratings of immediate supervisors and top management as the values expressed by the MAS dimension are linked to personal and work-related goals of individuals (Hofstede, 1998).

Based on the above summary of the findings on masculinity-femininity and ratings, the following hypothesis is suggested:

*H8: Employees in cultures low on masculinity dimension will give higher ratings of leadership, compared to employees in cultures high on masculinity.*

#### *Uncertainty Avoidance and Leadership Evaluation*

According to Hofstede (2001): “Uncertainty about the future is a basic fact of human life with which we try to cope through the domains of technology, law, and religion. In organizations, these take the form of technology, rules, and rituals” (Hofstede, 2001, p.145). Uncertainty avoidance represents the degree to which people in a cultural group focus on planning and the creation of stability and feel threatened by

unstructured situations. A high uncertainty society values regulations, laws, and policies designed to diminish existential ambiguity.

Members of high uncertainty avoidance cultures prefer clear rules and regulations, exhibit more resistance to change, and hesitate to change employers. To the contrary, individuals from the low uncertainty avoidance cultures value flexibility, have less resistance to change, and do not consider organizational commitment to be a virtue (Hofstede, 2001). Persons from cultures high on uncertainty avoidance may place more value on goals, tasks, specific roles, clearly-defined responsibilities, and deadlines.

Hofstede (2001) mentions one characteristic related to uncertainty-avoidance that is of particular interest to this study. Specifically, individuals from high uncertainty avoidance cultures “Don’t admit dissatisfaction with their employer.”, whereas workers from low uncertainty-avoidance cultures are more likely to “Admit dissatisfaction with their employer.” (Hofstede, 2001, p.160). Additionally, Hofstede has noted that individuals from a low uncertainty avoidance culture have higher tolerance for ambiguity in subordinate-supervisor relationships. Offermann and Hellmann (1997) have found that leaders from cultures high in uncertainty avoidance were perceived by their subordinates as more controlling, compared to leaders from cultures low in uncertainty avoidance.

Since the primary focus on this study is on power distance, individualism-collectivism, and masculinity-dimensions, with uncertainty avoidance being reviewed in exploratory terms, the following hypothesis is proposed:

*H9: Employees in cultures high on uncertainty avoidance dimension will give higher ratings of leadership, compared to employees in cultures low on uncertainty avoidance.*

## Summary of the Hypotheses

To summarize, the hypotheses investigated in current research will be as follows:

*H1: Across all nations, females will give higher leadership ratings compared to males.*

*H2: Individualism-collectivism will moderate the relationship between gender and leadership such that in cultures low on individualism, females will give higher ratings than males; in cultures high on individualism, both females and males will give similar ratings of leadership.*

*H3: Power distance will moderate the relationship between gender and leadership ratings such that females in high power distance cultures will give higher leadership ratings compared to males; in low power distance cultures, both males and females will give similar ratings of leadership.*

*H4: Masculinity-femininity will moderate the relationship between gender and leadership such that in cultures low on masculinity, females will give higher ratings than males; in cultures high on masculinity, both females and males will give similar leadership ratings.*

*H5: Uncertainty Avoidance will moderate the relationship between gender and leadership.*

*H6: Employees in high power distance cultures will rate their leaders higher compared to employees in low power distance cultures.*

*H7: Employees in cultures low on individualism will give higher leadership ratings compared to employees in cultures high on individualism.*

*H8: Employees in cultures low on masculinity dimension will give higher leadership rating, compared to employees in cultures high on masculinity.*

*H9: Employees in cultures high on uncertainty avoidance dimension will give higher leadership ratings, compared to employees in cultures low on uncertainty avoidance.*

## Chapter 3: Method

### *Participants*

The data for the participants was taken from an archival database, provided by an external consulting firm based on a survey administered across subsidiaries of a large multi-national company in a heavy industry sector. The survey was administered in 2006, using the web and paper-and-pencil administration methods. The consulting firm sent the paper-and-pencil versions to their client's "survey team coordinator", who in turn distributed the surveys to the employees. Completed surveys were collected by the client's "survey team" representatives and sent back to the consulting firm. The online version of the survey was administered from the consulting company's server; employees were sent directly to the central server (i.e. there was no intermediary). The survey response rate was 73 percent; 43,175 responses were received by web, 6807 were received by paper.

The dataset contains data from 49982 workers employed by a large international organization headquartered in Europe (herein referred to as Company B). The participants represent various employment levels and departments within the organization. The data for the specific functions for the company subsidiaries were not available due to the confidentiality consideration. The selection of the countries to include in the analysis was guided by the consideration of parsimony and the attempt to provide variation on the Hofstede's (2001) cultural dimensions of power distance, individualism-collectivism, uncertainty avoidance and masculinity-femininity. The four countries selected were U.S., China, Spain, and Austria (N = 18568). The Hofstede's (2001) culture scores are presented in Table 1.

Cultural scores were assigned to respondents based on their location and reported ethnicity. Data from each country were examined for potential presence of expatriate workers. Only employees who reported ethnicity congruent with the majority ethnical group were included in the final analysis. In other words, employees who reported ethnicity outside the majority group (e.g. respondents of European descent/White, or Black/Black-African descent working in China) were excluded from the analysis. The exclusion of ethnically-noncongruent respondents from each country's sample provided a somewhat more conservative approximation of a nationality dimension, compared to a location-based approach.

Specifically, in China, of the 1195 respondents, 1096 respondents indicated their ethnicity. Out of the 1096 respondents who indicated their ethnicity, 1051 (87.9%) respondents identified themselves as of Asian descent, 1 (0.1%) as of Black or Black-African descent, 2 (0.2%) as of Hispanic/Latino descent, 39 (3.3%) as European descent/White Caucasian, 3 (0.3%) as Multi-Racial, 99 (8.3%) respondents did not provide their ethnicity. In Austria, 271 (95.4%) respondents identified themselves as of European descent/White Caucasian, 1 (0.4%) as Multi-Racial, twelve respondents did not provide their ethnicity.

In Spain, of the 780 respondents, 736 (91.7%) identified themselves as of European descent/White Caucasian, 2 (0.2%) respondents as of Asian descent, 2 (0.2%) as of Black or Black-African descent, 24 (3 %) as of Hispanic/Latino descent, 1 (0.1%) as of Middle Eastern descent, 2 (0.2%) as American Indian/Alaskan/Canadian native, 1 (0.1%) as Pacific Islander, Aboriginal, or Maori, 8 (1%) as Multi-Racial, 27 (3.4%) respondents did not provide their ethnicity.

In the U.S., 823 (4.8%) respondents identified themselves as of Asian descent, 967 (5.7%) as of Black or Black-African descent, 1032 (6.1%) as of Hispanic/Latino descent, 80 (.5%) as of Middle Easter descent, 251 (1.5%) as American Indian/Alaskan native, 65 (.4%) as Pacific Islander, Aboriginal, or Maori, 11425 (67%) as European descent/White Caucasian, 491 (2.9%) as Multi-Racial, 1923 (11.3%) respondents did not provide their ethnicity. Because the U.S. has historically been known as a “melting pot,” encompassing a wide range of ethnically-diverse sub-populations, all the data were retained for the U.S.-based respondents. Due to the small overall percentage of ethnically non-congruent populations present in China, Austria and Spain compared to the U.S., it was not anticipated that the deletion of the cases in these countries would bias this study’s results.

The data from the survey were collected for organizational developmental purposes. The employees were told that the purpose of the survey was to improve employee satisfaction through company/managerial interventions in order to better serve the company’s customer base. The respondents were guaranteed complete confidentiality for their answers. The participants were told that the identifying information could not be linked to their responses and no one at their organization could access an individual employee’s responses. Moreover, the identity of the surveyed organization is not known to the researcher.

The questionnaire consisted of substantive questions and demographics questions. Participants indicated their level of agreement on a 5-point Likert type scale, ranging from (1) *strongly disagree* to (5) *strongly agree*, and a *not applicable* response was available. Items were averaged to form scores on the respective measures. The survey

was administered to all employees in the organization and was professionally translated into corresponding native languages. No incentives for completing the survey were provided.

### *Independent Measures*

*Gender.* The variable gender in this study was based on whether the respondents identified themselves as male or female.

*Culture.* This study used the culture scores identified by Hofstede (2001) to measure participants' national culture scores, as the nature of the available archival data does not allow for individual-level assessments. Researchers have noted that national-level scores do not necessarily correspond to scores obtained at individual level, as a national culture is an aggregate formed by multiple members within each society (Diener & Diener, 1995). Thus, an important distinction must be made between national culture, a macro-level concept, and cultural values held by individuals, which is a micro-level concept.

To circumvent the “ecological fallacy” (Hofstede, 2001) of assigning country-level scores to individuals, some researchers propose the use of direct assessments that would allow to measure cultural values at individual level (Oyserman et al., 2002). However, such approach has been criticized for assuming that culture consists of explicit set of beliefs, rather than implicit values and that the respondents can accurately assess their own cultural orientation. Another disadvantage of this approach is that it assumes that respondents assign the same meaning to the response choices (Oyserman et al., 2002).

Additionally, researchers have noted that culture is driven by the similarity of perceptions based on contextual experiences and thus is likely to be experienced in a similar manner by members of a single society (House et al., 1997). Further, some investigators maintained that variations between cultures are likely to be greater than variations within cultures (Markus & Kitayama, 1991). The present study will take into consideration the above approaches to cross-cultural investigation, while using caution in interpreting the results from the cross-level analyses.

*Power Distance Index (PDI)*. PDI used in this study is taken from the classification developed by Hofstede (1980; 2001).

*Individualism-Collectivism (IDV)*. The concept of individualism-collectivism has been under scrutiny by researchers (Triandis, 1993), with multiple conceptualizations of this dimension proposed in the field. Ronen (1997) has observed that panoply of definitions of individualism-collectivism concept has made it difficult for researchers to compare the results of cross-cultural studies. To ensure methodological transparency and to facilitate meaningful knowledge-transfer in a cross-cultural psychology field, researchers should make an effort to clearly articulate which conceptualization of a given cultural value dimension they use. This study used individualism-collectivism index developed by Hofstede (1980; 2001).

*Masculinity-Femininity (MAS)*. The present study used Hofstede's (1980; 2001) index of masculinity-femininity dimension of culture.

*Uncertainty Avoidance (UA)*. The present study used Hofstede's (1980; 2001) index of uncertainty avoidance dimension of culture.

### *Dependent Measure*

*Leadership Perceptions.* Items pertaining to leadership perceptions were identified from a total pool of the employee attitude survey items used by the external consulting company. Due to the proprietary nature of the survey material, the specific survey items cannot be provided in this study; however, the content of the items will be briefly summarized below. The survey items asked employees to rate their management on aspects covering such issues as communication, trust, satisfaction with performance feedback, and coaching among others. Items were evaluated on a 5-point Likert-type scale. Cronbach's alpha of reliability for the Leadership scale is  $\alpha = .95$ .

### *Control Variables*

In the present study, the following potential confounding variables were controlled for in the analyses: 1) age; 2) belief in constructive use of survey ratings; and 3) power distance dimension when testing for the effect of individualism-collectivism on leadership ratings, and individualism-collectivism when testing for the effect of power distance on leadership ratings.

### *Measurement Equivalence*

A compelling issue in cross-cultural research is the methodological necessity of establishing equivalence of psychological meaning (i.e. construct comparability) across samples. Measurement equivalence (ME) is an important pre-requisite for a meaningful comparison of survey scores across divergent cultures (Little, 1997; Poortinga, 1989; Ryan et al., 1999; Bond & Smith, 1996). It is not uncommon in cross-cultural research to assume that all items on a measure are invariant across studied cultures. However, such an assumption may introduce a statistical conclusion invalidity bias (Cook & Campbell,

1979) and may compromise the interpretability of cross-cultural findings (Vijver & Leung, 1997).

Drasgow and Kanfer (1985) have pointed out that without measurement equivalence one cannot make a valid comparison of observed scores across relevant groups. Ryan et al. (1999) have emphasized the importance of establishing conceptual equivalence when multinational companies use different versions of a job attitude measure, such as an organization-wide survey. Moreover, Vijver and Leung (1997) have noted that failure to establish measurement equivalence may render the interpretation of the results rather ambiguous, as one cannot be sure in such cases whether the significant results occurred due to real differences, or a bias.

*Definitions of Measurement Equivalence.* There are a number of approaches to demarcating the concept of measurement equivalence. To date, researchers have outlined panoply of definitions. Poortinga (1989) has pointed out that researchers should distinguish between equivalence at the construct level and measurement scale equivalence. Mullen (1995) has suggested that when subjects across cultures respond to measurement scales in the same way, the cross-cultural comparison thus has metric equivalence. Similarly, Brett, Tinsley, Janssens, Barsness, and Lytle (1997) have suggested that whether a given construct has a similar definition across cultures is an indication of conceptual equivalence.

Other researchers (Hui & Triandis, 1985) have expanded the definition of equivalence by categorizing it into the following four levels: conceptual/functional equivalence, equivalence in construct operationalization, item equivalence and scalar equivalence. Van de Vijver and Leung (1997) have outlined a similar four-level

framework: construct inequivalence, structural equivalence, measurement unit equivalence and scalar equivalence. Currently, researchers have converged on the importance of conceptual equivalence, defined as equivalence which occurs when a construct has a similar meaning in every culture (Ryan et al., 1999; Brett et al., 1997).

Establishing measurement equivalence will help ensure that organizations obtain meaningful data, as the quality of data may have a substantial impact on the quality of organizational decision-making. The present study will seek to establish the measurement equivalence of survey ratings across respondents from different cultures. Specifically, it will answer the question of whether the measurements used in the current study had the same meaning across all survey respondents, regardless of culture.

*Methods of Assessing Measurement Equivalence.* Measurement equivalence can be statistically assessed by several methods: multigroup covariance structure analysis, mean and covariance structure analysis (Little, 1997), item response theory (IRT) analysis and simultaneous factor analysis in several populations (Sörbom, 1974). Two most popular methods for assessing measurement equivalence are IRT (Maurer, Raju, & Collins, 1998) and confirmatory factor-analytic (CFA) framework (Raju, Laffite, & Byrne, 2002; Hui & Triandis, 1985).

IRT is the study of test and item scores based on assumptions concerning the mathematical relationship between individual characteristics and item responses (Hulin, Drasgow, & Parsons, 1983). Primarily, this measurement theory has been used to construct tests, develop Computerized Adaptive Testing systems and assess scale equivalence (Smith, Tisak, Bauman, & Green, 1991; Hulin, Drasgow, & Komocar, 1982). Researchers have found CFA to be more appropriate approach to assessing

measurement invariance of composite measures consisting of multiple items, compared to IRT (Vandenberg & Lance, 2000; Raju et al., 2002). Therefore, in this study, the CFA method for establishing measurement equivalence will be used.

In a fairly recent comprehensive review of the measurement equivalence literature, Vandenberg and Lance (2000) have provided an overview of current methods for establishing measurement equivalence. Researchers have stressed that there exists considerable variance across the theoretical and empirical studies concerning recommended approaches to establishing equivalence (Vandenberg & Lance, 2000). Specifically, the authors have noted that there is little consensus in the measurement equivalence field about the following: 1) appropriate tests; 2) sequencing of tests; 3) terminology used in the studies. For example, the authors distinguished between the following forms of equivalence: configural (same pattern of factor loadings in different samples), tau-equivalent (factor loadings invariance), invariance of error variances of indicators, parallel (factor loadings and error variances are the same across different groups) and equality of latent variances and covariances across groups (Vandenberg & Lance, 2000).

The present study used confirmatory factor analytical techniques to investigate whether underlying constructs possess a similar factor structure for each country. The discussion of the measurement equivalence and hypotheses' testing results is presented next.

## Chapter 4: Results

### *Descriptive Statistics*

The descriptive statistics, means and standard deviations for the dependent variable (leadership perceptions), Hofstede's cultural scores (power distance, individualism-collectivism, masculinity-femininity and uncertainty avoidance), and gender are summarized in Table 2 and Table 3.

Examination of the descriptive statistics for the dependent and independent variables did not reveal any unusual effects in the data. The total sample size of respondents from all four countries was  $N = 18421$  (China,  $n = 1051$ , Austria,  $n = 271$ , Spain,  $n = 736$ , U.S.,  $n = 15134$ ). After listwise deletion of variables with missing data for Leadership perceptions scale, the sample size was reduced to  $N = 15494$  (refer to Table 2). Further, only the respondents who indicated their gender were retained for the analysis, with the corresponding sample size of  $n = 3678$  for females and  $n = 11248$  for males ( $N = 14926$ ) across all four countries (refer to Table 3). The majority of respondents were in the 40-49 years of age group (35.8%), followed by the 50 and over (30.5%) and 30-39 years of age groups (24.5%) (refer to Table 5). Table 6 provides age distribution by country.

Table 3 also details gender distribution by country: in China, there were 305 females (33.3%) and 611 males (66.7%); in Austria, the sample was comprised of 80 females (37%) and 136 males (63%); the sample in Spain contained 224 female respondents (36.5%) and 390 male respondents (63.5%); and in the U.S., there were 3069 (23.3%) females and 10111 (76.75) males. It must be noted that unbalanced sample sizes raise a problem of non-orthogonality in group analysis, and thus balanced sample sizes

were randomly selected for the measurement equivalence portion of the analysis. A more detailed description of the selection procedure is provided in the section describing measurement equivalence tests. For the portion of the analysis entailing regression tests, the study's sample sizes were well within the recommendations for regression analysis, specified by Tabachnik and Fidell (1996).

The pan-cultural correlation matrix containing the reliability coefficients and the dependent variable is presented in Table 7. Further, in order to re-assess the Leadership scale factor structure, Principal Components Analysis (PCA) using Varimax rotated solution was conducted on the 8 leadership items, yielding a single dominant factor on the Leadership scale. The examination of the scree plot showed a sharp shift in the curving of variance after the first factor. The factor loadings were examined to determine whether the factors were represented by eigenvalues greater than 1. Component 1 had an eigenvalue of 8.2; the next component had an eigenvalue of .81, providing evidence of a primarily one-factor structure. Alpha coefficient for the Leadership scale was .94, indicating excellent support for the scale reliability.

#### *Item Non-Response*

Univariate comparisons of item non-response patterns were done using the chi-squared statistic. Across all cultures, non-response was consistently below 10% and on many questions less than 3% (refer to Table 4). The non-response rate was highest for a question on how leaders receive feedback (9.5% for females and 7.8% for males). Gender differences were infrequent, but females were less likely to provide an analyzable response on an item eliciting information on how leaders deal with subordinates' feedback (item 7). This was also the item with the highest non-response rate in the U.S.

(maximum 10.3%). One plausible explanation for the higher non-response rate for the item 7 is the difficulty of ascertaining accurately the degree of leader use of a subordinates' feedback.

Overall, the item non-response rate was on average low across the respondents and the gender differences in patterns of non-response were statistically non-significant. While there was a small difference between genders in regards to the item dealing with leadership feedback, this isolated gender difference was not statistically significant and did not appear to substantially diminish the reliability of the Leadership scale. The results indicate that males and females do not statistically differ in non-response patterns across the number of factors that measure leadership perceptions in this study.

The literature search on the topic of item non-response across genders in the context of cross-cultural leadership perceptions yielded no published studies, thus providing little indication whether the findings in the current study were to be expected, or not. Nevertheless, because no statistical difference was found for item non-response, it seemed reasonable to conclude there was no detectable bias between genders created by item non-response between male and female employees.

#### *Paper-and-pencil and Web-based Tests Equivalence*

Because of the different methods of administering the survey, prior to the hypotheses testing, the data were examined to determine whether meaningful differences exist between paper-and-pencil versus on-line survey respondents. Independent samples t-tests were conducted to compare scores on the Leadership scale for respondents who took a paper-and-pencil version of the survey and those who took an on-line version. Significant differences were found for leadership scores across all countries (refer to

Table 8 for descriptive statistics and t-test results). Specifically, the Leadership scores for paper-and-pencil survey respondents ( $M = 12.72$ ,  $SD = 4.33$ ) were significantly different than those for web survey respondents [ $M = 11.12$ ,  $SD = 4.23$ ;  $t(15492) = -12.60$ ,  $p < .000$ ]. According to Cohen's (1988) guidelines, the magnitude of the differences in the means was small ( $\eta^2 = 0.01$ ).

Additional t-tests were conducted for each country (the U.S., China, Austria and Spain) separately (shown in Tables 9, 10, 11 and 12). No significant differences between paper-and-pencil survey takers and web survey takers were found in China and Austria. Significant differences were found in Spain, where the scores for paper-and-pencil survey respondents ( $M = 14.24$ ,  $SD = 4.89$ ) were significantly higher than those for web survey respondents [ $M = 13.19$ ,  $SD = 4.86$ ;  $t(630) = -2.54$ ,  $p < .01$ ]. The magnitude of the differences in the means was small ( $\eta^2 = 0.02$ ). In the U.S., the mean differences for paper and pencil respondents ( $M = 12.77$ ,  $SD = 4.23$ ) were also significantly different than those for web survey respondents [ $M = 11.07$ ,  $SD = 4.23$ ;  $t(13683) = -10.72$ ,  $p < .000$ ]. The effect size for the significant differences in the means was small ( $\eta^2 = 0.01$ ).

Overall, there seems to be a small, statistically significant difference between those who took paper-and-pencil survey and those who took web-based version of the survey in Spain and the U.S. Results indicate that participants in Spain and the U.S. who took paper-and-pencil version rated their leaders slightly higher than those who took a web-based survey.

Previous research on the equivalence of the internet versus paper-and-pencil survey versions found slight differences between the two modalities. The somewhat lower ratings provided by internet respondents in the current study were consistent with

the findings by Eaton and Struthers (2002). The researchers reported that respondents who took web-based survey gave somewhat harsher ratings to their organizations and expressed somewhat higher level of anger and cynicism compared to those who took paper-and-pencil survey version (Eaton & Struthers, 2002). Because of the differences found in the current study, paper-and-pencil versus on-line test modality was included as a control variable in further analyses.

### *Measurement Equivalence Tests*

As discussed above, evaluation of measurement equivalence is a core requirement for making mean comparisons across cultures (Ryan et al., 1999; Drasgow, 1984). This study used confirmatory factor analytical techniques to establish measurement equivalence. Disparate sample sizes were anticipated to bias the measurement equivalence analyses because of the distinct standard errors when parameters are freely estimated across samples (Ryan et al., 1999). Therefore, identical sample sizes were randomly selected for each country for the measurement equivalence portion of the analysis. The selection of the sample size to use for the analysis was based on the smallest sample size available among the four countries in this study ( $n = 284$ , Austria).

Measurement invariance was tested by means of multi-group CFA, using the chi-square statistic, the Goodness-of-Fit Index (GFI), the Root Mean Square Error of Approximation (RMSEA), the Comparative Fit Index (CFI), and the Normed Fit Index (NFI) (Bollen, 1989; Byrne, 1993; Ryan et al., 1999; Vandenberg & Lance, 2000). The chi-square statistic is conventionally used to assess the adequacy of model fit, with a significant chi-square suggesting poor fit of the data to the model. However, chi-square

statistic is reliant on sample size (Bollen, 1989; Ryan et al., 1999), and thus other indices should also be considered.

The GFI value indicates the relative amount of variance and covariance explained by the model (Jöreskog & Sörbom, 1993). The GFI value ranges from 0 to 1.00, with values equal to or greater than .90 indicating a good fit (Byrne, 1993). The RMSEA, a measure of the discrepancy between the predicted and observed covariance matrices per degree of freedom (Ryan et al., 1999), ranges from 0 to 1.00. The values of 0.05 or less represent a close fit, whereas values up to 0.08 indicate reasonable errors of approximation (Browne & Cudeck, 1993), and values of .10 or more have a poor fit (Bollen & Long, 1993). The CFI index compares a restricted model with a null model (Bentler, 1990). The CFI and NFI indices vary between 0 and 1.00, with values equal to, or above .90 providing psychometrically acceptable fit to the data, and values near 0 representing poor fit (Byrne, 1993; Hoyle, 1995).

The measurement equivalence was evaluated through the application of sequentially more restrictive tests.

*Phase 1: Evaluation of the Baseline Model (First-Order CFA) Across All Countries.*

A first-order confirmatory factor analysis (CFA) across all cultures was conducted to test whether the model has the same factor pattern across the four cultures. The factor loadings and error variances were allowed to remain free for this analysis. This baseline model served to indicate the best fit across data in regards to “parsimony and substantive meaningfulness” (Byrne, 2001, p. 175) from the four countries.

The baseline model appeared to be overidentified, based on the degrees of freedom specified in the output. Identification is a structural requirement referring to the

idea that in order for the SEM analysis to produce meaningful results, there should be at least one best value for each parameter estimate (Rigdon, 1995). According to Byrne (1993), the model is overidentified when there is more than one possible solution, including one optimal solution for each parameter estimate. The advantage of overidentified model is that it produces positive degrees of freedom which allows for the falsification and rejection of the hypothesis. Traditionally, the model is considered to have an adequate fit, when the overidentified model fits the data (Rigdon, 1995).

*Testing for factorial validity separately for China, Austria, Spain and the US.*

Following the recommendations of Jöreskog and Sörbom (1993), leadership construct was tested and evaluated individually by culture (the U.S., China, Spain, and Austria). To evaluate the model fit, the chi-square, GFI, CFI, NFI and RMSEA indices were assessed.

*Model Assessment: the U.S.* Model 1, consisting of 8 items, provided the specification input for the analyses (see Figure 1).

*Goodness-of-Fit Summary.* Examination of the fit indices suggested that the fit of the data was not entirely adequate: ( $\chi^2_{(20)} = 87.868$ ,  $p = .0001$ , GFI = .91, CFI = .95, NFI = .94 and RMSEA = .12). Table 13 summarizes the fit indices for the U.S. Modification indices suggested correlated errors between item 3 and item 4 (MI = 32.37). Investigation of these items uncovered evidence of a high degree of overlap in item content, with item 3 tapping into performance feedback dimension and item 4 asking about developmental conversations. Byrne (2001) suggested that such misspecification occurs when different items ask the same question. Further inspection of modification indices showed correlated error terms for item 7 and item 8 (MI = 15.77) and items 2 and 6 (MI = 8.30).

Following Byrne's (2001) recommendation, the model was re-specified, with the item 4 removed from the analysis in Model 2. Additionally, the error terms for items 7 and 8 and items 2 and 6 were specified as free parameters, resulting in an enhanced model fit: ( $\chi^2_{(12)} = 24.97, p = .02, GFI = .97, CFI = .99, NFI = .98, \text{ and RMSEA} = .07$ ). Further inspection of modification indices revealed correlated error variances between item 5 and item 6 (MI = 4.52). In Model 3, the item 5 was removed, resulting in an excellent model fit: ( $\chi^2_{(7)} = 11.56, p = .12, GFI = .98, CFI = 1.0, NFI = .99, \text{ and RMSEA} = .06$ ).

*Model Assessment: China.* Model 1 had a marginal fit: ( $\chi^2_{(20)} = 65.22, p = .00, GFI = .93, CFI = .97, NFI = .96, \text{ and RMSEA} = .10$ ). An assessment of modification indices revealed two largest values for correlated error variances for items 3 and 4 (MI = 19.77) and items 5 and 6 (MI = 9.60).

In Model 2, items 4 and 5 were removed, resulting in an enhanced model fit: ( $\chi^2_{(9)} = 18.40, p = .03, GFI = .97, CFI = .99, NFI = .98, \text{ and RMSEA} = .07$ ). Subsequent review of the modification indices revealed correlated error variances for item 1 and item 8 (MI = 5.07). In Model 3, the error terms for items 1 and 8 were allowed to correlate, producing a well-fitting model: ( $\chi^2_{(8)} = 12.12, p = .146, GFI = .98, CFI = .99, NFI = .99, \text{ and RMSEA} = .05$ ) (refer to Table 13).

*Model Assessment: Austria.* Model 1 revealed a marginal fit: ( $\chi^2_{(20)} = 96.88, p = .00, GFI = .90, CFI = .93, NFI = .92, \text{ and RMSEA} = .13$ ). An examination of modification indices suggested correlated error variances for items 5 and 6 (MI = 30.77) and items 3 and 4 (MI = 20.05).

The removal of item 4 and item 5 in Model 2 resulted in an improved fit: ( $\chi^2_{(9)} = 26.46$ ,  $p = 0.00$ ,  $GFI = .97$ ,  $CFI = .97$ ,  $NFI = .97$ , and  $RMSEA = .09$ ). In Model 3, the error terms for items 1 and 8 ( $MI = 6.24$ ) and items 3 and 6 ( $MI = 4.49$ ) were allowed to correlate, revealing an enhanced model fit: ( $\chi^2_{(7)} = 15.57$ ,  $p = 0.03$ ,  $GFI = .98$ ,  $CFI = .99$ ,  $NFI = .98$ , and  $RMSEA = .07$ ) (Refer to Table 13).

*Model Assessment: Spain.* Model 1 revealed a marginal fit for data: ( $\chi^2_{(20)} = 117.93$ ,  $p = .00$ ,  $GFI = .88$ ,  $CFI = .94$ ,  $NFI = .93$ , and  $RMSEA = .15$ ). The inspection of modification indices revealed correlated error variances between items 3 and 4 ( $MI = 42.84$ ), and items 4 and 5 ( $MI = 57.94$ ). In Model 2, items 4 and 5 were removed, resulting in an improved model fit: ( $\chi^2_{(9)} = 22.30$ ,  $p = .008$ ;  $GFI = .97$ ,  $CFI = .99$ ,  $NFI = .98$  and  $RMSEA = .08$ ).

Further inspection of modification indices revealed correlated error terms for items 3 and 6 ( $MI = 8.59$ ) and items 1 and 8 ( $MI = 10.30$ ). In Model 3, the error terms for items 3 and 6 and items 1 and 8 were allowed to correlate, producing a well-fitting model: ( $\chi^2_{(7)} = 3.61$ ,  $p = .82$ ;  $GFI = .99$ ,  $CFI = 1.0$ ,  $NFI = .99$ , and  $RMSEA = .00$ ). The indices are outlined in Table 13.

*Model Assessment. Baseline Model.* Model 1, consisting of 6 items, was estimated across four groups to provide the baseline value against which all subsequent specifications will be compared (refer to Figure 2).

*Goodness-of-Fit Summary.* Baseline Model 1 indicated a good fit: ( $\chi^2_{(29)} = 42.86$ ,  $p = .05$ ,  $GFI = .98$ ,  $CFI = .99$ ,  $NFI = .99$  and  $RMSEA = .02$ ). However, further investigation of modification indices revealed correlated error variances between items 1 and 2 ( $MI = 5.99$ ). Following Byrne (2001) procedure, item 2 was removed from the

analysis in Model 2, resulting in a decrease in chi-square from 42.86 to 24.08.

Examination of the fit indices indicated that the hypothesized one-factor model of the Leadership measurement is well-fitting across the four countries: ( $\chi^2_{(14)} = 24.08$ ,  $p = .04$ ,  $GFI = .99$ ,  $CFI = 1.0$ ,  $NFI = .99$  and  $RMSEA = .03$ ). Table 14 summarizes the fit indices for the baseline model. Having established the good fit of this model, the next step is to test for the invariance of factorial measurement and structure across all four countries (refer to Figure 3).

*Phase 2. Testing for Equivalence of the Fully Constrained Model across the U.S., Austria, China and Spain.*

*Model Assessment. Goodness-of-Fit Statistics.* The results of a multi-step invariance analysis, including  $\chi^2$  values and  $\Delta \chi^2$  values are summarized in Table 14. Following Byrne (2001), the fit of the unconstrained model across all four groups (U.S., Austria, China and Spain) tested simultaneously is summarized in the first entry in Table 13. In testing for measurement equivalence, the initially hypothesized model in which no equality constraints were imposed ( $\chi^2_{(14)} = 24.80$ ) was compared with the constrained four-group model ( $\chi^2_{(32)} = 73.33$ ). The second entry shows the fit statistics for the fully-constrained model and the outcome of the comparison between an unconstrained and constrained model as expressed in  $\Delta \chi^2$  statistic. The comparison of the two models yielded a  $\Delta \chi^2$  value of 48.53 with 18 degrees of freedom, which is statistically significant at the .001 probability level. The results of the measurement equivalence tests suggest that some equality constraints do not hold across all four countries (Byrne, 2001).

In order to uncover the source of inequivalence, the subsequent analysis tested for factor loadings invariance across the four countries (Byrne, 2001). In testing for factor

loadings invariance, the constrained model yielded a  $\chi^2$  value of 38.06 with 26 degrees of freedom; comparison with Model 1 (refer to Table 13) yielded a  $\Delta \chi^2 = 13.26$  with 12 degrees of freedom, which was statistically non-significant. Results related to this test of measurement equivalence showed all factor loadings to be invariant across all four countries (the U.S., Austria, China and Spain).

Following the logical framework of increasingly restrictive tests of equivalence, outlined by Byrne (2001), the next step was to analyze structural equivalence of the model. The test of the equivalence of the factor invariance structure produced  $\chi^2$  value of 68.19 with 29 degrees of freedom and  $\Delta \chi^2$  value of 43.38 with 15 degrees of freedom, which was statistically significant ( $p < .001$ ). Hence, the hypothesis of equal factor variance could not be supported. The conclusion drawn from this phase of the measurement equivalence analysis is the existence of structural differences in a leadership factor across the four countries.

The subsequent analyses tested for structural equivalence between the pairs of countries, in order to identify the source of inequivalence: the U.S. - Austria; the U.S. - China; the U.S. - Spain; Austria - China; Austria - Spain; China - Spain.

*Phase 3a: Testing for Equivalence Across the U.S. and Austria.*

The unconstrained model for the U.S. and Austria ( $\chi^2_{(7)} = 14.22$ ) was compared to fully constrained model ( $\chi^2_{(20)} = 43.52$ ) for the two countries. The comparison of the two models yielded a  $\Delta \chi^2$  value of 29.30 with 13 degrees of freedom, which is statistically significant at the .01 probability level. The results of the comparison suggested a lack of equivalence between the U.S. and Austria.

In order to identify the source of structural inequivalence, the test of factor variance between the U.S. and Austria was conducted. The results produced  $\chi^2$  value of 32.00 with 12 degrees of freedom and  $\Delta \chi^2$  value of 17.78 with 7 degrees of freedom, which was statistically significant ( $p < .01$ ). Hence, the hypothesis of equal factor variance could not be supported. The conclusion drawn from this phase of the measurement equivalence analysis is the existence of structural differences in a leadership factor across the U.S. and Austria groups.

*Phase 3b: Testing for Equivalence Across the U.S. and China.*

The unconstrained model for the U.S. and China ( $\chi^2_{(8)} = 16.02$ ) was compared to fully constrained model ( $\chi^2_{(13)} = 21.28$ ) for the two countries. The comparison of the two models yielded a  $\Delta \chi^2$  value of 5.26 with 5 degrees of freedom, which is statistically non-significant. The results of the comparison suggested full measurement, structural, and error variances equivalence between the U.S. and China.

*Phase 3c: Testing for Equivalence Across the U.S. and Spain.*

The unconstrained model for the U.S. and Spain ( $\chi^2_{(7)} = 10.40$ ) was compared to fully constrained model ( $\chi^2_{(12)} = 17.23$ ) for the two countries. The comparison of the two models yielded a  $\Delta \chi^2$  value of 6.84 with 5 degrees of freedom, which is statistically non-significant. The results of the analysis suggest that the factor loadings, variances and error covariances are equivalent across the U.S. and Spain.

*Phase 3d: Testing for Equivalence Across Austria and China.*

The unconstrained model for Austria and China ( $\chi^2_{(7)} = 14.41$ ) was compared to fully constrained model ( $\chi^2_{(13)} = 19.87$ ) for the two countries. The comparison of the two models yielded a  $\Delta \chi^2$  value of 5.46 with 6 degrees of freedom, which is statistically non-

significant. The results of the analysis suggest that the factor loadings, variances and error covariances are equivalent across Austria and China.

*Phase 3e: Testing for Equivalence Across Austria and Spain.*

The unconstrained model for Austria and Spain ( $\chi^2_{(6)} = 8.78$ ) was compared to fully constrained model ( $\chi^2_{(13)} = 48.05$ ) for the two countries. The comparison of the two models yielded a  $\Delta \chi^2$  value of 39.27 with 7 degrees of freedom, which is statistically significant at  $p < .001$ . The results of the initial test suggest that there is no equivalence across Austria and Spain.

The next step of the analysis consisted of structural equivalence testing. Error covariance equivalence was established for both set of items (item 3 and item 6, and item 1 and item 8):  $\Delta \chi^2 = 2.26$ ,  $df = 2$ , non-significant. Next, factor variance equivalence was tested. As shown in Table 14, the test for equivalence associated with this step was significant ( $\Delta \chi^2 = 33.61$ ,  $df = 5$ ,  $p < .001$ ). Therefore, although the Leadership measure was found to be operating equivalently for employees in both Austria and Spain, there were some structural differences in the leadership facet among the two groups.

*Phase 3f: Testing for Equivalence Across China and Spain.*

The unconstrained model for China and Spain ( $\chi^2_{(7)} = 10.59$ ) was compared to fully constrained model ( $\chi^2_{(13)} = 30.30$ ) for the two countries. The comparison of the two models yielded a  $\Delta \chi^2$  value of 19.71 with 6 degrees of freedom, which is statistically significant at .01 probability level. The results of the analysis suggest that there is no equivalence across China and Spain.

In testing for structural equivalence, the equivalence of the error covariance between China and Spain for items 1 and 8 was non-significant ( $\Delta \chi^2 = 1.40$ ,  $df = 1$ ),

indicating structural equivalence in terms of error covariances. Further, the test for factor invariance produced  $\chi^2$  value of 28.54 with 12 degrees of freedom and  $\Delta \chi^2$  value of 17.95 with 5 degrees of freedom, which was statistically significant ( $p < .01$ ). The results of this step of the analysis suggest structural equivalence and the lack of factor variance equivalence across the U.S. and Austria.

### *Overview of Measurement Equivalence Results*

To summarize, the aim of the measurement equivalence testing detailed in the above section was to test measurement invariance of a multinational Leadership scale, using a series of increasingly restrictive tests. Specifically, the influence of cultural effects on measurement invariance across 4 countries comprising three diverse cultural groups (West Europe – Austria and Spain; Asia – China; and North America – the U.S.) was assessed.

When full measurement equivalence is present, all pertinent structural and factorial scale components are the same across all groups (Vandenberg & Lance, 2000). However, as noted by some researchers, such full measurement equivalence is a rare occurrence in organizational research, especially in applied settings (Steenkamp & Baumgartner, 1998). When it is not possible to establish full measurement equivalence, the next step is to test for partial measurement equivalence, by relaxing parameter constraints. In this study, the Leadership scale was tested for both full and partial measurement equivalence, following the recommendations by Byrne (2001).

First, the study evaluated the initial 8-item model and implemented modifications based on a number of goodness-of-fit indices (e.g. chi-square, CFI, RMSEA, etc.). The modifications led to the formulation of a better-fitting model. Specifically, subsequent

analyses explored the measurement equivalence of the modified, 5-item version of the Leadership scale. The results of the study showed an excellent support for the 5-item measurement model. The 5-item model was successfully cross-validated across the four countries with measurement equivalence fit indices revealing a well-fitting model.

Next, following the recommendations of Byrne (2001), multi-group confirmatory factor analysis (CFA) was used in order to test for distinct levels of measurement equivalence based on the final 5-item model. Specifically, the parameter constraints were imposed in a series of increasingly restrictive tests to examine the levels of measurement equivalence for the model. First, the study tested for factor loadings equivalence, followed by the subsequently more stringent tests of factor variance and error covariances levels. Again, on the basis of several robust fit indices, the study found that there was full measurement equivalence across the U.S. – China, the U.S. – Spain, and Austria – China pairs of countries, and factor loadings equivalence between the U.S.- Austria, Austria-Spain, and Spain-China.

The findings of a structural inequivalence point to the differing interpretation of the leadership factor structure. There is, however, evidence that employees tend to form impressionistic, “holistic” views of their supervisors, and tend to be less concerned about various distinct supervisory attributes (Madzar, 2001). Thus, even if the statistical factor invariance was not established for this subset of countries, the practical variance in leadership factor across employees may be minimal (Ryan et al., 1999).

Although the U.S. - Austria, Austria – Spain, and Spain – China pairs failed to demonstrate structural invariance, the pairs were found equivalent in terms of factor loadings. The presence of factor loadings equivalence is a sufficient requirement to

establish a fundamental level of measurement equivalence. For example, in a sophisticated study on measurement equivalence, Ryan et al. (1999) used the definition of factor loading equivalence as indicating sufficient level of measurement equivalence to allow the score comparisons.

Because the study found full measurement, structural and error variances equivalence between the U.S. and China, the U.S. and Spain, and Austria and China, the study was able to proceed with the absolute score comparisons between these countries. With all items equivalent for the U.S. – Austria, Austria – Spain and Spain-China, and full measurement equivalence achieved for the U.S.- China, the U.S. - Spain, and Austria - China, the study established a solid foundation for the subsequent hypotheses testing.

### *Tests of the Hypotheses*

*Hypothesis 1.* Hypothesis 1 predicted that across all nations, females would give higher leadership ratings compared to males. To test this hypothesis, independent samples t-test was conducted to compare leadership scores for males and females across all groups. As shown in Table 14, results indicate that scores for females ( $M = 13.42$ ,  $SD = 4.99$ ) were not significantly different than those for males [ $M = 13.46$ ,  $SD = 5.06$ ;  $t(14925) = .407$ ,  $p = .69$ ].

Further, independent samples t-test was conducted to compare male and female scores on leadership scale for those that took a web-based survey version compared to those that took a paper-and-pencil survey version. No significant differences were found for female scores ( $M = 13.28$ ,  $SD = 4.96$ ) compared to male scores [ $M = 13.30$ ,  $SD = 5.03$ ;  $t(13761) = .215$ ,  $p = .83$ ] in web-based group, as well as females ( $M = 15.68$ ,  $SD =$

4.99) and males [ $M = 15.19$ ,  $SD = 5.08$ ;  $t(1162) = -1.308$ ,  $p = .19$ ] in paper-and-pencil group (refer to Tables 16 and 17).

Contrary to the prediction, this study found no statistically significant difference between female and male followers across all countries in how they perceive their leaders. Hypothesis 1 was not supported.

*Hypothesis 2.* Hypothesis 2 predicted that individualism-collectivism culture dimension would moderate the relationship between gender and leadership, such that in cultures low on individualism, females would give higher ratings than males, while in cultures high on individualism, both females and males would give similar ratings of leadership.

To test this hypothesis, hierarchical regression was used entering control variables (age, belief in the constructive use of survey ratings, web or paper-and-pencil version, and power distance dimension) first, the main effect of gender and individualism-collectivism second, and the interaction between the two influencing variables third. As shown in Table 18, the regression results were significant ( $p < .05$ ), with an R-square of .309 for the entire model, and a change in R-square of .001 for Gender and Individualism, indicating that .1% of the variation in Leadership perceptions can be explained by the variation in Gender and Individualism, after controlling for the effects of confounding variables. Further, there was also a significant .001 ( $p < .05$ ) R-square change for the interaction between Gender and Individualism on Leadership perceptions. An assessment of beta weights revealed a negative significant main effect for Gender ( $\beta = -.09$ ,  $p < .01$ ), a non-significant main effect for Individualism ( $\beta = -.04$ ,  $p = .20$ ), and a positive

significant interaction effect between Gender and Individualism ( $\beta = .08, p < .05$ ). Figure 8 provides an interaction plot for Individualism and Gender.

There was modest support for the Hypothesis 2, predicting that gender and individualism would interact, such that females and males would give similar ratings when individualism is high, but females would give higher ratings when individualism is low, compared to males. The interaction was significant, but the effect size was rather small. Even though this finding shows statistical significance, the results should be interpreted with prudence, as the achieved statistical significance might have been due to the large sample size used in the study. The statistical and practical significance of these findings are discussed in greater detail at the end of this Results section.

*Hypothesis 3.* Hypothesis 3 predicted that power distance would moderate the relationship between gender and leadership ratings such that females in high power distance cultures will give higher leadership ratings compared to males; in low power distance cultures, both males and females would give similar ratings of leadership. Again, to test this hypothesis, hierarchical regression was used entering control variables (age, belief in the constructive use of survey ratings, web or paper-and-pencil version, and individualism-collectivism) first, the main effect of gender and power distance second, and the interaction between the two influencing variables third.

The regression results were (refer to Table 19) significant ( $p < .01$ ), with an R-square of .309 for the entire model and a change in R-square of .003 for Gender and Power Distance, indicating that .3% of the variance in Leadership perceptions can be explained by the variance in Gender and Power Distance after controlling for the effect of confounding variables. The R-square change for the interaction between Gender and

Power Distance was .001, significant at  $p = .003$ . Examination of the standardized beta coefficients revealed a positive main effect for Gender ( $\beta = .05, p = .09$ ) and for Power Distance ( $\beta = .16, p < .001$ ), and a significant negative interaction effect between Gender and Power Distance ( $\beta = -.11, p = .00$ ). The interaction between Power Distance and Gender terms is depicted in Figure 9.

The hypothesis 3 predicted that power distance would moderate the impact of gender on leadership perceptions. The results of the hierarchical regression supported the prediction that the interaction between gender and power distance would be associated with lenient leadership ratings. Thus, hypothesis 3 was supported.

*Hypothesis 4.* Hypothesis 4 predicted that masculinity-femininity would moderate the relationship between gender and leadership such that in cultures low on masculinity, females would give higher ratings than males, in cultures high on masculinity, both females and males would give similar leadership ratings. Hierarchical regression was used entering the control variables first, the main effect of gender and femininity-masculinity second, and the interaction between the two influencing variables third.

As shown in Table 20, the regression results were significant ( $p < .05$ ), with an R-square of .307 for the entire model and a change in R-square of .005 for the Gender and Masculinity-Femininity, indicating that .5% of variance in perceptions of Leadership can be explained by the variance in the two influencing variables after controlling for the effects of the confounding variables (age, web versus paper-and-pencil, belief in the constructive use of survey ratings). The R-square change for the interaction between Gender and Masculinity-Femininity was negligible, yet significant ( $p < .05$ ). The standardized beta coefficients revealed the main significant effect for Gender ( $\beta = -.21, p$

= .01) and Masculinity-Femininity ( $\beta = -.12$ ,  $p < .001$ ), and a significant interaction effect ( $\beta = .19$ ,  $p = .03$ ) (refer to Figure 10).

Results for the Hypothesis 4, investigating the impact of masculinity-femininity dimension and gender on leadership perceptions confirmed this study's predictions. The findings from the regression analyses revealed the significant interaction between gender and masculinity in the hypothesized direction. Masculinity-femininity moderated the relationship between gender and leadership such that in cultures low on masculinity, females gave higher ratings than males; in cultures high on masculinity, both females and males gave similar leadership ratings. Hence, hypothesis 4 was supported.

*Hypothesis 5.* Hypothesis 5 predicted that uncertainty avoidance would moderate the relationship between gender and leadership. Again, hierarchical regression was used entering the control variables first, the main effect of gender and uncertainty avoidance second, and the interaction between the two influencing variables third. Table 21 shows the regression results, which were non-significant ( $R^2 = .303$ ,  $F(1, 14452) = .047$ ,  $p = .83$ ) (refer to Figure 11). Thus, the hypothesis 5 was not supported.

*Hypothesis 6.* Hypothesis 6 predicted that employees in high power distance cultures would rate their leaders higher compared to employees in low power distance cultures.

Again, hierarchical regression was used entering the control variables first, followed by the main effect for power distance. As shown in Table 22, the regression results were significant ( $p < .000$ ), with an R-square of .307 for the entire model and a change in R-square of .002 for power distance, indicating that .2% of variance in perceptions of Leadership can be explained by the variance in power distance after

controlling for the effects of the confounding variables (age, web versus paper-and-pencil, belief in the constructive use of survey ratings, and individualism). The standardized beta coefficients revealed the main significant effect for power distance ( $\beta=.09, p = .000$ ).

The independent sample t-test was conducted to compare mean Leadership scores. There was a significant difference in the mean Leadership scores for the respondents from Austria ( $M = 9.32, SD = 3.52$ ) and China [ $M = 11.45, SD = 3.55; t(1175) = -8.05, p = .000$ ]. As predicted, the employees from China, a high power distance country, gave higher ratings compared to employees from Austria, a low power distance country. A comparison of mean Leadership scores between the employees in Austria and the U.S. also revealed significant differences, ( $M_{\text{Austria}} = 9.32, SD = 3.52; M_{\text{US}} = 11.07, SD = 4.23; t(13153) = -6.12, p < .001$ ). Employees from the U.S. (a low-medium power distance country) gave significantly higher Leadership ratings compared to employees from Austria (a low power distance country). A comparison between Spain (a medium power distance country) and Austria revealed significant differences, with employees from Spain giving higher ratings of Leadership compared to employees from Austria: ( $M_{\text{Spain}} = 13.19, SD = 4.87; M_{\text{Austria}} = 9.32, SD = 3.52; t(648) = 10.52, p < .001$ ).

This study hypothesized that employees in high power distance cultures would perceive their leaders more favorably compared to employees in low power distance cultures. The results of the hierarchical regression showed that power distance had a positive significant association with leadership ratings. In addition to hierarchical regression analyses, the study examined the mean differences between Austria, China, the U.S. and Spain and found that employees from countries low on power distance (e.g.

Austria) perceived leaders as less effective compared to employees in medium- and high-power distance countries (e.g. Spain and China). Hence, the hypothesis 6 was supported.

*Hypothesis 7.* Hypothesis 7 predicted that employees in cultures low on individualism would give higher leadership ratings compared to employees in cultures high on individualism.

To test the hypothesis, hierarchical regression was again used entering the control variables first, followed by the main effect for individualism (refer to Table 23). The regression results were non-significant ( $p < .35$ ). The standardized beta coefficients revealed a non-significant effect for individualism ( $\beta=.01, p = .35$ ).

Further, the independent sample t-test was conducted to compare the Leadership scores for countries scoring low on individualism (i.e. China) and those scoring higher on individualism (i.e. Spain, Austria, and the U.S.). There was a significant difference in the mean Leadership scores for the respondents from China ( $M = 11.45, SD = 3.55$ ), and the respondents from the U.S. [ $M = 11.07, SD = 4.23; t(13884) = 2.68, p = .007$ ]. In support for the hypothesis, the employees from China, a country low on individualism, gave higher ratings compared to employees in the U.S., a country high on individualism.

A comparison between China and Spain (a country scoring medium-low on individualism) also yielded significant differences, ( $M_{\text{China}} = 11.45, SD = 3.55; M_{\text{Spain}} = 13.19, SD = 4.86; t(1379) = -7.48, p < .001$ ). However, because Spain scored somewhat higher than China on the individualism, the results of this t-test were opposite of those predicted by this hypothesis. A comparison between China and Austria, a country scoring medium on the individualism, revealed significant differences in the hypothesized direction, with employees from China giving higher ratings of Leadership compared to

employees from Austria: ( $M_{\text{China}} = 11.45, SD = 3.55; M_{\text{Austria}} = 9.32, SD = 3.52; t(1175) = 8.05, p < .001$ ).

When examining the main effect for the influencing relationship between individualism and leadership perceptions, the hierarchical regression analysis yielded non-significant results. Further, the mean scores on leadership scales were compared for cultures low on individualism (e.g. China) versus cultures that score medium (e.g. Austria) and high (e.g. the U.S.) on individualism dimension. The independent samples t-tests revealed mixed results. One explanation for the mixed results is that China and Spain are both located on the low to low-medium end of the individualism spectrum. Thus, it is possible, that the differences between the countries located on the lower end of individualism (e.g. China versus Spain) are not as pronounced as the differences between the countries located at the opposite ends of the individualism spectrum, such as China versus the U.S., and China versus Austria. Thus, the hypothesis 7 was in part supported.

*Hypothesis 8.* Hypothesis 8 predicted that employees in cultures low on the masculinity dimension would give higher leadership ratings, compared to employees in cultures high on the masculinity dimension.

Hierarchical regression was used entering the control variables first, followed by the main effect for masculinity (refer to Table 24). The regression results were significant ( $p < .000$ ), with an R-square of .306 for the entire model and a change in R-square of .004 for masculinity, indicating that .4% of variance in perceptions of Leadership can be explained by the variance in masculinity after controlling for the effects of the confounding variables (age, web versus paper-and-pencil, belief in the constructive use of

survey ratings). The standardized beta coefficients revealed the main significant effect for masculinity ( $\beta = -.06, p = .00$ ).

Further, the independent sample t-test was conducted to compare the Leadership scores for countries scoring low on masculinity (e.g. Spain) and those scoring higher on Masculinity (e.g. Austria). There was a significant difference in mean Leadership scores between Spain and Austria, a country scoring high on masculinity, with employees from Spain giving higher ratings of Leadership compared to employees from Austria: ( $M_{\text{Spain}} = 13.19, SD = 4.86; M_{\text{Austria}} = 9.32, SD = 3.52; t(648) = 10.52, p < .001$ ).

A comparison between Spain and China (a country scoring medium-high on masculinity) also revealed significant differences, ( $M_{\text{Spain}} = 13.19, SD = 4.86; M_{\text{China}} = 11.45, SD = 3.55; t(1379) = 7.48, p < .001$ ). Employees in Spain gave higher Leadership ratings compared to employees in China. Additionally, there was a significant difference in the mean Leadership scores for the respondents from Spain ( $M = 13.19, SD = 4.86$ ), and the respondents from the U.S. [ $M = 11.07, SD = 4.23; t(13357) = 10.133, p = .000$ ]. As hypothesized, employees in Spain gave higher Leadership ratings compared to employees in the U.S. (a medium-high masculinity country).

The study predicted that masculinity-femininity would influence leadership perceptions, such that employees from countries low on masculinity would give higher evaluation of leaders, compared to employees in countries high on masculinity. The findings from the regression analyses revealed the main effect for masculinity in the hypothesized direction. Also, the mean comparison of leadership perceptions showed that employees from the countries low on masculinity (e.g. Spain) perceived their leaders as more effective compared to employees from countries that score medium-high (e.g.

China and the U.S.) and high (Austria) on masculinity dimension. Low masculinity (i.e. high femininity) was found to be significantly and positively associated with the more favorable perceptions of leaders by followers. Thus, hypothesis 8 was supported.

*Hypothesis 9.* Hypothesis 9 predicted that employees in cultures high on uncertainty avoidance dimension would give higher leadership ratings, compared to employees in cultures low on uncertainty avoidance.

Again, hierarchical regression was used to test the hypothesis, entering the control variables first, followed by the main effect for uncertainty avoidance (refer to Table 25). The regression results were significant ( $p < .000$ ), with an R-square of .302 for the entire model and a change in R-square of .001 for uncertainty avoidance, indicating that .1% of variance in the perceptions of leadership can be explained by the variance in uncertainty avoidance after controlling for the effects of the confounding variables (age, web versus paper-and-pencil, belief in the constructive use of survey ratings). The standardized beta coefficients revealed the main significant effect for uncertainty avoidance ( $\beta = .02$ ,  $p = .00$ ).

Further, the independent sample t-test was conducted to compare the Leadership scores for countries scoring high on uncertainty avoidance (e.g. Spain) and those scoring low on uncertainty avoidance (e.g. China). A comparison between Spain and China resulted in significant differences, ( $M_{\text{Spain}} = 13.19$ ,  $SD = 4.86$ ;  $M_{\text{China}} = 11.45$ ,  $SD = 3.55$ ;  $t(1379) = 7.48$ ,  $p < .001$ ). As predicted, employees in Spain gave higher Leadership ratings compared to employees in China.

Additionally, there was a significant difference in the mean Leadership scores for the respondents from Spain ( $M = 13.19$ ,  $SD = 4.86$ ), and the respondents from the U.S.

[ $M = 11.07$ ,  $SD = 4.23$ ;  $t(13357) = 10.133$ ,  $p = .000$ ]. Employees in Spain gave higher Leadership ratings compared to employees in the U.S. (a low-medium uncertainty avoidance country). When Spain was compared to Austria (a medium-high uncertainty avoidance country), there was a significant difference found in mean Leadership scores, with employees from Spain giving higher ratings of Leadership compared to employees from Austria: ( $M_{\text{Spain}} = 13.19$ ,  $SD = 4.86$ ;  $M_{\text{Austria}} = 9.32$ ,  $SD = 3.52$ ;  $t(648) = 10.52$ ,  $p < .001$ ).

The results of the regression analysis revealed a main effect for uncertainty avoidance on leadership perceptions. A closer examination of means between the U.S., China, Austria and Spain confirmed that employees from countries scoring high on uncertainty avoidance (e.g. Spain) perceived their leaders more positively compared to employees from the countries scoring low on uncertainty avoidance (e.g. China), low-medium (e.g. the U.S.) and medium-high (e.g. Austria). Hence, hypothesis 9 was supported.

### *Overview of Results*

The overall results revealed a significant main effect of culture, a non-significant main effect of gender, and a significant interaction between gender and culture. In other words, the expectation that females would differ in their leadership perceptions based on the level of cultural dimensions identified by Hofstede (2001) was supported.

Further, the interplay between gender and culture on leadership perceptions was investigated. Modest, statistically significant support was found for the interaction between gender and cultural dimensions of individualism-collectivism, power distance and masculinity-femininity. In particular, gender predicted lenient leadership perceptions

in the countries that score high on power distance, collectivism and femininity cultural dimensions. There was, however, an exception to this pattern of an interaction of gender and culture. Uncertainty avoidance did not interact with gender to influence leadership perceptions. Even though uncertainty avoidance did not interact with gender, the overall pattern of results was consistent with the prediction that gender would interact with the culture of followers to influence leadership perceptions.

The interaction effect of gender and culture was shown to add to the prediction of leader perceptions above and beyond the variance explained separately by either the gender or culture variables. The findings support the suggestion by Smith and Peterson (2005) that researchers should examine the role of demographic variables across cultures. Given the demographic diversity of current multinational organizations, this finding is important. The discussion of the statistical and practical significance of the findings is presented next.

#### *Statistical and Practical Significance of the Findings*

It is important to note that although some of the hypotheses resulted in significant findings, the question remains as to the degree of the practical significance of these findings. Statistical significance does not automatically indicate practical significance of a study. The current study used a large sample size, which is likely to have influenced the statistical significance of the results, as statistically significant tests are linked to sample sizes (Cohen, 1994, cited in Armstrong & Henson, 2004). Although statistical significance is an important indicator of the fact that the results obtained in this study were not due to chance, the power of the outcome is important as well. Small effect sizes

revealed in this study indicate that although there are differences between genders and cultures in leadership perceptions, these differences are small, albeit significant. It is prudent to interpret the results of the study in light of not only statistical significance, but also in terms of overall practical meaningfulness.

One explanation for the small effect sizes found in this study lies in the fact that a large percent of the correlations between variables can often be explained by outside factors. For instance, according to Gall, Borg, and Gall (1996), a number of factors besides a sample size can influence the magnitude of effect sizes: instruments used for data collection, individual idiosyncrasies of the sample under the study, shape of score distribution and other variables. The current study was based on a pool of literature indicating that culture and gender may be possible variables influencing employees' perceptions of leadership. As such, further studies may be needed to investigate what additional variables might have impacted the link between leadership perceptions and culture and gender variables in the current samples.

Further, when evaluating "practical significance" of a study, the importance of the context needs to be taken into consideration. As Rosnow and Rosenthal (as cited in Armstrong & Henson, 2004, p. 1280) pointed out, "There is a growing awareness in psychology that just about everything under the sun is context dependent in one way or another." Even though the effect sizes in this study were small, the issue of cross-cultural diversity remains to be an important one in the globalized organizational world. The merging of cultures and the need for cultural sensitivity will likely be increasing in the future, as the world continues to move into a global plane. Therefore, the current study makes an important contribution to an extant cross-cultural pool of knowledge. The

overall findings of this study point towards the direction that merits further investigation. It is possible that certain leadership behaviors are more cross-culturally bound compared to other leadership behaviors. Perhaps in the future another measure of leadership could be used, with a more refined taxonomy of leadership facets deemed susceptible to cross-cultural influences.

## Chapter 5: Discussion

The purpose of this study was to examine several dimensions of the influence of demographic variables (i.e. gender and culture) on leadership perceptions. In particular, the study investigated separately the effect of gender on leadership perceptions and the effect of culture on leadership perceptions (i.e. power distance, individualism-collectivism, masculinity-femininity and uncertainty avoidance). Further, the study examined the combined effect of gender and culture on the views followers express about their leaders.

This research advanced the view that leadership perceptions and evaluations in multinational organizations are substantially influenced by demographic variables. This study argued that the gender variable and cultural values, and the interplay between gender and culture would impact the way diverse followers view their leaders. As a result, it was predicted that leniency bias in leadership perceptions, as expressed in ratings, would be more prevalent in individualistic, high power distance, masculine and low uncertainty avoidance cultures. It was also expected that women would be more likely to exhibit leniency bias than men. Further, it was hypothesized that women from collectivistic, high power distance, feminine, and high uncertainty avoidance cultures would give higher ratings of leadership than women from individualistic, low power distance, masculine and low uncertainty avoidance cultures, as well as men across all cultures.

The study found support for a leadership perceptions model in which followers' characteristics, such as gender and culture, influence leadership perceptions. Specifically, participants from cultures low on individualism, and high on power distance, femininity

and uncertainty avoidance expressed more favorable views of their leaders than did employees from the cultures high on individualism, low on power distance, and low on femininity and uncertainty avoidance. While culture and gender were found to be useful indicators of how followers perceived their leaders, cultural variables were more important predictors in this study than was gender. Further, it was found that cultural dimensions of individualism-collectivism, power distance and masculinity-femininity moderate the relationship between gender and leadership perceptions.

The study served to integrate methodological rigor with theoretical contributions in a cross-cultural field. The main contributions of this study are two-fold. Firstly, the study examined the measurement equivalence of the leadership perceptions scale across diverse cultures, which allowed for more robust and meaningful data comparison. Secondly, the study attempted to advance the theory development in the field of leadership by investigating the influence of key demographic variables on leadership perceptions across cultures. The findings from this study have strong implications both for gender and for cross-cultural sensitivity issues within a leadership framework.

In addition to the above main contributions, the study has a number of methodological and empirical strengths. This study used a representative sample size of 14 926 total employees across four countries, selected to reflect the diversity of Hofstede's cultural dimensions. Additionally, the study had a substantial sample size of female employees ( $n = 3678$ ) -- a large number, given the challenges in obtaining representative data of female employees across cultures (Paris, 2003).

The next section will discuss the Measurement Equivalence portion of the findings, followed by the review of the study's results. Additionally, the importance of

the findings, as well as the unexpected results, will be examined. Lastly, the limitations of the study and directions for future research will be discussed.

### *Measurement Equivalence*

The strength of this study lies in the two-step analytical approach employed. Prior to conducting hypotheses' testing, the study investigated the measurement equivalence across all four countries, with the goal of ascertaining the degree of cross-cultural measurement invariance of the Leadership scale. By doing so, this study made an important step towards contributing to the body of literature on gender and leadership issues, while utilizing robust methodological procedures.

Researchers agree that the cross-cultural measurement non-invariance is an important issue in the organizational field (Shipper, Hoffman & Rotondo, 2007; Vandenberg & Lance, 2000; Singh, 1995; Ryan et al., 1999; Liu, Borg & Spector, 2004). According to Riordan and Vandenberg (1994), respondents holding different cultural values may use distinct frames of reference when interpreting survey questions. As noted by Liu et al. (2004), the use of different frames of reference by diverse employees pose a threat to the equivalence in terms of the common meaning of the cross-cultural survey versions.

Non-equivalence can present a problem for applied psychologists conducting research in the cross-cultural field, and also to organizations using the intervention systems designed to obtain meaningful feedback from the diverse workforce. To avoid the problem of non-comparable data, serious consideration should be given to the issue of ME in any cross-cultural survey research. At the least, as suggested by Ryan and

associates (1999), organizational psychologists should not fail to ask themselves whether the global instruments used to collect important organizational data are psychometrically sound, when transported to other cultures.

In an effort to illustrate what might happen when a cross-cultural researcher ignores ME analysis, Singh (1994) re-analyzed a published cross-cultural study using ME techniques. The results of Singh's (1994) re-analysis showed that the study had committed Type I and Type II errors, underestimated all of the variances, and over- and under-estimated both magnitude and significance of reported path coefficients. Based on these and other research findings, Singh (1994) concluded that a failure to test for ME posed a risk of serious inferential errors by hindering researchers' ability to draw meaningful conclusions from cross-cultural research.

Singh (1994) warned that the accumulated effect of inadequate testing for ME could be exceedingly severe, "resulting in some cross-national differences showing up as spuriously significant while others appear erroneously insignificant, and the substantive havoc caused by under or overestimation of the magnitude of effects is unmistakably pervasive." (p.617). Singh (1994) maintained that absence of proper ME testing had damaging effects on the validity of cross-cultural study conclusions, but also for the cross-cultural field in general, as the confounding influence of inappropriate methodological techniques can seriously impede the progress in the area of cross-cultural research.

In practical terms, in multinational organizations lack of ME assessment may lead to "long-term deleterious effects", resulting in faulty organizational decision-making and

inadequate intervention efforts (Ryan et al., 1999, p.54). Yet, to date, ME process has not become an integral part of instrument development in multinational organizations.

Further, researchers noted that a dearth of empirical studies not only investigate relevant organizational topics, but also demonstrate the application of ME techniques (Erez, 1994; Ryan et al., 1999). Integration of ME and substantive empirical studies would foster the accumulation of a solid knowledge base and would help those in the applied field to determine whether the perceptual differences they encounter are the results of real cultural differences, or merely a reflection of measurement inequivalence (Ryan et al., 1999).

The importance of this study to the issue of leadership perceptions across socio-demographic variables of culture and gender is clear. The integrative approach used in this study contributes to the scant pool of literature examining how to conduct measurement equivalence within the context of leadership perceptions across genders and cultures. Even though the role of gender and culture in leadership perceptions is admittedly a narrow area, there has been a call to researchers to conduct measurement equivalence studies on constructs other than traditional job attitude surveys (Lui et al., 2004). Specifically, to date, researchers have examined the equivalence of the multinational job attitude survey (Ryan et al., 1999); 360-degree feedback ratings (Gillespie, 2005); and a number of job satisfaction surveys (Liu et al., 2004; Hulin & Mayer, 1986). Yet, there have been no published studies on establishing the measurement equivalence in the context of leadership perceptions across cultures and genders.

The current study fills the gap in cross-cultural leadership literature by evaluating ME of the multinational Leadership perceptions scale. Leadership perceptions are a

complex construct (Yukl, 2002; House et al., 2004; Bass & Riggio, 2006), researched worldwide. In order for applied leadership methodologies to be transportable across cultures, the study of this field requires the employment of sophisticated techniques. Clearly, leaders have a responsibility for the health and effectiveness of their organizations. However, no matter how effective the leaders may be, there are always blind spots that company leadership may not be aware of. Effective and culturally sensitive organizational instruments, such as surveys, can inform the company's leadership about the areas of improvement that are visible to their followers. Such information is invaluable in the age of global knowledge-sharing, and the effort should go into obtaining an accurate and realistic picture of employees' perceptions.

The full level of equivalence established in this study across a number of countries is encouraging. Additionally, the factor loadings equivalence found across all countries in this study indicates that countries located on the opposite ends of the cultural spectrum can share the frame of reference when it comes to item interpretation of cross-cultural surveys. Additionally, the study concluded that the Leadership scale used in this research was sufficiently robust in terms of psychometric properties of measurement equivalence.

Although the current study tested a specific version of the Leadership scale using a ME approach, this was not the study's sole focus, as it has been a more common occurrence in the field. To the contrary, the goal of the current study was not only to provide evidence of ME for a single Leadership measure, but to serve as an example of an integration of ME methodology into a study researching wider theoretical topics, such as gender and cultural dynamics in the area of leadership. Researchers have noted that

integrating both psychometrical and theoretical advances in applied psychology would foster the development of more effective methods of establishing ME in organizational research – something that the field would benefit from (Ryan et al., 1999; Singh, 1994; Vandenberg & Lance, 2000; Gillespiel, 2005). The current study made a contribution towards furthering the integration of ME research with cross-cultural theory development.

The findings from this study showcase the challenges and opportunities of conducting cross-cultural research. Establishing measurement equivalence of a leadership perceptions scale fills a research gap in evaluating the U.S.-based leadership instruments used across different cultures. It is customary for organizations to use an imposed-etic approach to instrument development (Ryan et al., 1999; Katigbak, Church, & Akamine, 1996), mostly for practical reasons. Such an approach presumes that the measure developed in Western contexts would be equally effective and applicable to the realities of other cultures. The obvious disadvantage of this approach is that it disregards the culture-specific concepts (i.e. emic aspects) of other cultures in favor of a standardized approach.

To overcome the issue of excessive ethnocentricity in survey design, organizations need to be aware of a potential problem of non-equivalence in multinational surveys and install safeguards at critical points of survey design. For example, in the early stages of survey development, Ryan and colleagues (1999) advise to use “transculturals” (i.e. individuals who have transcended their cultural socialization and thus are less susceptible to cultural biases). Another approach would be to involve individuals from differing socio-demographic backgrounds into every stage of survey

development. Such a comprehensive approach may foster more balanced item design and concept integration, resulting in unbiased data. Of course, implementing the ME procedures would further allow the multinational companies to reap the benefits of psychometrically robust cross-cultural comparisons of survey data.

It is important to view the contribution of this study not solely from a psychometric point of view, but from the perspective of combining theory and psychometrics to produce a more accurate picture of the leadership perceptions across diverse demographic layers. Even though the ME portion of this study lends psychometrical strength, this portion should be viewed as a pre-requisite to the theoretical portion of the discussion – something that cross-cultural researchers should seek to adopt as a standard practice, and something that has not yet become commonplace in the organizational field.

To conclude, this study contributed to the cross-cultural investigation of gender and leadership issues through the use of the robust methodology available in the field of measurement equivalence. As has been noted by Vandenberg and Lance (2000), there currently exist too many definitions and techniques for ME to allow for a parsimonious and unified approach to ME testing. The refinement of ME and wider use of ME methods in cross-cultural studies can have an added benefit of fostering methodological advances in the field, along with any theoretical advances such studies bring about. Of course, it is possible, that in establishing the measurement equivalence between the countries, some of the rich data containing the cultural differences in measure interpretation might have been lost. Further studies need to explore this possibility in the future.

This study attempted to contribute to the research pool by linking ME to the Leadership perceptions model across demographically diverse populations. It is the hope of the author of this study that this study's findings have made a meaningful and timely contribution to fostering the wider integration of the ME theory into cross-cultural psychology.

More cross-cultural leadership research needed to be done using the sophisticated psychometric procedures across diverse populations. As the world is becoming more complex, it is imperative to advance analytical techniques that would allow researchers and applied psychologists to use precise measurements to bring clarity to a complex global world. Psychometric tools such as ME should be a crucial part of a robust cross-cultural analysis if we are to enrich the pool of cross-cultural leadership knowledge with meaningful, comparable, and systematic results. The study is an important step in this direction.

#### *The Impact of Gender and Culture on Leadership Perceptions*

The second contribution of the study is an exploration of the impact of gender and culture on followers' leadership perceptions and the interaction between these two variables as they impact the outcome variable. There was a recent call to focus leadership research on examining such topics as the role of followers in construction of leadership (Shamir, Pillai, Bligh & Uhl-Blien, 2007) and the influence of demographic variables on leadership perceptions across cultures (Smith & Peterson, 2005).

As previously noted, the earliest cross-cultural studies examining intrinsic values traditionally used only males in their subject pool, and by large ignored the investigation of the cultural values held by women (Spindler & Spindler, 1983). More recently, Gaines

et al. (1997) noted that cross-cultural studies “tend to deemphasize gender in favor of race/ethnicity and nationality as predictors” (p. 1463). Smith and Peterson (2005) echoed the view of Gaines and colleagues by observing the dearth of research on demographic variables (e.g. gender) used as predictor variables across cultures, even though demographic variables were shown to influence a variety of organizational outcomes (Pfeffer, 1983). As stated by Smith and Peterson (2005), researchers tend to investigate demographic variables within a single-country framework, or, as control variables in multi-country studies. This study contributed to the literature on both leadership and cross-cultural issues by investigating the role of gender and culture variables and the interplay between these two important variables in leadership perceptions.

Prior to the discussion of the study’s findings, it is worth mentioning that due to the large sample sizes used in the study, along with the small effect sizes, the results of the study may lack practical significance. The assessment of the overall impact of the study should be based not only on the statistical significance, but also on the practical contributions of the findings. Even though it is important to interpret the study results with caution, some researchers (e.g. Levin, 1998) advocate the use of a McLean and Ernest (1998) “chance-importance-replicability” framework when evaluating the overall significance of any study, with the priority being given to the findings of statistical significance and replicability, followed by practical significance. Hence, this study will be guided by the general framework proposed by McLean and Ernest (1998) in evaluating this study’s outcomes. The findings uncovered in this study concerning the impact of gender and culture variables on leadership perceptions across cultures will be discussed below.

*Gender Influences on Leadership Perceptions.* The study hypothesized that across all cultures, females would give higher ratings compared to males when national culture is not taken into account. This study found that leadership ratings given by both females and males across all cultures were not significantly different, when culture was not used as a moderator. This finding of no gender differences in leadership perceptions across cultures is surprising, given prior research (Bass & Riggio, 2006) documenting differences in male and female leadership perceptions. The proposition that females would give higher ratings to leaders across all cultures was supported by the work of Bass and Riggio (2006) who found that in the U.S., females gave higher ratings on the Multifactor Leadership Questionnaire, compared to males. Additionally, Bass and Avolio (1989) have found females to be more lenient raters as a group, possibly indicating a general tendency by females to provide lenient ratings of social objects.

Potential theoretical underpinnings for the hypothesis that women would provide higher ratings of their leaders may be found in research on agency and communion. Females are stereotypically perceived as “relationship-oriented”, or possessing a “communal” orientation, while males are stereotypically depicted as preferring competitive environments (Buss, 1981; Epitropaki & Martin, 2004; Kray, Thompson & Galinsky, 2001). This study predicted that females across all cultures would be less likely to provide unfavorable ratings, as they value relationships and social connectivity (Hogue & Lord, 2007; Eagly & Steffen, 1984) and may wish to preserve harmonious relationships with their supervisors. Male employees, on the other hand, were expected to be driven by the concerns for self-enhancement in a competitive environment

(Kemmelmeyer et al., 2002; Buss, 1981; Sidanius & Pratto, 2001; Van Vugt, De Cremer, & Janssen, 2007) and, therefore, less likely to be generous in their evaluations.

One source of support for the finding that females do not necessarily report more favorable perceptions when compared to males comes from the study results reported by Hartenstine (2006), who discovered that female employees perceived their organizations as slightly less satisfactory compared to males. In another study, Paris (2003) found no difference between how males and females perceive the team-oriented, autonomous, self-protective, humane-oriented and charisma/value-based leadership dimensions. It was suggested that societal socialization may shape leadership views more than gender socialization (Paris, 2003).

Similarly, the results of this study indicate that society-level values, such as cultural values, may exert stronger influence on leadership perceptions compared to gender differences when examined separately (refer to the theoretical Model on p.10). The sets of hypotheses exploring the influence of culture on gender variable as it impacts leadership perceptions is explored in the subsequent sections of this chapter.

Another area of literature that may provide insight into the current findings is the discourse on the organizations as “gendered” entities (Fletcher, 1999; Bailyn, 2006; Ruderman & Ohlott, 2003; Lorber, 2005). Research on women and leadership suggests that there is a strong social effect on how men and women view leaders in organizational settings (Valian, 1998; Watson, 1988). Men and women are not socialized in the same way, and not all gender socialization process is explicit (Valian, 1998). When it comes to work, researchers have noted that both women and men have internalized the idea that professional behavior is masculine behavior (Ely & Meyerson, 2000; Valian, 1998). For

example, some researchers have noted that “gendered” organizations are considered socially legitimate when they are masculine and that organizational environment is primarily based on a “masculine” foundation (Fletcher, 1999; Bailyn, 2006). Similarly, Ely and Padavic (2007) have noted that the present organizational system favors men and that gender should be viewed as a hierarchical phenomenon. Hence, the reason for the unexpected findings for the *Hypothesis 1* could be socialization differences between men and women who work within a masculine organizational paradigm.

It is possible that the present findings point towards women’s attempt to cope with the fact that they are in masculine organizations. These results may not necessarily imply that men and women indeed view their leaders in the same way, but that perhaps women in some cultures adopted the masculine type of behavior in Western contexts (Ely & Meyerson, 2000; Bailyn, 2006).

There is a great deal of agreement that, throughout the world, women typically occupy lower status positions, especially in more traditional societies. In a fairly recent study, Stickney and Konrad (2007) have reported that women with traditional attitudes have lower levels of earnings compared to women with egalitarian attitudes across cultures. No link has been found between earnings and gender-role attitudes for men (Stickney & Konrad, 2007). Researchers attempted to explain the absence of a direct link between gender-attitudes and men’s salaries by the fact that the evolution in gender attitudes mainly touched on the role of females, with the roles of males remaining, for the most part, unchanged (Calvo-Salguero, Garcia-Martinez, & Monteoliva, 2008). These findings suggest that the socio-cultural characteristics of the nations may play a role in how men and women view their status in organizational contexts.

Indeed the task of achieving professional success for females, even in more “egalitarian” Western contexts, has not been a straightforward one. A number of research studies have pointed out that the role of a leader goes against traditional expectations (Valian, 1998), and the role of a “follower” is traditionally viewed as more appropriate for women. Thus, females who also have the role of a “follower” in hierarchical organizations may experience a doubled amount of low-status stereotyping: that of an “indecisive” female and that of a “follower.” These stereotypes go against the predominant, implicit view of leader as a “hero.” Specifically, researchers observed that the poor fit between female role prescription and typical “masculine,” “assertive” leadership prototypes might lead some observers to reject the notion of females as effective leaders and de-value female leadership contributions.

When women do enact leadership roles and behave within an accepted, “assertive leadership” framework, they are penalized for behaving in non-feminine ways (Watson, 1988). This implicit system of penalties for women in “gendered” organizations has been referred to as a “double-bind” issue. Specifically, studies have documented that raters tend to provide negative assessments of personal qualities of female leaders who enact an assertive leadership style (Watson, 1988; Heilman et al., 1989; Medvedeff & Lord, 2007; Schein, 2001). Similarly, the findings from a meta-analysis conducted by Eagly, Makhijani, and Klonsky (1992), across multiple experimental studies evaluating male and female leaders, showed that female leaders tend to be evaluated less favorably than male leaders by non-managerial employees in comparable organizational scenarios.

To compensate for the loss of power in organizational settings, females may employ a strategy of providing higher ratings to their leaders in order to gain valuable

leadership support. In countries with less egalitarian values, i.e. countries that score higher on power distance, collectivism, and masculinity dimensions, women would experience more pressure to behave in gender-role congruent ways, and thus, would be likely to produce more elevated ratings; however, it is possible that, in Western contexts, the elevated ratings from female subordinates implicitly underscore their lower status, and thus, are to be avoided by females if they wish to gain the same status as males in the “gendered” organizational environment.

Under the circumstances, when women have to overcome the gender bias and advance their careers despite organizational barriers, women may choose to enact masculine, evaluative behaviors in order to fit the definition of the “ideal worker.” The findings in the current study indicate that it is possible that women may have adjusted their rating behavior to match the behavior of men, as masculine behavior has been long considered a standard behavior in “gendered” organizations (Valian, 1998; Lorber, 2005).

However, the findings in the current study may not necessarily signify that women adjusted their internal perceptions of leaders to match the perceptions expressed by men. Ohlott and Ruderman (2003), for example, discussed empirical accounts of women faced with the reality of “gendered” organizations. Women who learned how to successfully navigate masculine organizations, often struggle with the issue of authenticity. It may be that female employees who learned to demonstrate successful behavior in masculine settings may feel that organizations will simply not value their “feminine” perceptions (Fletcher, 1999). For example, Fletcher (1993) has provided compelling accounts of how such stereotypically “feminine” tasks as collaboration, team-

building, and conflict prevention became “disappearing acts” – unrewarded and unrecognized by most organizations.

The findings from this study indicate that the concepts of organizational leadership need to be further examined in light of the shifting societal and cultural realities. The area of male and female perceptions in global organizational contexts is multi-faceted and complex. Further research will need to be conducted on the relationship between male and female leadership perceptions in “gendered” organizations. Specifically, the juxtaposition of implicit attitudes and explicit leadership evaluation strategies of men and women might be a fruitful area for further exploration.

Of course, it is possible that not finding any differences between males and females in leadership perceptions across cultures in this study occurred due to methodological and not theoretical reasons. One explanation could be that the current sample was drawn from a single company in a heavy industry, and even though it is uncertain whether this particular industry attracted a population with unique characteristics, it is also possible that this might have affected the results of the study. Additionally, the participants in this study were employed by a multi-national organization, and thus, it is possible that the females held less traditional values compared to the respective general population.

Another possible explanation for finding no perceptual differences of leadership effectiveness between genders is the unique properties of the Leadership scale used in this study. Even though the scale had a high alpha coefficient of .94 and was tested for measurement equivalence, it is possible that finding no perceptual differences was an artifact of the Leadership scale used. It is feasible that the finding of gender differences is

more likely to occur when rating particular facets of leadership, such as transformational leadership (Bass & Riggio, 2006). Future studies should consider using meta-analytic techniques to examine under what conditions women are likely to give higher ratings of leadership compared to men.

A failure to find gender differences in leadership perceptions is a potentially important discovery on its' own. However, because only four countries were used in this study, it is not yet entirely clear whether these findings can be generalized pan-culturally. Further research in this area would be beneficial.

*Culture and Gender Influences on Leadership Perceptions.* In addition to investigating the influence of gender on leadership perceptions across cultures, this study examined the main effect of culture on leadership perceptions. Countries that vary on individualism-collectivism, masculinity-femininity, power distance and uncertainty avoidance were expected to differ in the prediction of leadership perceptions. The findings from the analyses provided support for the impact of cultural variables on leadership perceptions. In particular, employees from countries scoring higher in power distance, femininity and uncertainty avoidance cultural dimensions expressed more favorable leadership perceptions, compared to employees from countries scoring lower in power distance, femininity and uncertainty avoidance. Mixed results were found for the influence of individualism-collectivism dimension on leadership perceptions.

Further, this study examined an interaction between gender and culture and how these two variables impact leadership perceptions. Specifically, the present study extended the research reported by the GLOBE project (House et al., 2004) and the findings by Paris (2003) on gender and culture influences on leadership perceptions.

However, the current study used Hofstede's taxonomy of cultural dimensions and also investigated dimensions beyond power distance and gender egalitarianism (Paris, 2003), to include individualism-collectivism, masculinity-femininity, and uncertainty-avoidance. Additionally, instead of examining the views of mid-level managers of what hypothetically constitutes "ideal" leadership (Paris, 2003), this study used the followers' ratings of actual leaders.

The discussion of the findings for each cultural dimension and the interaction between cultural dimensions and gender are presented below.

*Individualism-Collectivism, Gender and Leadership Perceptions.* It was hypothesized that the individualism culture dimension would negatively influence the leniency of the ratings. Analyses partially supported the link between the individualism-collectivism dimension and leniency in leadership perceptions. Although the regression analysis did not show statistically significant support for the relationship between individualism-collectivism and leadership perceptions, the results did show a trend in the expected direction, such that employees from individualistic cultures did express somewhat less favorable perceptions of their leaders than employees from collectivistic cultures. Further tests suggested that cultures whose value profiles were at the opposite ends of each other on Hofstede's (2001) individualism-collectivism spectrum showed significant differences on leadership ratings, compared to the countries that were closer to each other on individualism-collectivism.

Intuitively, leniency in ratings is consistent with cultural views intrinsic to collectivistic societies, in which the self is considered to be interdependent with others and values such as modesty and humility are accepted cultural ideals (Gelfand et al.,

2002; Markus & Kitayama, 1991; Markus & Kitayama, 1994). One feature of countries low on individualism is the importance placed on social network (Hui & Triandis, 1986). For example, brainstorming in the U.S. (an individualistic country) is very different from brainstorming in China. In the U.S., people engage in brainstorming to come up with creative ideas, while in China it is not unusual for employees to refrain from talking during a brainstorming session, as Chinese employees tend to avoid what may be perceived as conflict-inducing situations. The possibility of causing an in-group member to “lose face” is to be prevented, even if it means not engaging in brainstorming (Goncalo & Staw, 2006).

The use of Western techniques, like surveys and brainstorming is based on a premise that the diversity of opinions will be shared in safe environments. However, in a collectivistic country, ideas are not viewed in isolation, but are embedded within a social context, and work is accomplished through relationships. The findings from present research suggest that followers from countries low on individualism (e.g. China) may be more attuned to the importance of context and interpersonal harmony, compared to those from highly individualistic countries (e.g. the U.S.). However, the findings from this study seem to indicate that this phenomenon might be only relevant to the countries on the extreme ends of the Hofstede’s individualism-collectivism spectrum, and might be less relevant to the countries that score low and medium on collectivism spectrum (e.g. Spain). It is possible that for the countries whose value profiles are low-to-moderately different from each other on individualism-collectivism, the organizations could be reasonably confident in adapting multi-cultural survey versions and interpreting survey

results. The results from this study seem to point to the need to further research the conditions under which individualism-collectivism may impact leadership perceptions.

*Interaction: Gender and Individualism-Collectivism.* This study hypothesized that gender would interact with individualism-collectivism to influence leadership perceptions. Specifically, it was expected that in individualistic countries (e.g. the U.S.) there would be a smaller gap between leadership perceptions by male and female followers, compared to collectivistic countries (e.g. China). This study suggested that gender differences (possibly, via distinct self-construals as either independent (i.e. “agentic”), or interdependent (i.e. “communal”) (Kimmelmeier & Oyserman, 2001), would interact with the individualistic-collectivistic culture to influence how men and women rate their leaders. Modest, statistically significant support was found for the interaction effect between gender and the individualism dimension. The findings indicated that female employees gave higher ratings compared to male employees in collectivistic countries, while female and male employees in individualistic countries gave similar ratings.

These results support the findings in the field of agency and communion (Bakan, 1966; Buss, 1981) and the research in individualism-collectivism (Hofstede, 2001; Triandis, 1989). Recall that this study suggested that the communal tendency of women to focus on group well-being (Buss, 1981) and interpersonal sensitivity (Cross & Madson, 1997) is conceptually similar to the tendency by members of collectivistic cultures to preserve group harmony (Triandis, 1989). Additionally, prior research has shown that individualism is associated with a tendency to self-enhance (Kimmelmeier et al., 2002) which is conceptually similar to the agentic qualities traditionally ascribed to males. In individualistic cultures, independent self-construals are cultivated since early

childhood and become a basis for self-enhancement and the viewing of oneself as unique and better than others (Gelfand et al., 2002). On the contrary, members of collectivistic societies (e.g. China) are more likely to seek to preserve harmonious relationships, especially those concerning important authority figures, such as organizational leaders (Oyserman et al., 2002). While members of individualistic societies (e.g. the U.S.) are less concerned with conforming to collective norms, people from collectivistic societies are more likely to guide their behavior based on the expectations of others (Peng, Kimmelmeier, Burnstein, & Manis, 1996).

Taken together, this study's findings lend support to the idea that the relationship/communal tendencies of female employees would interact with the tendency of collectivists to preserve harmony, resulting in more favorable ratings of leaders. The findings of the interaction of gender and individualism-collectivism is the right step in the research on psychosocial influences on leadership perceptions, but further research may be beneficial. Although the effect sizes were too small to warrant conclusive practical recommendations, some suggestions about the potential areas for concern in cross-cultural survey practice could be made. Organizations might benefit from becoming aware that the process of providing ratings of leaders might activate intrinsic cultural and gender-related tendencies in the diverse employees. Rather than expecting employees to provide unbiased and impartial information on organizational surveys, proactive leaders may need to become aware of the socio-cultural processes involved in individual perceptions and may wish to exercise caution when interpreting data from a demographically-diverse workforce.

*Leadership Perceptions and Power Distance.* This study predicted that the power distance dimension would be especially relevant to leadership perceptions, as power distance involves values of hierarchy and authority. It was expected that leadership perceptions in low power distance countries (as expressed through ratings) would be less favorable, due to the fact that there is less power differential between supervisor and employee, compared to the ratings given by employees from high power distance countries. Conversely, it was hypothesized that employees in high power distance cultures would rate their leaders higher compared to employees in low power distance cultures. This relationship was statistically significant, supporting the proposition that power distance is an important predictor of leadership perceptions. The findings indicated that employees in higher power distance cultures expressed more favorable perceptions of their leaders compared to employees in low power distance cultures.

Again, recall that power distance reflects the acceptance of power inequality within a given society (Hofstede, 2001). Researchers have remarked on the link between the level of power distance and the degree of loyalty demonstrated by employees towards their leaders (Hofstede, 2001; Chew & Putti, 1995). To illustrate the importance of hierarchy in high power distance cultures, one can imagine a river flowing from the top of a hill down to a village. A person who controls the stream on the top has a negotiating power over those at the bottom of the stream who need to have access to water. This metaphor exemplifies the importance of hierarchy and relationships as a means of obtaining needed resources in high power distance cultures.

Current results supported the prediction that the tendency of people from high power distance cultures to respect roles and hierarchy may influence people from those

countries to give more lenient ratings compared to those from low power distance cultures. Thus, when employees in high power distance cultures such as China, are asked to share their perceptions of their leaders, this strategy is opposite to what employees in high power distance countries would expect (Nash, 2005; Fletcher & Perry, 2001; Huo & Von Glinow, 1995). This process may be uncomfortable for employees in high power distance cultures and may even be perceived as threatening by some. Because loyalty and seniority are valued in high power distance cultures, when an employee gives less than favorable ratings to a supervisor, this employee may inadvertently jeopardize the established social order and his/her own status as a loyal worker.

Discomfort with over-stepping the boundaries of one's role in a strictly hierarchical culture impacts the quality of the messages from followers to their leaders, as it was observed by Uhl-Bien and Pillai (2007). Maintaining status differences between followers and leaders are part of the core values in countries high on power distance. Thus, researchers noted that a strict hierarchy may impact the accuracy of communication, as employees may distort their messages when communicating information to their leaders. Not only are the employees apt to skew their messages, they are also likely to frame their messages in positive terms when relating less than favorable information to their leaders (Dansereau & Markham, 1987).

The current study presented empirical evidence in support of the potential influence of the power distance dimension on leadership perceptions. The recognition of importance of the hierarchy and authority in high power distance cultures has an important practical value for business and human resource professionals. Role-fulfillment and conflict avoidance may impede the open sharing of one's views, especially if those

views concern leadership effectiveness. Thus, those wishing to collect meaningful data from employees in high power distance cultures might need to be aware that leadership endorsement of survey initiatives may be more important in collectivistic cultures, compared to individualistic cultures.

*Interaction: Gender and Power Distance.* Further, it was hypothesized that the hierarchical form of organizational values in high power distance countries (Paris, 2003) would interact with gender differences to impact leadership perceptions. Specifically, it was expected that there would be interplay between gender and the hierarchical status differentials found in high power distance cultures, influencing women from high power distance cultures to give higher ratings compared to men in high power distance cultures, and compared to both women and men in low power distance cultures. It was found that gender variable interacted with power distance such that females from high power distance cultures gave the most lenient ratings of their leaders compared to females from low power distance cultures, or to males across all cultures.

Several theoretical and empirical explanations exist concerning the link between gender and power distance. LaPlante and Ambady (2002) noted that women have been historically considered a low status group. Others linked the concept of self in women (as opposed to men) to power inequalities produced by social contexts in some cultures (Lykes, 1985). Recently, Blau and Kahn (2007) have reported that globally, more women in the workplace are found in roles of followers and few hold organizational leadership positions.

As noted earlier, in low power distance countries, both men and women are viewed as having a right to equal opportunities in regards to power distribution within a

society. Thus, in low power distance countries, the difference between men and women in the workplace is minimized, as both genders are expected to be treated equally. Hence, the finding of similar perceptions of male and female employees in low power distance countries compared to high power distance countries was not surprising, given the emphasis on workplace gender equality in low power distance countries.

The results of this study seem to indicate that female employees from high power distance countries may need to be encouraged to voice their opinions in a safe and supportive environment. Multinational organizations may benefit from communicating to their employees that employees at all levels have the authority to voice their opinions in order to make the company more effective, and that it is safe to do so. Leaders may wish to pay special attention to the quality of their communication with their diverse followers, as this would increase the leaders' realistic view of the level of effectiveness, morale and motivation in their organizations (Offermann, 2004). Leaders in large multinational organizations might need to be especially pro-active in seeking upward feedback from followers in high power distance countries.

*Leadership Perceptions and Masculinity-Femininity.* This study predicted that the masculinity-femininity dimension would impact leadership perceptions such that employees from cultures low on masculinity would give higher evaluation of leaders, compared to employees in cultures high on masculinity. Indeed, low masculinity (i.e. high femininity) was found to be significantly and positively associated with the leniency in leadership ratings. The results of the tests suggest that employees in high masculinity cultures are less likely to give lenient ratings compared to employees from low masculinity cultures.

Hofstede (1989) has observed that masculine cultures support ego-boosting cultural ideals, such as ambitiousness and assertiveness, while feminine cultures support modesty. A study by Bruins et al. (1993) reported empirical evidence for the impact of masculinity-femininity on the followers' views of leadership. Bruins and associates (1993) presented a hypothetical scenario to participants from the Netherlands and Poland. The researchers asked men and women to nominate any person for a leader position vacated by the current incumbent. Bruins et al. (1993) found that across all countries, men strongly overnominated themselves for the leader role. However, in Poland (a country scoring moderately high on masculinity), both males and females nominated mostly males for leader position, while in the Netherlands (a country scoring extremely low in masculinity), the majority of female participants nominated either themselves or another female.

The finding in the present study that masculinity-femininity may influence leadership perceptions may have a meaningful implication to the study of leadership in masculine versus feminine countries. Overall, the results provide empirical support for the contention that masculinity-femininity is an important dimension to consider when evaluating its impact on leadership perceptions.

*Interaction: Gender and Masculinity-Femininity.* Further, this study expected that gender would interact with culture and that females from feminine cultures would give the highest leadership ratings. This research found that there was a significant interaction between gender and the masculinity-femininity dimension.

A theoretical foundation for the interaction between the gender variable and masculinity-femininity dimension can be found in the research on agency and

communion (Bakan, 1966; Buss, 1981). It is possible, that the agentic and task-oriented tendencies stereotypically ascribed to men, and relationship-oriented tendencies ascribed to women, interacted with the cultural variation in masculinity-femininity in this study (Cross & Madson, 1997; Wood & Karten, 1986). As Hofstede (1997) pointed out, gender roles prescribed by society tend to correlate with the intrinsic cultural values that members of those societies hold.

Researchers have noted that masculine cultures value competition and achievement-oriented action, and tend to advocate distinction between gender roles (Hofstede, 2001). Feminine cultures, on the other hand, value communal qualities of social awareness and interconnectedness, and do not draw sharp lines between gender roles (Hofstede, 2001). For example, Lawler (as cited in Paris, 2003, p. 84) found that the Scandinavian countries of Finland, Denmark and Norway were high in gender egalitarianism. These three countries also score very low on the masculinity cultural dimension (Hofstede, 2001). Additionally, Bass (as cited in Paris, 2003, p. 84) found that in countries high on femininity, both genders placed a high value on interdependence (unlike in masculine countries), and both males and females expressed a preference for a participative leadership style.

The findings of this study seem to be relevant to the issue of gender at workplace, and how gender differences impact leadership perceptions across cultures. This study's results serve as useful empirical evidence of an interaction between gender and the masculinity-femininity cultural dimension. If the diversity of culture-based approaches towards leadership perception is not taken into consideration, organizational leadership might obtain incomparable data for males and females in high versus low masculinity

cultures. Such incompatible information can lead to ineffectual decision-making, and consequently may possibly affect the effort diverse employees put into carrying out their daily tasks. Positive communication with leaders and realistic clarification of employees' perceptions can contribute to a sense of commitment in employees from diverse backgrounds. This could possibly lead to a greater sense of responsibility for their part in overall organizational effectiveness.

*Leadership Perceptions and Uncertainty Avoidance.* Although it was expected that the uncertainty avoidance cultural dimension might impact leadership perceptions, this cultural dimension was not the primary focus of the study, and thus was examined in an exploratory manner. Based on the previous research, it was not surprising to find support for the positive relationship between the level of uncertainty avoidance and leniency in leadership ratings. Specifically, employees from countries with greater levels of uncertainty avoidance (e.g. Spain) rated their leaders higher than employees from countries with lower levels of uncertainty avoidance (e.g. the U.S.).

*Interaction: Gender and Uncertainty Avoidance.* No support was found for the interaction effect between gender and uncertainty avoidance. The lack of statistically significant findings for the interaction of uncertainty avoidance and gender is intriguing. Uncertainty avoidance reflects a level of risk aversion within a society (Hofstede, 2001). It is possible that even though females are stereotypically said to be relationship-oriented and men are shown to be task-oriented, this does not imply higher risk aversion for either gender group.

In other words, uncertainty avoidance describes how comfortable individuals are in ambiguous and unstructured environments. As both relationships and tasks can be

either structured or ambiguous, it is feasible that men and women enact both structured and flexible behaviors, as they navigate their respective social and task-centered domains. Thus, even though uncertainty avoidance may influence the direction of the ratings, it may not necessarily interact with gender differences between the raters. Future research will need to explore this issue further.

To summarize, the findings of this study provide promising support for the interaction between gender and culture as these variables impact leadership perceptions, however modest the results are. This study expands the current paradigm of leadership to include the study of followers and leaders by examining whether leadership perceptions and evaluations are driven by universal (*etic*) or culture-specific (*emic*) processes. This is a critical implication, given that the majority of leadership perception and evaluation tools are designed in the West (Fletcher & Perry, 2001). The main leadership theories, moreover, have also been almost exclusively developed in North America (Yukl, 2002). And yet, applied psychologists world-wide are faced with the task of understanding and examining leadership issues across organizational diversity.

Additionally, this study makes a contribution to the field of leadership by integrating research on cultural values, gender dynamics, and raters' behavior, into a theory of leadership perceptions. Also, this study attempted to "reverse the lenses" and investigate followers' construal of leadership (Shamir, 2007, p. xxi). In the past, the discussions focused mostly on leaders and neglected the follower-centered perspective on leadership investigation. Moreover, studies dealing with gender issues in followers were scant (Shamir et al., 2007). The findings from this research illustrate that to understand

leadership effectiveness, it may be useful to examine the nature of followers' gender- and culture-related processes as they impact leadership perceptions.

Deeper understanding of the gender and cultural differences in leadership perceptions might help organizations provide better opportunities for diverse followers across a wide cultural spectrum. With the increase of global mobility, more employees are originally from countries other than their host country. Multi-national corporations might garner a competitive advantage when they have access to a complete pool of employees' views about leadership effectiveness in their organizations. A leadership equipped with meaningful and complete information is better poised to make effective decisions.

In the area of cross-cultural research, the findings from this study indicate that the effect of demographic variables on leadership perceptions in international contexts deserves further investigation. It appears that gender may influence leadership perceptions in some cultures, but not in others. These findings suggest that there is a need to further examine the mechanism employed in the process of leadership perceptions across cultures and how gender impacts these perceptions.

Lastly, human resource professionals may benefit from a deeper understanding of cultural values that impact the perceptions of leaders by male and female followers across cultures. Multinational survey efforts that do not take into consideration the interaction between demographic variables of the workforce may be less than optimal. It is the hope of the author of this study that these findings would help alert applied psychologists of the need to thoroughly understand the demographic forces influencing their multinational organizations.

### *Limitations*

Despite some methodological and substantive strengths of this study, there are some limitations that should be noted. One such limitation is the study's assumption of cultural differences as defined by the boundaries of nation states, as opposed to the direct assessment of cultures. As this is a somewhat simplified approach to investigation of cultures, claims could be made that cultures are not homogenous entities and that internal culture variation should be accounted for in the analysis. However, it is worth noting that the major existing studies in the cross-cultural field employed the same parsimonious approach. Additionally, some researchers suggest that variations between cultures are likely to be greater than variations within cultures (Markus & Kitayama, 1991).

In a similar vein, this study used the employees' countries as a proxy for employees' cultural values. However, researchers have noted that cultural experiences are driven by the similarity of broad perceptions and thus are likely to be experienced in a similar manner by members of a single society (House et al., 1997). To this end, this study uses a well established classification of cultures by Hofstede (1980; 2001) that synthesizes the well-validated differences across nation states. Also, while it would be useful to use a direct measure of participants' culture, the nature of the archival data used in this study precluded such an investigation.

Additionally, this study examined the differences between a limited number of countries. Researchers investigating leadership perceptions in applied settings need to continue to explore opportunities for collecting cross-cultural data. However, the reality of cross-cultural applied research warrants the use of realistic data sources in which the adult working population across the globe is represented.

Other limitations pertain to the leadership perceptions scale used in this study. It is possible that other leadership perceptions scales may not yield the same level of cross-cultural measurement equivalence across diverse populations. Additionally, because of the archival nature of the data, the items of the leadership scale were drawn from the existing survey scales. Future research might consider using a well-established leadership scale, such as the Multifactor Leadership Questionnaire (Bass & Riggio, 2006), as this may strengthen the construct validity of the research. Further, more levels of leadership can be included in the study (e.g. immediate supervisors versus executive leaders).

Next, the study data were obtained from a single multi-national company, thus it is open to debate whether the results would be replicable in other types of organizations. Care needs to be taken when generalizing the findings to companies of different sizes, structures and organizational cultures (Hunter, Morewitz & Costanza, 2006). However, it must be noted that limiting the study to a single multi-national company reduces organizational and industry-level confounding variance and enhances the comparability of the participants across cultures.

Lastly, the study used only data obtained from a self-report survey. Future studies may wish to use objective measures of leadership performance, in order to compare the results of such measures with self-reported leadership perceptions. Moreover, it may be possible to use other types of data collection, for example, interviews, focus-groups, or even projective techniques, such as the implicit attitudes test (IAT) (Greenwald, Nosek, & Banaji, 2003), to correlate with the self-report measures. Nevertheless, this study provides valuable empirical support to the importance of gender and culture variables in

leadership studies, using a well-validated cultural taxonomy (Hofstede, 1980, 2001), and a well-represented cross-section of Hofstede's cultural dimensions.

### *Future Research*

Given the findings of this study that suggest a combined effect of gender and culture, future research may need to examine the dynamic nature of a wider spectrum of cultural and demographic influences on leadership perceptions. Such exploration would lead to a more refined understanding of the global shift occurring in the area of cultural demographics and how organizations can benefit from such a shift.

Further, because situational conditions activate intrinsic schemas, including the schemas rooted in cultural values (Gelfand & Realo, 1999), future studies may focus on extending the view of culture into a realm of context-driven leadership perceptions. For example, under what conditions do men and women differ in their leadership perceptions, given the same level of cultural variables? Moreover, what contexts (e.g. military, competitive, political, etc.) tend to activate cultural ideals and strengthen the influence of culture on the way male and female employees perceive their leaders?

Other avenues for future research may include comparative studies of the influential cultural taxonomies, such as the frameworks developed by House et al. (2004), Inglehart (1997), and Schwartz (2004) to uncover a more precise interaction between cultural variables and gender. Further, another highly interesting area of investigation is the application of cross-cultural methods to the field of "cross-ethnic" research (Gaines et al., 1997). It would be beneficial to extend the approaches used in this study to the exploration of cultural processes in the sub-groups in the United States (e.g. African

American, Asian American, Latina/Latino) to determine how and when the demographic variables in these sub-groups may affect leadership perceptions.

Additionally, future research should investigate the combined effect of language and culture on measurement equivalence, as language plays an important role in constructing the meaning of cross-cultural survey items. For example, it would be useful to compare a cluster of English-speaking countries to a group of Arab countries to examine the frame of references used by the members of these countries when interpreting multinational surveys.

Lastly, future studies should consider examining gender differences in leadership perceptions involving different types of leaders (e.g. top managers versus immediate supervisors). Moreover, researchers may wish to find an effective yet practical way of linking actual leadership performance across organizational strata to leadership perceptions of diverse followers. Additionally, it would be useful to investigate how the gender- and culture-fit between followers and leaders affect followers' perceptions of leadership effectiveness.

### *Conclusion*

To conclude, this study examined the issue of measurement equivalence in cross-cultural leadership perceptions, thus contributing to the psychometric pool of knowledge in the cross-cultural survey research area. There has been a call to cross-cultural researchers to increase efforts in establishing measurement equivalence for constructs other than traditional job satisfaction instruments (Liu et al., 2004). This study answered this call by testing measurement equivalence of a leadership perceptions scale.

Further, the findings of this study supported the view that in the global organizational environment, gender and cultural characteristics of followers are inherently intertwined to form intrinsic lenses through which the followers perceive their leaders. This study pointed to the need to further examine the psychosocial differences in the way followers perceive and evaluate their leaders in international contexts.

Rapid globalization is a salient feature of the current organizational environment. It is only by fully considering the demographic variables of multi-national organizations that a deeper understanding of the followers' views of organizational leadership can be attained.

## References

- Adler, N. J., & Bartholomew, S. (1992). Academic and professional communities of discourse: Generating knowledge on transitional human resource management. *Journal of International Business Studies*, 23, 3-25.
- Armstrong, S. A., & Henson, R. K. (2005). Statistical practices of IJPT researchers: A review from 1993-2003. *International Journal of Play Therapy*, 14(1), 7-26.
- Atwater, L., Waldman, D., Ostroff, C., Robie, C. & Johnson, K. (2005). Self-other agreement: Comparing its relationship with performance in the U.S. and Europe. *International Journal of Selection and Assessment*, 13 (1), 25 – 40.
- Bailey, A. (2006). *Heroic individualism: The hero as author of democratic culture*. (Louisiana State University). Retrieved from ProQuest Dissertations & Theses. (AAT 3244935).
- Bailyn, L. (2006). *Breaking the mold: Redesigning work for productive and satisfying lives*. Ithaca, New York: Cornell University Press.
- Bakan, D. (1966). *The duality of human existence*. Boston: Beacon Press.
- Barlett, F. A. (1932). *Remembering: A study in experimental psychology*. Cambridge: England: Cambridge University Press.
- Bass, B. M. (1990). *Handbook of leadership* (3<sup>rd</sup> ed.). New York: Free Press.
- Bass, B. M., & Avolio, B. J. (1989). Potential biases in leadership measures: How prototypes, leniency, and general satisfaction relate to ratings and rankings of transformational and transactional leadership constructs. *Educational and Psychological Measurement*, 49, 509-527.

- Bass, B. M., & Avolio, B. J. (1993). Transformational leadership: a response to critiques. In M. M. Chemers, & R. Ayman (Eds.), *Leadership theory and research: perspectives and directions* (pp.49 – 80). San Diego: Academic Press.
- Bass, B. M., Avolio, B. J., & Atwater, L. (1996). The transformational and transactional leadership of men and women. *Applied Psychology: An International Review*, 45 (1), 5-34.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership*. NJ: Lawrence Erlbaum Associates.
- Baumeister, R.F., & Sommer, K.L. (1997). What do men want ? Gender differences and the two spheres of belongingness. *Psychological Bulletin*, 122, 38 – 44.
- Berry, J. W. (1993). An ecological approach to understanding cognition across cultures. In J. Altarriba (Ed.), *Cognition and culture: A cross-cultural approach to cognitive psychology* (pp.361-375). Oxford, UK: Elsevier.
- Berry, J. W., Poortinga, Y. H., Segall, M. H., & Dasen, P. R. (2002). *Cross-cultural psychology*. Cambridge: University Press.
- Beyer, S. (1990). Gender differences in the accuracy of self-evaluations of performance. *Journal of Personality and Social Psychology*, 59, 960-970.
- Blau, F. D., & Kahn, L. M. (2007). The gender pay gap: Have women gone as far as they can? *Academy of Management Perspectives*, 21 (1), 7 – 35.
- Bochner, S., & Hesketh, B. (1994). Power distance, individualism/collectivism, and job-related attitudes in a culturally diverse work group. *Journal of Cross-Cultural Psychology*, 25 (2), 233 – 257.
- Bollen, K. A. (1989). *Structural equations with latent variables*. New York: Wiley.

- Bollen, K. A. & Long, S. (Eds.). (1993). *Testing Structural Equation Models*. Thousand Oaks, CA: Sage.
- Bond, M. H., Leung, K., Au, A., Tong, K. K., de Carrasquel, S. R., Murakami, F., et al. (2004). Culture-level dimensions of social axioms and their correlates across 41 cultures. *Journal of Cross-Cultural Psychology, 35* (5), 548 - 570.
- Bond, M. H., & Smith, P. B. (1996). Cross-cultural social and organizational psychology. *Annual Review of Psychology, 47*, 205-235.
- Bracken, D.W., Timmreck, C.W., & Church, A. H. (Eds.). (2001). *The handbook of multisource feedback*. San Francisco: Jossey-Bass.
- Brett, J. M., Tinsely, C. H., Janssens, M., Barsness, Z. I., & Lytle, A. L. (1997). New approaches to the study of culture in industrial/organizational psychology. In P.C. Earley, & M. Erez (Eds.), *New perspectives on international industrial/organizational psychology*. San Francisco: New Lexington Press.
- Bretz, R. D., Jr., Milkovich, G. T. & Read, W. (1992). The current state of performance appraisal research and practice: Concerns, directions, and implications. *Journal of Management, 18* (2), 321 – 352.
- Browne, M. W. & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen, & J. S. Long (Eds.) *Testing Structural Equation Models*. pp. 136–162. Beverly Hills, CA: Sage.
- Brunis, J., den Ouden, M., Extra, J., Gornik, M., Iannaccone, A., Kramarczyk, E., et al. (1993). On becoming a leader: Effects of gender and cultural differences on power distance reduction. *European Journal of Social Psychology, 23* (4), 411-426.

- Brutus, S., Derayeh, M., Fletcher, C., Bailey, C., Velazquez, P., Shi, K., et al. (2001). Internationalization of Multisource Feedback Systems: A six-country exploratory analysis of 360-degree feedback.
- Bryman, A. (1987). The generalizability of implicit leadership theory. *Journal of Social Psychology, 127*, 129-141.
- Buss, D. M. (1981). Sex differences in the evaluation and performance of dominant acts. *Journal of Personality and Social Psychology, 40*, 147 - 154.
- Butterfield, D. A., & Grinnell, J. P. (1999). “Re-viewing” gender, leadership, and managerial behavior: Do three decades of research tell us anything? In G. N. Powell (Ed.), *Handbook of gender and work* (pp. 223 – 238). Thousand Oaks, CA: Sage.
- Byrne, B. M. (1993). The Maslach Burnout Inventory: Testing for factorial validity and invariance across elementary, intermediate and secondary teachers. *Journal of Occupational and Organizational Psychology, 66*, 197 – 212.
- Byrne, B. M. (2001). Structural Equation Modeling with AMOS, EQS, and LISREL: Comparative approaches to testing for the factorial validity of a measuring instrument. *International Journal of Testing, 1* (1), 55 – 86.
- Calvo-Salguero, A., Garcia-Martinez, J. M. A., & Monteoliva, A. (2008). Differences between and within genders in gender role orientation according to age and level of education. *Sex Roles, 58*, 535 – 548.
- Carver, C. & Scheier, M. (1981). *Attention and self-regulation: A control theory approach to human behavior*. New York: Springer.

- Ciabattari, T. (2001). Changes in men's conservative gender ideologies: Cohort and period influences. *Gender & Society, 15*, 574 – 591.
- Chandy, P. R., & Williams, T. (1994). The impact of journals and authors on international business research: A citational analysis of JIBS articles. *Journal of International Business Studies, 25* (4): 715 – 728.
- Chew, I. K., & Putti, J. (1995). Relationship on work-related values of Singaporean and Japanese managers in Singapore. *Human Relations, 48*, 1149-1170.
- Chiang, F. T. & Birtch, T. (2007). The transferability of management practices: Examining cross-national differences in reward preferences. *Human Relations, 60* (9), 1293-1330.
- Chiles, A. M., & Zorn, T. E. (1995). Empowerment in organizations: Employees' perceptions of the influence of empowerment. *Journal of Communication Research, 23*, 1-25.
- Cleveland, J.N., & Murphy, K.R. (1992). Analyzing performance appraisal as goal-directed behavior. *Research in Personnel and Human Resources Management, 10*, 121 – 185.
- Cohen, D. (2001). Cultural variation: Considerations and implications. *Psychological Bulletin, 127*, 451-471.
- Commision of the European Communities (2009). Equality between women and men. *Report from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions* (SEC (2009) 165). Retrieved May 18, 2009 from <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0077:FIN:EN:PDF>

- Cook, T. D., & Campbell, D. T. (1979). *Quasi-experimentation. Design and analysis issues for field settings*. Chicago: Rand McNally.
- Cross, S., & Madson, L. (1997). Models of the self: Self-construals and gender. *Psychological Bulletin*, 122, 5-37.
- Dansereau, F., & Markham, S. (1987). Superior-Subordinate Communication: Multiple Level of Analysis. In Porter, L., Roberts, K., Jablin, F., Putnam, L. (Eds.). *Handbook of Organizational Communication*, 343-388. Beverly Hills, California: Sage.
- De Leeuw, E.D., Hox, J.J., & Dillman, D.A. (Eds.). (2008). *International handbook of survey methodology*. New York: Lawrence Erlbaum Associates.
- DeNisi, A.S. (1996). *Cognitive approach to performance appraisal: A programme of research*. Routledge: London.
- Diener, E. & Diener, M. (1995). Cross-cultural correlates of life satisfaction and self-esteem. *Journal of Personality and Social Psychology*, 68, 653 – 663.
- Drasgow, F. (1984). Scrutinizing psychological tests: Measurement equivalence and equivalent relations with external variables are central issues. *Psychological Bulletin*, 95, 134-135.
- Drasgow, F. & Kanfer, R. (1985). Equivalence of psychological measurement in heterogeneous populations. *Journal of Applied Psychology*, 70, 662-680.
- Eagly, A. H. (1987). *Sex differences in social behavior: A social-role interpretation*. Hillsdale, NJ: Lawrence Erlbaum Associated Inc.
- Eagly, A. H., & Johnson, B. (1990). Gender and leadership style: A meta-analysis. *Psychological Bulletin*, 108 (2), 233 – 256.

- Eagly, A. H., Johannesen-Schmidt, M.C. & Van Engen, M. L. (2003). Transformational, transactional, and laissez-faire leadership styles: A meta-analysis comparing men and women. *Psychological Bulletin*, *129*, 569-591.
- Eagly, A. H., & Karau, S. J. (1991). Gender and the emergence of leaders: A meta-analysis. *Journal of Personality and Social Psychology*, *60*, 685 – 710.
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, *109*, 573 – 598.
- Eagly, A. H., Makhijani, M. G., & Klonsky, B.G. (1992). Gender and the evaluation of leaders: A meta-analysis. *Psychological Bulletin*, *111* (1), 3-22.
- Eagly, A. H., & Mladinic, A. (1989). Gender stereotypes and attitudes toward women and men. *Personality and Social Psychology Bulletin*, *15*, 543 – 558.
- Eagly, A. H., & Steffen, V. J. (1984). Gender stereotypes stem from the distribution of women and men into social roles. *Journal of Personality and Social Psychology*, *46*, 735 – 754.
- Early, P. C. (1986). Trust, perceived importance of praise and criticism, and work performance: An examination of feedback in the United States and England. *Journal of Management*, *12*, 457 – 473.
- Early, P. C., Gibson, C. B., & Chen, C. C. (1999). “How did I do?” versus “How did we do?”: Cultural contrasts of performance feedback use and self-efficacy. *Journal of Cross-Cultural Psychology*, *30* (5), 594-619.
- Early, P. C. & Stubblebine, P. (1989). Intercultural assessment of performance feedback. *Group and Organization Studies*, *14*, 161 – 181.

- Eaton, J. & Struthers, C. W. (2002). Using the Internet for organizational research: A study of cynicism in the workplace. *CyberPsychology and Behavior*, 5 (4), 305-313.
- Echabe, A. E. & Castro, J. L. G. (1999). The impact of context on gender social identities. *European Journal of Social Psychology*, 29, 287-303.
- Elenkov, D. S. (1998). Can American management concepts work in Russia? A cross-cultural comparative study. *California Management Review*, 40 (1), 133 – 156.
- Elenkov, D. (2002). Effects of leadership on organizational performance in Russian companies. *Journal of Business Research*, 55, 467 – 480.
- Elenkov, D. S., & Manev, I. M. (2005). Top management leadership and influence on innovation: The role of socio-cultural context. *Journal of Management*, 31(3): 381-402.
- Ely, R., & Meyerson, D. B. (2000). Theories of gender in organizations: A New approach to organizational analysis and change. *Research in Organizational Behavior*, 22, 103 – 151.
- Ely, R., & Padavic, I. (2007). A feminist analysis of organizational research on sex differences. *Academy of Management Review*, 32 (4), 1121-1143.
- Entrekin, L. & Chung, Y. W. (2001). Attitudes towards different sources of executive appraisal: A comparison of Hong Kong Chinese and American managers in Hong Kong. *International Journal of Human Resource Management*, 12 (6), 965-987.
- Epitropaki, O., & Martin, R. (2004). Implicit Leadership Theories in applied settings: Factor structure, generalizability and stability over time. *Journal of Applied Psychology*, 89, 293-310.

- Erez, M. (1994). Toward a model of cross-cultural industrial and organizational psychology. In Triandis, H. D., Dunnette, M. D., Hough, L. M. (Eds.), *Handbook of industrial and organizational psychology* (Vol. 4, pp. 559-608). Palo Alto, CA: Consulting Psychologists Press.
- Erez, M., & Earley, P. C. (1993). *Culture, self-identity, and work*. New York: Oxford University Press.
- Farh, J., Dobbins, G.H. & Cheng, B. (1991). Cultural relativity in action: A comparison of self-ratings made by Chinese and U.S. workers. *Personnel Psychology*, 44, 129-147.
- Fletcher, J.K (1999). *Disappearing acts: Gender, power and relational practice at work*. Cambridge, MA: The MIT Press.
- Fletcher, C. & Baldry, C. (1999) Multi-source feedback systems: A research perspective. In C. L. Cooper & I. T. Robertson (Eds.), *International Review of Industrial and Organizational Psychology*, 14. New York/London: Wiley.
- Fletcher, C., & Perry, E. L. (2001). Performance appraisal and feedback: A consideration of national culture and a review of contemporary research and future trends. In N. Anderson, D.S., Ones, K. Sinangil, & C. Viswesvaran (Eds.) *Handbook of Industrial, Work, and Organizational Psychology*. Sage Publications: Thousands Oaks: CA.
- Friedman, T. (2006). *The world is flat: A brief history of the twenty-first century*. Farrar, Straus, and Giroux.
- Gaines, S. O., Marelich, W. D., Bledsoe, K. L., Steers, W. N., Henderson, M. C., Granrose, C. S., et al. (1997). Links between race/ethnicity and cultural values as

- mediated by racial/ethnic identity and moderated by gender. *Journal of Personality and Social Psychology*, 72 (6), 1460 – 1476.
- Gelfand, M. J., Higgins, M., Nishii, L. H., Raver, J. L., Dominguez, A., Murakami, F., et al. (2002). Culture and egocentric perceptions of fairness in conflict and negotiation. *Journal of Applied Psychology*, 87 (5), 833-845.
- Gelfand, M. J. & Realo, A. (1999). Individualism-collectivism and accountability in intergroup negotiations. *Journal of Applied Psychology*, 84, 721-736.
- Gerber, G. L. (1988). Leadership roles and the gender stereotype traits. *Sex Roles*, 18, 649-668.
- Gillespie, T. L. (2005). Internationalizing 360-degree feedback: Are subordinate ratings comparable? *Journal of Business and Psychology*, 19 (3), 361-382.
- Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Cambridge, MA: Harvard University Press.
- Goethals, G., Messick, D. M., & Allison, S. T. (1991). The uniqueness bias: Studies of constructive comparison. In J. Suls & T. A. Wills (Eds.), *Social comparison: Contemporary theory and research* (pp. 149 – 176). Hillsdale, NJ: Erlbaum.
- Goncalo, J.A. & Staw, B.M. (2006). Individualism-collectivism and group creativity. *Organizational Behavior and Human Decision Processes*, 100 (1), 96-109.
- Gregersen, H. B., Hite, J., & Black, J. S. (1996). Expatriate performance appraisal in U.S. multinational firms, *Journal of International Business Studies*, 27 (4), 711-738.
- Greller, M. M. & Herold, D. M. (1975). Sources of feedback: A preliminary investigation. *Organizational Behavior and Human Performance*, 13, 244 – 256.

- Greenwald, A. G., Nosek, B. A., & Banaji, M. R. (2003). Understanding and using the Implicit Association Test: I. An improved scoring algorithm. *Journal of Personality and Social Psychology*, 85(2), 197-216.
- Hamner, C., Kim, J., Baird, L., & Bigoness, W. (1974). Race and sex as determinants of ratings by potential employees in a simulated sampling task. *Journal of Applied Psychology*, 59, 705-711.
- Hartenstine, J. C. (2006). *The ethical self-concept: An internal mediator regulating ethical judgments and ethical behavioral intentions (The George Washington University)*. Retrieved from ProQuest Dissertations & Theses. (AAT 3217548).
- Harter, J. (1986). Appraisal from Aristotle on. *Management Education and Development*, 17, 34-39.
- Harzing, A.W. (2006). Response styles in cross-national survey research: A 26-country study. *International Journal of Cross-Cultural Management*, 6(2), 243-266.
- Helgeson, V. S. (1994). Relation of agency and communion to well-being: Evidence and potential explanations. *Psychological Bulletin*, 116, 412-428.
- Heilman, M. E., Block, C. J., Martell, R. E. & Simon, M. C. (1989). Has anything changed? Current characterizations of men, women, and managers. *Journal of Applied Psychology*, 74, 935 – 942.
- Herk, H., Poortinga, Y. H., & Verhallen, T. M. (2004). Response styles in rating scales: Evidence of method bias in data from six EU countries. *Journal of Cross-Cultural Psychology*, 35(3), 346-360.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*, Beverly Hills, CA: Sage.

- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*. Thousand Oaks, CA: Sage.
- Hogue, M. & Lord, R. G. (2007). A multilevel, complexity theory approach to understanding gender bias in leadership. *Leadership Quarterly*, 18, 370 – 390.
- House, R. J., Hanges, P. J., Javidan, M., Dorfman, P., & Gupta, V. (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. Newbury Park, CA: Sage.
- House, R. J., Javidan, M., Dorfman, P. W. & Sully de Luque, M. (2006). A failure of scholarship: response to George Graen's critique of GLOBE. *The Academy of Management: Perspectives*, 29 (4), 102-114.
- Howard, A., & Bray, D. W. (1988). *Managerial lives in transition: Advancing age and changing times*. New York: Guilford.
- Hoyle, R. H. (1995). The structural equation modeling approach: Basic concepts and fundamental issues. In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues, and applications* (pp. 1 – 15). Thousand Oaks, CA: Sage.
- Hui, C.H. & Triandis, H. C. (1985). Measurement in cross-cultural psychology: A review and comparison of strategies. *Journal of Cross-Cultural Psychology*, 16, 131-152.
- Hui, C.H. & Triandis, H. C. (1986). Individualism-Collectivism. *Journal of Cross-Cultural Psychology*, 17 (2), 225-248.
- Hulin, C. L., Drasgow, F., & Komocar, J. (1982). Applications of item response theory to analysis of attitude scale transformations. *Journal of Applied Psychology*, 67, 818-825.

- Hulin, C. L., Drasgow, F., & Parsons, C. K. (1983). *Item response theory: Application to psychological measurement*. Homewood, IL: Business One Irwin.
- Hulin, C.L., & Mayer, L.J. (1986). Psychometric equivalence of a translation of the job descriptive index into Hebrew. *Journal of Applied Psychology*, 71, 83-94.
- Hunter, A., Morewitz, C., & Costanza, D. (2006, February). *The impact of founders on organizational culture and performance*. Paper presented at the annual Industrial-Organizational and Organizational Behavior Student Conference. George Mason University. Fairfax, VA.
- Huo, Y.P. & Von Glinow, M. A. (1995). On transplanting human resource practices to China: A culture-driven approach. *International Journal of Manpower*, 16 (9), 3-15.
- Inglehart, R. (1997). *Modernization and postmodernization: Cultural, economic and political change in 43 societies*. Princeton, NJ: Princeton University Press.
- Janssens, M., Brett, J. M., & Smith, F. J. (1995). Confirmatory cross-cultural research: Testing the viability of a corporation-wide safety policy. *Academy of Management Journal*, 38 (2), 364 – 382.
- Javidan, M., Dorfman, P. W., Sully de Luque, M., & House, R. J. (2006). In the eye of the beholder: Cross cultural lessons in leadership from Project GLOBE. *Academy of Management Perspectives*, 20 (1), 67-90.
- Johnson, T.P., Cho, Y. I., Holbrook, A. L., O'Rourke, D., Warnecke, R.B., Chavez, N. (2006). Cultural variability in the effects of question design features on respondent comprehension of health surveys. *Annals of Epidemiology*, 16(9), 661-668.

- Jöreskog, K. G., & Sörbom, D. (1993). *LISREL 8: Structural equation modeling with the SIMPLIS command language*. Chicago: Scientific Software.
- Katigbak, M.S., Church, A. T., & Akamine, T. X. (1996). Cross-culture generalizability of personality dimensions: Relating indigenous and imported dimensions in two cultures. *Journal of Personality and Social Psychology*, 70, 99-114.
- Kimmelmeier, M., Burnstein, E., Krumov, K., Genkova, P., Kanagawa, C., Hirshberg, M. S., et al. (2003). Individualism, collectivism, and authoritarianism in seven societies. *Journal of Cross-Cultural Psychology*, 34 (3), 304-322.
- Kimmelmeier, M., & Oyserman, D. (2001). Gendered influence of downward social comparisons on current and possible selves. *Journal of Social Issues*, 57 (1), 129-148.
- Kitayama, S., Markus, H. R., Matsumoto, H., & Norasakkunkit, V. (1997). Individual and collective processes in the construction of the self: Self-enhancement in the United States and self-criticism in Japan. *Journal of Personality and Social Psychology*, 72, 1245-1267.
- Konrad, A. M., Corrigan, E., Lieb, P., & Richie, J. E. (2000). Sex differences in job attitude preferences among managers and business students. *Group and Organizational Management*, 25, 108 – 131.
- Kray, L. J., Thompson, L., & Galinsky, A. D. (2001). Battle of the sexes: Gender stereotype confirmation and reactance in negotiations. *Journal of Personality and Social Psychology* 80, 942–958.
- Kroeber, A.L., & Kluckhohn, C. (1952). *Culture: A critical review of concepts and definitions*. New York- Random House.

- Landy, F. J., & Farr, J. L. (1980). Performance ratings. *Psychological Bulletin*, 87, 72-107.
- LaPlante, D., & Ambady, N. (2002). Saying it like it isn't: Mixed messages from men and women in the workplace. *Journal of Applied Social Psychology*, 32 (12), 2435 – 2457.
- Laurent, A. (1983). The cross-cultural puzzle of international human resource management. *Human Resource Management*, 25, 91-102.
- Laurent, A. (1992). The cross-cultural puzzle of global human resource management. In V. Pucik, N. M. Tichy, & C. K. Barnett (Eds.), *Globalizing management: Creating and leading the competitive organization* (pp. 174 – 184). New York: John Wiley & Sons.
- Levin, J. R. (1998). To test or not to test Ho. *Educational and Psychological Measurement*, 58, 311 – 331.
- Little, T. (1997). Mean and covariance structures (MACS) analyses of cross-cultural data: Practical and theoretical issues. *Multivariate Behavioral Research*, 32, 53-76.
- Liu, I. (1986). Chinese cognition. In M. H. Bond (Ed.), *The psychology of the Chinese people* (pp. 73-105). New York: Oxford University Press.
- Liu, C., Borg, I. & Spector, P. E. (2004). Measurement equivalence of the German job satisfaction survey used in a multinational organization: Implications of Schwartz's Culture Model. *Journal of Applied Psychology*, 89 (6), 1070 – 1082.
- Locke, E. A. (2001). *Motivation by goal setting*. *Handbook of Organizational Behavior*, 2, 43-54.

- Loden, M. (1985). *Feminine leadership: How to succeed in business without being one of the boys*. New York: New York Times Books.
- Longenecker, C.O, Sims, H.P , & Gioia, D. (1987). Behind the mask: The politics of employee appraisal, *Academy of Management Executive*, 1(3), 183-93.
- Lorber, J. (2005). *Breaking the bowls: Degendering and feminist change*. New York: W.W. Norton & Company.
- Lykes, M. B. (1985). Gender and individualistic vs. collectivistic bases for notions of self. *Journal of Personality*, 53, 356-383.
- Lyness, K. S. & Thompson, D. E. (2000). Climbing the corporate ladder: Do female and male executives follow the same route? *Journal of Applied Psychology*, 85 (1), 86-101.
- Madzar, S. (2001) Subordinates' information inquiry: Exploring the effect of perceived leadership style and individual differences. *Journal of Occupational and Organizational Psychology*, 74, 221-232.
- Maier, M. (1999). On the gendered substructure of organization: Dimensions and dilemmas of corporate masculinity. In G. N. Powell (Ed.), *Handbook of gender and work*, pp.69-93. Thousand Oaks, CA: Sage.
- Mamman, A., Sulaiman, M. & Fadel, A. (1996). Attitudes to pay systems: An exploratory study within and across cultures. *The International Journal of Human Resource Management*, 7 (1), 101-121.
- Markus, H. R. & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224 – 253.

- Markus, H. R., & Kitayama, S. (1994). The cultural construction of self and emotion: Implications for social behavior. In H. R. Markus & Kitayama, M. S. (Ed.), *Emotions and culture* (pp.89-130). Washington, D.C.: American Psychological Association.
- Matsumoto, D. & Yoo, S. H. (2006). Toward a new generation of cross-cultural research. *Perspectives on Psychological Science, 1* (3), 234 – 250.
- Maurer, T. J., Raju, N. S., & Collins, W. C. (1998). Peer and subordinate performance appraisal measurement equivalence. *Journal of Applied Psychology, 83*, 693 – 702.
- McLean, J. E. & Earnest, J. M. (1998). The role of statistical significance testing in educational research. *Research in the Schools, 5* (2), 15 – 22.
- McSweeney, B. (2002). Hofstede's model of national cultural differences and their consequences: A triumph of faith – a failure of analysis. *Human Relations, 55* (1), 89-118.
- Medvedeff, M. E. & Lord, R. G. (2007). Implicit leadership theories as dynamic processing structures. In B. Shamir, R. Pallai, M. C. Bligh, & M. Uhl-Bien (Eds.). *Follower-centered perspectives on leadership: A tribute to the memory of James R. Meindl*. (pp. 19 – 50). Greenwich, CT: Information Age Publishing, Inc.
- Meindl, J. R. (1995). The romance of leadership as a follower-centric theory: A social constructionist approach. *Leadership Quarterly, 6*, 329-341.
- Mendonca, M. & Kanungo, R. N. (1990). Work culture in developing countries: Implications for performance management. *Psychology and Developing Societies, 2*, 137 – 164.

- Milliman, J.F., Nason, S., Gallagher, E., Huo, P., Von Glinow, M.A., & Lowe, K. (1998). The impact of national culture on human resource management practices: The case of performance appraisal. *Advances in International Comparative Management, 12*, 157 – 183.
- Moore, D. (1999). Gender traits and identities in a “masculine” organization: The Israeli police force. *Journal of Social Psychology, 139*, 49-68.
- Morris, M. H., Davis, D. L., & Allen, J. W. (1994). Fostering corporate entrepreneurship: Cross-cultural comparison of the importance of individualism versus collectivism. *Journal of Business Studies, 25*, 65 -89.
- Mount, M. K. (1984). Psychometric properties of subordinate ratings of managerial performance. *Personnel Psychology, 37*, 687 – 702.
- Mullen, M. R. (1995). Diagnosing measurement equivalence in cross-national research. *Journal of International Business Studies, 573 - 596*.
- Murphy, K. R., Cleveland, J. N., Skattebo, A. L. & Kinney, T. B. (2004). Raters who pursue different goals give different ratings. *Journal of Applied Psychology, 89* (1), 158 – 164.
- Nakata, Y. F., & Takehiro, R. (2002). Employment and wages of female Japanese workers: Past, present, and future. *Industrial Relations, 41*, 521 – 547.
- Nash, K. (2005). *Differences in the responses of managers to 360-degree feedback in low, medium, and high power distance cultures. (Capella University)*. Retrieved from ProQuest Dissertations & Theses. (AAT 3185676).

- Newman, K. L. & Nollen, S. D. (1996). Culture and congruence: The fit between management practices and national culture. *Journal of International Business Studies*, 27(4), 753-779.
- Nimkoff, M. F., & Middleton, R. (1960). Types of family and types of economy. *American Journal of Sociology*, 66, 215-225.
- Nisbett, R. E. (2003). *The Geography of Thought*. New York: The Free Press.
- Offermann, L. R. (2004). When followers become toxic. *Harvard Business Review*, 82, 55-60.
- Offermann, L. R. & Phan, L. U. (2002). Culturally intelligent leadership for a diverse world. In R. E. Riggio, S. E. Murphy, & F. J. Pirozzolo (Eds.). *Multiple intelligencies and leadership*, 187 – 214. Mahwah, NJ: Erlbaum.
- Offermann, L. R. & Hellman, P. (1997). Culture's consequences for leadership behavior: National values in action. *Journal of Cross-Cultural Psychology*, 28 (3), 342 – 351.
- Offermann, L. R., Kennedy, J. K., Jr., & Wirtz, P. W. (1994). Implicit leadership theories: Content, structure, and generalizability. *The Leadership Quarterly*, 5, 43 – 58.
- Oyserman, D., Coon, H. & Kimmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin*, 128(1), 3-72.
- Panayotova, E., & Brayfield, A. (1997). National context and gender ideology: Attitudes toward women's employment in Hungary and the United States. *Gender & Society*, 11, 627 – 655.

- Parboteeah, K. P., Hoegl, M. & Cullen, J. B. (2008). Managers' gender role attitudes: A country institutional profile approach. *Journal of International Business Studies*, 1-19.
- Paris, L. D. (2003). *The effects of gender and culture on implicit leadership theories: A cross-cultural study. (New Mexico State University)*. Retrieved from ProQuest Dissertations & Theses. (AAT 3108875).
- Pelled, L.H., Xin, K.R., & Weiss, A.M. (2001), No es como mi: Relational demography and conflict in a Mexican production facility, *Journal of Occupational and Organizational Psychology*, 74 (1), 63-85.
- Peng, K., Kimmelmeier, M., Burnstein, E. & Manis, M. (1996, May). *Individualism, collectivism, and inter-ethnic friendships*. Paper presented at the 60<sup>th</sup> anniversary conference of the Society on the Psychological Study of Social Issues, Ann Arbor, MI.
- Peterson, M. F., & Castro, S. L. (2006). Measurement metrics at aggregate levels of analysis: Implications for organization culture research and the GLOBE project. *Leadership Quarterly*, 17 (5), 506-521.
- Pfeffer, J. (1983). Organizational demography. In L. L. Cummings & B. M. Staw (Eds.), *Research in Organizational Behavior* (Vol. 5). Greenwich, CT: JAI Press.
- Phelps, E. S. (2007), "Entrepreneurial Culture" The Wall Street Journal, February 12, p. A15.
- Poortinga, Y. H. (1989). Equivalence of cross-cultural data: An overview of basic issues. *International Journal of Psychology*, 23, 737 – 756.
- Powell, G. N. (1999). *Handbook of gender and work*. Thousand Oaks, CA: Sage.

- Raju, N.S., Laffitte, L. J., & Byrne, B. M.(2002). Measurement equivalence: A comparison of methods based on confirmatory factor analysis and item response theory. *Journal of Applied Psychology, 87*, 517-529.
- Ralston, D. A., Vollmer, G. R., Srinivasan, N., Nicholson, J. D., Tang, M. & Wan, P. (2001). Strategies of upward influence: A study of six cultures from Europe, Asia, and America. *Journal of Cross-Cultural Psychology, 32* (6), 728 – 735.
- Ramamoorthy, N., & Carroll, S. J. (1998). Individualism/Collectivism orientations and reactions towards alternative human resource practices. *Human Relations, 51*, 571-588.
- Reilly, R. R., Smither, J. W. & Vasilopoulos, N. L. (1996). A longitudinal study of upward feedback. *Personnel Psychology, 49*, 599 – 612.
- Reise, S. P., Widaman, K. F., & Pugh, R. H. (1993). Confirmatory factor analysis and item response theory: Two approaches for exploring measurement invariance. *Psychological Bulletin, 114*, 552 – 566.
- Ricks, D. A., Toyne, B., & Martinez, Z. (1990). Recent developments in international management research. *Journal of Management, 16* (2), 219 – 253.
- Ridgeway, C. (2001). Gender, status and leadership. *Journal of Social Issues, 57* (4), 637– 655.
- Riordan, C. R., & Vandenberg, R. J. (1994). A central question in cross-cultural research: Do employees of different cultures interpret work-related measures in an equivalent manner? *Journal of Management, 20*, 643 – 671.
- Robert, C., Probst, T. M., Martocchio, J. J., Drasgow, F. & Lawler, J. J. (2000). Empowerment and continuous improvement in the United States, Mexico, Poland

- and India: Predicting fit on the basis of the dimensions of Power Distance and Individualism. *Journal of Applied Psychology*, 85 (5), 643 – 658.
- Rohner, R. (1984). Toward a conception of culture for cross-cultural psychology. *Journal of Cross-Cultural Psychology*, 15, 111 – 138.
- Ronen, S. & Shenkar, O. (1985). Clustering countries on attitudinal dimensions: A review and synthesis. *Academy of Management Review*, 10 (3), 435 - 454.
- Ronen, S. (1997). Personal reflections and projections: International industrial/organizational psychology at a crossroads. In P.C. Earley & M. Erez (Eds.), *New perspectives on international industrial/organizational psychology*, pp. 715 – 731. San Francisco, CA: New Lexington Press.
- Rosenstein, E. (1985). Cooperativeness and advancement of managers: An international perspective. *Human Relations*, 38, 1-21.
- Rosen, B., & Jerdee, T. H. (1973). The influence of sex-role stereotypes on the evaluation of male and female supervisory behavior. *Journal of Applied Psychology*, 57, 44-48.
- Rothacher, A. (Ed). (2005). *Corporate globalization*. Singapore: Marshall Cavendish Academic.
- Ruderman, M. N., & Ohlott, P. J. (2002). *Standing at the crossroads: Next steps for high-achieving women*. San Francisco, CA: Jossey-Bass.
- Rudman, L. A. (1998). Self-promotion as a risk factor for women: The costs and benefits of counter-stereotypical impression management. *Journal of Personality and Social Psychology*, 74, 629 – 645.

- Rudmin, F.W., Ferrada-Noli, M., & Skolbekken, J.-A. (2003). Questions of culture, age and gender in the epidemiology of suicide. *Scandinavian Journal of Psychology*, 44, 373-381.
- Ryan, A. M., Chan, D., Ployhart, R. E., & Slade, L. A. (1999). Employee attitude surveys in a multinational organization: considering language and culture in assessing measurement equivalence. *Personnel Psychology*, 52, 37 – 57.
- Sauser, W. J. & York, C. M. (1978). Sex differences in job satisfaction: a re-examination. *Personnel Psychology*, 31, 537-547.
- Seddon, J. (1987). Assumptions, culture, and performance appraisal. *Journal of Management Development*, 6, 47-54.
- Schackleton, V. J., & Ali, A. H. (1990). Work related values of managers: A test of the Hofstede model. *Journal of Cross-Cultural Psychology*, 21, 109-118.
- Schein, V. E. (2001). A global look at psychological barriers to women's progress in management. *Journal of Social Issues*, 57, 675 – 688.
- Schneider, B. (1987). The people make the place. *Personnel Psychology*, 40, 437 – 453.
- Schneider, S. C. (1992). National vs. corporate culture: Implications for human resource management. In V. Pucik, N. M. Tichy, & C. K. Barnett (Ed.), *Globalizing management: Creating and leading the competitive organization*, 159-173. New York: John Wiley & Sons.
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In M. Zanna (Ed.), *Advances in experimental social psychology*, 25, pp. 1-65. Orlando, FL: Academic Press.

- Schwartz, S. H. (1994). Studying human values. In A. Bouvy, F. J. R. van de Vijver, P. Boski, & P. Schmitz (Eds.), *Journeys into cross-cultural psychology*, pp. 239 – 255. Lisse, The Netherlands: Swets & Zeitlinger.
- Schwartz, S. H. (2004). Mapping and interpreting cultural differences around the world. In H. Vinken, J. Soeters, & P. Ester (Eds.) *Comparing cultures: Dimensions of culture in a comparative perspective* (pp.43-73). Leiden, The Netherlands: Brill.
- Shamir, B. (1995). Social distance and charisma: theoretical notes and an exploratory study. *Leadership Quarterly*, 6 (1), 19 – 47.
- Shamir, B. (2007). From passive recipients to active co-producers: Followers' roles in the leadership process. In B. Shamir, R. Pillai, M. C. Bligh, & M. Uhl-Bien (Eds.), *Follower-centered perspectives on leadership : A tribute to the memory of James R. Meindl*, p. xi – xxxix. Greenwich, CT: Information Age Publishing.
- Shamir, B., Pillai, R., Bligh, M. C., & Uhl-Bien, M. (Eds.). (2007). *Follower-centered perspectives on leadership : A tribute to the memory of James R. Meindl*. Greenwich, CT: Information Age Publishing.
- Shipper, F., Hoffman, R.C., & Rotondo, D.M. (2007). Does the 360-degree feedback process create actionable knowledge equally across cultures. *Academy of Management Learning and Education*, 6 (1), 33-55.
- Sidanius, J., & Pratto, F. (2001). *Social dominance*. Cambridge, England: Cambridge University Press.
- Singh, J. (1995). Measurement issues in cross-national research. *Journal of International Business Studies*, 28 (3), 597 – 619.

- Smith, E. R., & DeCoster, J. (2000). Dual-process models in social and cognitive psychology: Conceptual integration and links to underlying memory systems. *Personality and Social Psychology Review, 4*, 108 – 131.
- Smith, P.B., Dugan, S., & Trompenaars, F. (1996). National culture and the values of organizational employees: A dimensional analysis across 43 nations. *Journal of Cross-Cultural Psychology, 27*, 231-264.
- Smith, P. B., Dugan, S. & Trompenaars, F. (1997). Locus of control and affectivity by gender and occupational status: A 14 nation study. *Sex Roles, 36*, 51-77.
- Smith, P. B., & Peterson, M. F. (2005). Demographic effects on the use of vertical sources of guidance by managers in widely differing cultural contexts. *Cross-Cultural Management, 5* (1), 5-26.
- Smith, P. B., Peterson, M. F. & Schwartz, S. H. (2002). Cultural values, sources of guidance, and their relevance to managerial behavior: A 47-nation study. *Journal of Cross-Cultural Psychology, 33* (2), 188 – 208.
- Smith, C. S., Tisak, J., Bauman, T., & Green, E. (1991). Psychometric equivalence of a translated circadian rhythm questionnaire: Implications for between- and within-population assessments. *Journal of Applied Psychology, 76*, 628-636.
- Smither, J. W., London, M., Vasilopoulos, N. L., Reilly, R., Millsap, R. E., & Salvemini, N. (1995). An examination of the effects of an upward feedback program over time. *Personnel Psychology, 48*, 1-34.
- Smither, J. W., Reilly, R. R., & Buda, R. (1988). Effect of prior performance information on ratings of present performance: Contrast versus assimilation revisited. *Journal of Applied Psychology, 73*, 487-496.

- Søndergaard, M. (1994). Hofstede's consequences: A study of reviews, citations and replications. *Organizational Studies*, 15 (3), 447-456.
- Sörbom, D. (1974). A general method for studying differences in factor means and factor structures between groups. *British Journal of Mathematical and Statistical Psychology*, 27, 229-239.
- Spindler, G. & Spindler, L. (1983). Anthropologists view American culture. *Annual review of anthropology*. In B. Siegel, A. Beals & S. Tyler (Eds.). Palo Alto: Annual Reviews Inc., 49-78.
- Steenkamp, E. M. & Baumgartner, H. (1998). Assessing Measurement Invariance in cross-national consumer research. *Journal of Consumer Research*, 25, 78 - 90.
- Stickney, L. T., & Konrad, A. M. (2007). Gender-role attitudes and earnings: A multinational study of married women and men. *Sex Roles*, 57, 801 – 811.
- Stoghill, R. M., & Coons, A.E. (Eds.). (1957). *Leader behavior: Its description and measurement*. Columbus, Ohio: Ohio State University Press.
- Tabachnik, B. G., & Fidell, L. S. (1996). *Using multivariate statistics*. New York: HarperCollins.
- Tannen, D. (2001). *You just don't understand: Women and men in conversation*. New York: HarperCollins.
- Trafimow, D., Triandis, H. C., & Goto, S. G. (1991). Some tests of the distinction between the private self and the collective self. *Journal of Personality and Social Psychology*, 60, 649– 655.
- Treas, J., & Widmer, E. D. (2000). Married women's employment over the life course: Attitudes in cross-national perspective. *Social Forces*, 78, 1409 – 1436.

- Triandis, H. C. (1982). Review of Culture's Consequences: International differences in work related values. *Human Organization*, 41, 86 – 90.
- Triandis, H. C. (1989). The self and behavior in different cultural contexts. *Psychological Review*, 96, 506-520.
- Triandis, H. C. (1993). The contingency model in cross-cultural perspective. In M. Chemers & R. Ayman (Eds.), *Leadership theory and research: Perspectives and directions*, pp.167-188. San Diego, CA: Academic Press.
- Triandis, H. C. (1994). *Culture and social behavior*. New York: McGraw-Hill.
- Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview Press.
- Triandis, H. C., Hall, E. R., & Ewen, R. B. (1965). Member of heterogeneity and dyadic creativity. *Human Relations*, 18, 33-55.
- Tziner, A., Murphy, K.R. & Cleveland, J. N. (2001). Relationships between attitudes toward organizations and performance appraisal systems and rating behavior. *International Journal of Selection and Assessment*, 9 (3), 226 – 239.
- Tziner, A., Murphy, K. & Cleveland, J. (2005a). Performance appraisal: Evolution and change. *Group & Organization Management*, 30 (1), 4 – 5.
- Tziner, A., Murphy, K. & Cleveland, J. (2005b). Contextual and rater factors affecting rating behavior. *Group & Organization Management*, 30 (1), 89 - 98.
- Uhl-Bien & Pillai, R. (2007). The romance of leadership and the social construction of followership. In B. Shamir, R. Pillai, M. C. Bligh, & M. Uhl-Bien (Eds.), *Follower-centered perspectives on leadership: A tribute to the memory of James R. Meindl* (p.187-211). Greenwich, CT: Information Age Publishing.

- U.S. Department of Labor, Bureau of Labor Statistics (2008), *Employment and Earnings*. Retrieved on June 5, 2009, from <http://www.dol.gov/wb/stats/main.htm>
- Valian, V. (1998). *Why so slow? The Advancement of women*. Cambridge, MA: The MIT Press.
- Vance, C.M., McClaine, S.R., Boje, D.M., & Stage, H.D. (1992). An examination of the transferability of traditional performance appraisal principles across cultural boundaries. *Management International Review*, 32, 313-326.
- Van de Vliert, E. (2006). Autocratic leadership around the globe: Do climate and wealth drive leadership culture? *Journal of Cross-Cultural Psychology*, 37 (1), 42 – 59.
- Vandenberg, R. J., & Lance, C. E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organizational Research Methods*, 3 (1), 4 – 70.
- Van Vugt, M., De Cremer, D., & Janssen, D.P. (2007). Gender differences in cooperation and competition. *Psychological Science*, 18 (1), 19 – 23.
- Vijver, F. J. R. & Leung, K. (1997). *Methods and data analysis for cross-cultural research*. Thousand Oaks, CA: SAGE Publications.
- Watson, C. (1988). When a woman is the boss: Dilemmas in taking charge. *Group & Organization Studies*, 13 (2), 163 – 181.
- Westphal, J.D. & Stern, I. (2007). Flattery will get you everywhere (Especially if you are a male Caucasian): How ingratiation, boardroom behavior, and demographic minority status affect the likelihood of gaining board appointments at US Companies. *Academy of Management Journal*, 50 (2), 267-288.

- Wexley, K.N. & Klimoski, R. (1984). Performance appraisal: An update. *Research in Personnel and Human Resources Management*, 2, 35 – 79.
- Williams, J.E. & Best, D.L. (1990). *Measuring sex stereotypes: A multination study*. Newbury Park, CA: Sage Publications.
- Woehr, D.J., & Huffcutt, A.I. (1994). Rater training for performance appraisal: A quantitative review. *Journal of Occupational and Organizational Psychology*, 67, 189-206.
- Wood, W. & Karten, S.J. (1986) Sex Differences in interactive style as a product of perceived sex differences in competence. *Journal of Experimental Social Psychology*, 50, 341-347.
- Wu, Z., & Baer, D. E. (1996). Attitudes toward family and gender roles: A comparison of English and French Canadian women. *Journal of Comparative Family Studies*, 27, 437 -452.
- Yu, J., & Murphy, K. (1993). Modesty bias in self-ratings of performance: A test of the cultural relativity hypothesis. *Personnel Psychology*, 46, 357-363.
- Yukl, G. (2002). *Leadership in organizations*. Englewood Cliffs, NJ: Prentice Hall.
- Zanfei, A. (2000). Transnational firms and the changing organization of innovative activities. *Cambridge Journal of Economics*, 24, 515 – 542.
- Zebian, S. & Denny, J. P. (2001). Integrative cognitive style in Middle Eastern and Western groups. *Journal of Cross-Cultural Psychology*, 32 (1), 58-75.

Table 1

*Hofstede's Index Scores for Power Distance, Uncertainty Avoidance, Individualism-Collectivism and Masculinity-Femininity (Hofstede, 2001)*

Countries	Sample Size	Power Distance	Uncertainty Avoidance	Individualism	Masculinity
China	1150	80	30	20	66
Austria	273	11	70	55	79
Spain	780	57	86	51	42
USA	16365	40	46	91	62
Total	18568				

Table 2

*Means, Standard Deviations and Sample Size for Leadership Scale, and Hofstede's Cultural Dimensions (Power Distance, Individualism-Collectivism, Masculinity-Femininity and Uncertainty Avoidance)*

Variables	Mean	SD	N
Leadership Perceptions	11.25	4.26	15494
Power Distance	42.74	10.72	15494
Individualism	84.48	18.76	15494
Masculinity	61.68	4.62	15494
Uncertainty Avoidance	46.99	9.40	15494

Table 3

*Gender Distribution by Country*

	Countries	Sample Size	Females	Males	Female %	Male %
1	China	917	305	611	33.3	66.7
2	Austria	216	80	136	37	63
3	Spain	614	224	390	36.5	63.5
4	USA	13180	3069	10111	23.3	76.7
	Total	14926	3678	11248		

Table 4

*Non-Response Rates (%) to Leadership Effectiveness Questions by Gender Across All*

*Cultures*

Questions	Females	Males
Item 1	1.2	1.2
Item 2	1.8	1.4
Item 3	6.3	6.3
Item 4	6.2	5.8
Item 5	1.5	1.3
Item 6	1.7	1.5
Item 7	9.5	7.8
Item 8	1.2	.9

Table 5

*Demographic Characteristics of Survey Participants*

Demographic Variables	N	%
<i>Gender</i>		
Female	3678	24.6
Male	11248	75.4
<i>Age</i>		
Under 20	13	.1
20 - 24	294	.1
25 - 29	1066	.1
30 - 39	3625	24.5
40 - 49	5293	35.8
50 and over	4509	30.5

Table 6

*Age of Survey Participants by Country*

Demographic Variables	N	%
<b>China</b>		
<i>Age</i>		
Under 20	1	.1
20 - 24	22	2.4
25 - 29	194	21.3
30 - 39	589	64.7
40 - 49	91	10.0
50 and over	13□	1.4□
<b>Austria</b>		
<i>Age</i>		
Under 20	1	.5
20 - 24	8	3.7
25 - 29	15	7.0
30 - 39	78	36.3
40 - 49	74	34.4
50 and over	39□	18.1□
<b>Spain</b>		
<i>Age</i>		
Under 20	1	.2
20 - 24	10	1.6
25 - 29	68	11.0
30 - 39	244	39.6
40 - 49	216	35.1
50 and over	77□	12.5□
<b>U.S.A.</b>		
<i>Age</i>		
Under 20	10	.1
20 - 24	254	1.9
25 - 29	788	6.0
30 - 39	2714	20.8
40 - 49	4912	37.6
50 and over	4380□	33.5□

Table 7

*Means, Standard Deviations, Alpha Coefficients (for Leadership Effectiveness) and Intercorrelations for all variables for Total Sample*

Variables	Mean	SD	1	2	3	4
1. Leadership Perceptions	29.9	10.05	(.94)			
2. Power Distance	42.74	10.72	.06**			
3. Individualism	84.48	18.76	-.05**	-.84**		
4. Uncertainty Avoidance	46.99	9.40	.09**	-.24**	-.01	
5. Masculinity	61.68	4.62	-.13*	-.21**	.05**	-.69**

*Note.* Cronbach's Alpha for Leadership Effectiveness appears on the diagonal for Leadership measure.  
\*p<.05. \*\*p<.01

Table 8

*Mean Differences and Tests of Independence for Paper-and-Pencil and Web Survey*

*Respondents Across Cultures*

Scale	Paper-and-Pencil		Web		T-Test	Eta <sup>2</sup>
	Mean	SD	Mean	SD		
Leadership Perceptions	33.23	10.31	28.93	9.98	$t(15492)=-14.014, p<.000$	.01

Table 9

*Mean Differences and Tests of Independence for Paper-and-Pencil and Web Survey*

*Respondents in the U.S.*

Scale	Paper-and-Pencil		Web		T-Test	Eta <sup>2</sup>
	Mean	SD	Mean	SD		
Leadership Perceptions	33.23	10.33	28.77	9.98	$t(13683)=-11.89, p<.000$	0.01

Table 10

*Mean Differences and Tests of Independence for Paper-and-Pencil and Web Survey*

*Respondents in China*

Scale	Paper-and-Pencil		Web		T-Test
	Mean	SD	Mean	SD	
Leadership Perceptions	29.92	8.59	29.57	8.36	$t(952)=-0.576, p=.57$

Table 11

*Mean Differences and Tests of Independence for Paper-and-Pencil and Web Survey*

*Respondents in Austria*

Scale	Paper-and-Pencil		Web		T-Test
	Mean	SD	Mean	SD	
Leadership Perceptions	25.75	10.72	25.3	7.85	$t(221)=-0.213, p=.83$

Table 12

*Mean Differences and Tests of Independence for Paper-and-Pencil and Web Survey*

*Respondents in Spain*

Scale	Paper-and-Pencil		Web		T-Test	Eta <sup>2</sup>
	Mean	SD	Mean	SD		
Leadership Perceptions	37.79	10.27	34.44	11.33	$t(630)=-3.58, p=.000$	0.02

Table 13

*Goodness-of-Fit Indices for the U.S., Austria, Spain and China*

Country	Model 1	Model 2	Model 3
<i>U.S.</i>			
Chi-square	87.87	24.97	11.56
Df	20	12	7
P - value	.00	.02	.12
GFI	.91	.97	.98
CFI	.95	.99	1.0
NFI	.94	.98	.99
RMSEA	.12	.07	.06
<i>Austria</i>			
Chi-square	96.88	26.46	15.57
Df	20	9	7
P-value	.00	.00	.03
GFI	.90	.97	.98
CFI	.93	.97	.99
NFI	.92	.97	.98
RMSEA	.13	.09	.07
<i>Spain</i>			
Chi-square	117.93	22.30	3.61
Df	20	9	7
P-value	.00	.01	.82
GFI	.88	.97	.99
CFI	.94	.99	1.0
NFI	.93	.98	.99
RMSEA	.15	.08	.00
<i>China</i>			
Chi-square	65.22	18.40	12.12
Df	20	9	8
P-value	.00	.03	.15
GFI	.93	.97	.98
CFI	.97	.99	.99
NFI	.96	.98	.99
RMSEA	.10	.07	.05

Table 14

*Summary for Goodness-of-Fit Statistics for Equivalence Analysis*

Model Description	Countries	Comparative Model	$\chi^2$	df	$\Delta \chi^2$	$\Delta$ df	Statistical Significance
1. Model 1	U.S., Austria, China, Spain		42.86	29	-	-	-
2. Model 2	U.S., Austria, China, Spain		24.08	14	-	-	-
3. Fully constrained	U.S., Austria, China, Spain	Model 2	73.33	32	48.53	18	p<.001
4. Factor loadings constrained equal	U.S., Austria, China, Spain	Model 2	38.06	26	13.26	12	n-s
5. Structural equivalence	U.S., Austria, China, Spain	Model 2	68.19	29	43.38	15	p<.001
6. Model 2 (a)	U.S. - Austria	-	14.22	7	-	-	-
7. Fully constrained	U.S. - Austria	Model 2 (a)	43.52	20	29.30	13	p<.01
8. Structural equivalence	U.S. - Austria	Model 2 (a)	32.00	12	17.78	5	p<.01
9. Model 2 (b)	U.S. - China	-	16.02	8	-	-	-
10. Fully constrained	U.S. - China	Model 2 (b)	21.28	13	5.26	5	n-s
11. Model 2 (c)	U.S. - Spain	-	10.40	7	-	-	-
12. Fully constrained	U.S. - Spain	Model 2 (c)	17.23	12	6.84	5	n-s
13. Model 2 (d)	Austria - China	-	14.41	7	-	-	-

Model Description	Countries	Comparative Model	$\chi^2$	df	$\Delta \chi^2$	$\Delta$ df	Statistical Significance
14. Fully constrained	Austria - China	Model 2 (d)	19.87	13	5.46	6	n-s
15. Model 2 (e)	Austria – Spain	-	8.78	6	-	-	-
16. Fully constrained	Austria - Spain	Model 2 (e)	48.05	13	39.27	7	p<.001
17. Structural equivalence: error covariance constrained	Austria - Spain	Model 2 (e)	11.04	8	2.26	2	n-s
18. Structural equivalence: factor variance constrained	Austria - Spain	Model 2 (e)	42.39	11	33.61	5	p<.001
19. Model 2 (f)	China - Spain	-	10.59	7	-	-	-
20. Fully constrained	China - Spain	Model 2 (f)	30.30	13	19.71	6	p<.01
21. Structural equivalence: error variance constrained	China - Spain	Model 2 (f)	11.99	8	1.40	1	n-s
22. Structural equivalence: factor variance constrained	China - Spain	Model 2 (f)	28.54	12	17.95	5	p<.01

Note.  $\Delta \chi^2$ , Difference in  $\chi^2$  values between models;  $\Delta$  df, difference in number of degrees of freedom between models.

Table 15

*Mean Differences and Test of Independence for Female and Male Employees Across All*

*Cultures*

Scale	Females		Males		T-Test
	Mean	SD	Mean	SD	
Leadership Perceptions	13.42	4.99	13.46	5.06	$t(14925) = -.41, p = .69$

Table 16

*Mean Differences and Test of Independence for Female and Male Employees on Web-Based Survey*

Scale	Females		Males		T-Test
	Mean	SD	Mean	SD	
Leadership Perceptions	13.28	4.96	13.30	5.03	$t(13761)=-.22, p=.83$

Table 17

*Mean Differences and Test of Independence for Female and Male Employees on Paper-and-Pencil Survey*

Scale	Females		Males		T-Test
	Mean	SD	Mean	SD	
Leadership Perceptions	15.68	4.99	15.19	5.08	$t(1162) = -1.31, p = .19$

Table 18

*Summary for Hierarchical Regression Analysis for Gender and Individualism Variables**Predicting Leadership Scores*

Variable	<i>B</i>	<i>S. E.</i>	$\beta$	<i>T</i>	<i>p</i>
<i>Gender and Individualism</i>					
Step 1					
Web vs. Paper-and-Pencil	0.90	0.11	0.06	7.96	0.00
Age 1	-0.59	1.02	-0.00	-0.58	0.57
Age 2	-0.85	0.22	-0.03	-3.98	0.00
Age 3	-0.63	0.12	-0.04	-5.13	0.00
Age 4	-0.33	0.08	-0.03	-4.16	0.00
Age 5	0.12	0.07	0.01	1.64	0.00
Belief in constructive use	2.21	0.03	0.54	77.95	0.00
Power Distance	0.03	0.00	0.08	10.78	0.00
Step 2					
Gender	-0.30	0.07	-0.03	-4.31	0.00
Individualism	0.00	0.00	0.01	1.06	0.29
Step 3					
Gender	-0.86	0.29	-0.09	-2.99	0.00
Individualism	-0.01	0.01	-0.04	-1.29	0.20
Gender x Individualism	0.01	0.00	0.08	2.02	0.04

Note:  $R^2 = .307$  for Step 1,  $R^2 = .308$  for Step 2, and  $R^2 = .309$  for Step 3

Table 19

*Summary for Hierarchical Regression Analysis for Gender and Power Distance**Variables Predicting Leadership Scores*

Variable	<i>B</i>	<i>S. E.</i>	$\beta$	<i>T</i>	<i>p</i>
<i>Gender and Power Distance</i>					
Step 1					
Web vs. Paper-and-Pencil	0.93	0.11	0.06	8.22	0.00
Age 1	-0.67	1.02	-0.01	-0.66	0.51
Age 2	-0.86	0.22	-0.03	-4.01	0.00
Age 3	-0.59	0.12	-0.04	-4.81	0.00
Age 4	-0.31	0.08	-0.03	-3.85	0.00
Age 5	0.12	0.07	0.01	1.69	0.09
Belief in constructive use	2.21	0.03	0.54	77.75	0.00
Individualism	-0.01	0.00	-0.06	-8.33	0.00
Step 2					
Gender	-0.30	0.07	-0.03	-4.31	0.00
Power Distance	0.04	0.01	0.09	7.00	0.00
Step 3					
Gender	0.45	0.26	0.05	1.72	0.09
Power Distance	0.06	0.01	0.16	5.90	0.00
Gender x Power Distance	-0.02	0.01	-0.11	-2.97	0.00

Note:  $R^2 = .305$  for Step 1,  $R^2 = .308$  for Step 2, and  $R^2 = .309$  for Step 3

Table 20

*Summary for Hierarchical Regression Analysis for Gender and Masculinity-Femininity**Variables Predicting Leadership Scores*

Variable	<i>B</i>	<i>S. E.</i>	$\beta$	<i>T</i>	<i>p</i>
<i>Gender and Masculinity-Femininity</i>					
Step 1					
Web vs. Paper-and-Pencil	1.14	0.11	0.07	10.26	0.00
Age 1	-0.56	1.02	-0.00	-0.54	0.59
Age 2	-0.81	0.22	-0.03	-3.76	0.00
Age 3	-0.42	0.12	-0.03	-3.47	0.00
Age 4	-0.15	0.08	-0.02	-1.96	0.05
Age 5	0.09	0.07	0.01	1.25	0.21
Belief in constructive use	2.20	0.03	0.53	77.29	0.00
Step 2					
Gender	-0.29	0.07	-0.03	-4.23	0.00
Masculinity-Femininity	-0.06	0.01	-0.06	-8.89	0.00
Step 3					
Gender	-2.10	0.81	-0.21	-2.58	0.01
Masculinity-Femininity	-0.11	0.02	-0.12	-4.66	0.00
Gender x Masculinity-Femininity	0.03	0.01	0.19	2.23	0.03

Note:  $R^2 = .302$  for Step 1,  $R^2 = .307$  for Step 2, and  $R^2 = .307$  for Step 3

Table 21

*Summary for Hierarchical Regression Analysis for Gender and Uncertainty Avoidance**Variables Predicting Leadership Scores*

Variable	<i>B</i>	<i>S. E.</i>	$\beta$	<i>T</i>	<i>p</i>
<i>Gender and Uncertainty Avoidance</i>					
Step 1					
Web vs. Paper-and-Pencil	1.14	0.11	0.07	10.26	0.00
Age 1	-0.56	1.02	-0.00	-0.54	0.59
Age 2	-0.81	0.22	-0.03	-3.76	0.00
Age 3	-0.42	0.12	-0.03	-3.47	0.00
Age 4	-0.15	0.08	-0.02	-1.96	0.05
Age 5	0.09	0.07	0.01	1.25	0.21
Belief in constructive use	2.20	0.03	0.54	77.29	0.00
Step 2					
Gender	-0.30	0.07	-0.03	-4.35	0.00
Uncertainty Avoidance	0.01	0.00	0.02	2.81	0.01
Step 3					
Gender	-0.23	0.32	-0.02	-0.74	0.46
Uncertainty Avoidance	0.01	0.01	0.03	0.99	0.32
Gender x Uncertainty Avoidance	-0.00	0.01	-0.01	-0.22	0.83

Note:  $R^2 = .302$  for Step 1,  $R^2 = .303$  for Step 2, and  $R^2 = .303$  for Step 3

Table 22

*Summary for Hierarchical Regression Analysis for Power Distance Variables Predicting*

*Leadership Scores*

Variable	<i>B</i>	<i>S. E.</i>	$\beta$	<i>T</i>	<i>p</i>
<i>Power Distance</i>					
Step 1					
Web vs. Paper-and-Pencil	0.85	0.11	0.05	7.61	0.00
Age 1	-0.71	1.03	-0.01	-0.69	0.49
Age 2	-0.88	0.22	-0.03	-4.09	0.00
Age 3	-0.65	0.12	-0.04	-5.35	0.00
Age 4	-0.35	0.08	-0.03	-4.41	0.00
Age 5	0.07	0.07	0.01	1.04	0.30
Belief in constructive use	2.23	0.03	0.54	79.39	0.00
Individualism	-0.01	0.00	-0.62	-8.37	0.00
Step 2					
Power Distance	0.04	0.01	0.09	6.97	0.00

*Note: R<sup>2</sup> = .305 for Step 1 and R<sup>2</sup> = .307 for Step 2*

Table 23

*Summary for Hierarchical Regression Analysis for Individualism Variables Predicting**Leadership Scores*

Variable	<i>B</i>	<i>S. E.</i>	$\beta$	<i>T</i>	<i>p</i>
<i>Individualism</i>					
Step 1					
Web vs. Paper-and-Pencil	0.81	0.11	0.05	7.31	0.00
Age 1	-0.63	1.03	-0.00	-0.61	0.54
Age 2	-0.87	0.22	-.03	-4.06	0.00
Age 3	-0.69	0.12	-0.04	-5.68	0.00
Age 4	-0.37	0.08	-0.04	-4.72	0.00
Age 5	0.07	0.07	0.01	1.01	0.31
Belief in constructive use	2.23	0.03	0.54	79.60	0.00
Step 2					
Individualism	0.00	0.00	0.01	0.93	0.35

Note:  $R^2 = .307$  for Step 1 and  $R^2 = .307$  for Step 2

Table 24

*Summary for Hierarchical Regression Analysis for Masculinity-Femininity Variables**Predicting Leadership Scores*

Variable	<i>B</i>	<i>S. E.</i>	$\beta$	<i>T</i>	<i>p</i>
<i>Masculinity-Femininity</i>					
Step 1					
Web vs. Paper-and-Pencil	1.06	0.11	0.67	9.71	0.00
Age 1	-0.60	1.03	-0.00	-0.58	0.56
Age 2	-0.84	0.22	-0.03	-3.87	0.00
Age 3	-0.49	1.12	-0.03	-4.06	0.00
Age 4	-0.20	0.08	-0.02	-2.57	0.01
Age 5	0.04	0.07	0.00	0.56	0.58
Belief in constructive use	2.22	0.03	0.54	78.91	0.00
Step 2					
Masculinity-Femininity	-0.06	0.01	-0.06	-9.14	0.00

Note:  $R^2 = .302$  for Step 1 and  $R^2 = .306$  for Step 2

Table 25

*Summary for Hierarchical Regression Analysis for Uncertainty Avoidance Variables**Predicting Leadership Scores*

Variable	<i>B</i>	<i>S. E.</i>	$\beta$	<i>T</i>	<i>p</i>
<i>Uncertainty Avoidance</i>					
Step 1					
Web vs. Paper-and-Pencil	1.06	0.11	0.07	9.71	0.00
Age 1	-0.60	1.03	-0.00	-0.58	0.56
Age 2	-0.84	0.22	0.03	-3.87	0.00
Age 3	-0.49	0.12	0.03	-4.06	0.00
Age 4	-0.20	0.08	0.02	-2.57	0.01
Age 5	0.04	0.07	0.00	0.56	0.58
Belief in constructive use	2.22	0.03	0.54	78.91	0.00
Step 2					
Uncertainty Avoidance	0.01	0.00	0.02	3.04	0.00

Note:  $R^2 = .302$  for Step 1 and  $R^2 = .302$  for Step 2

Figure 2. *Baseline Model: 8 items*

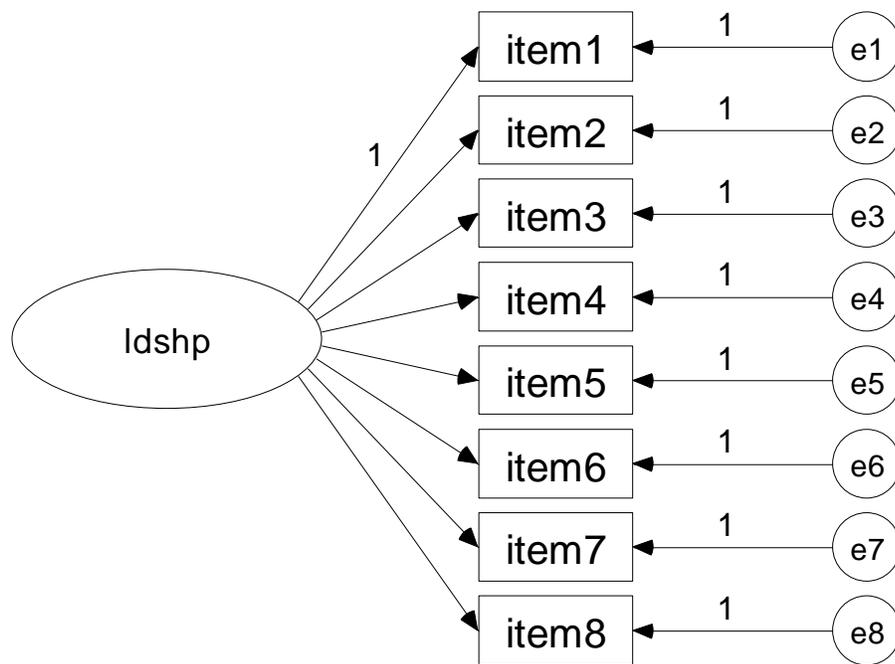


Figure 3. *Baseline Model: 6 items*

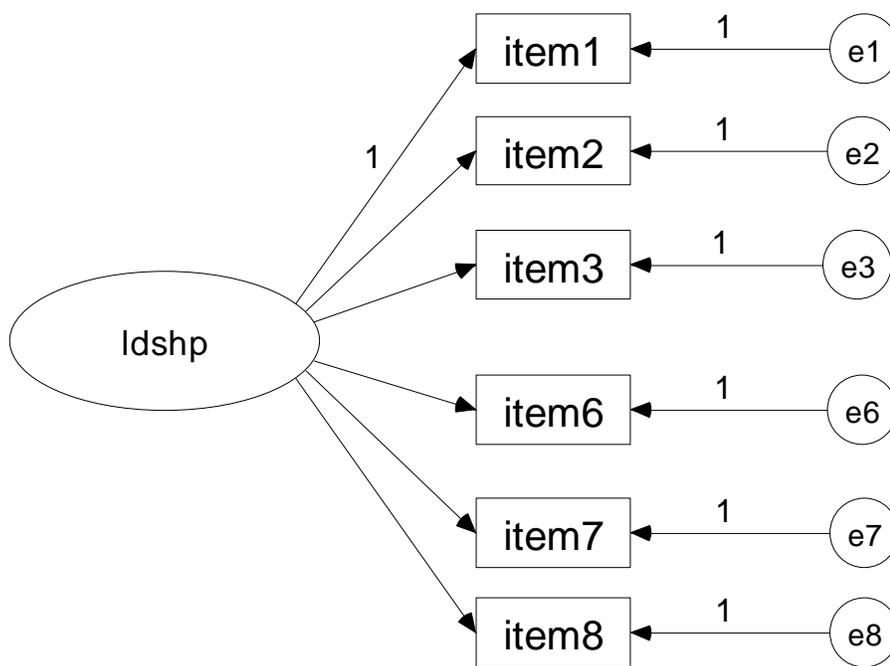


Figure 4. *Baseline Model: 5-item*

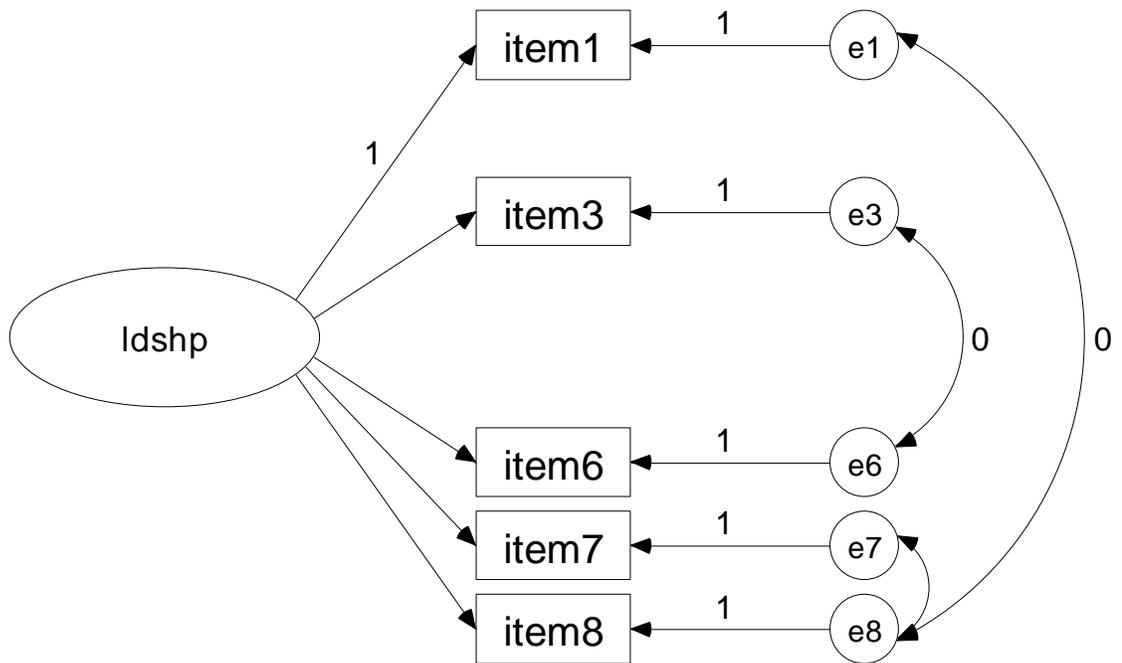


Figure 5. *Factor loadings: the U.S.*

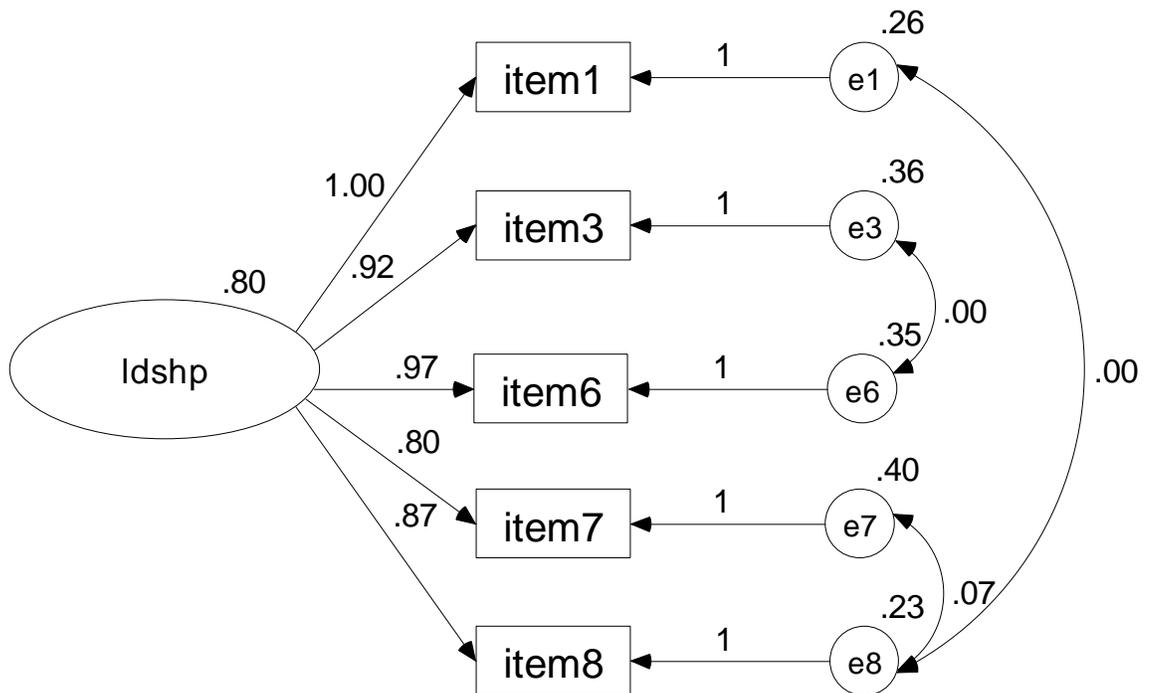


Figure 6. *Factor loadings:*  
*China*

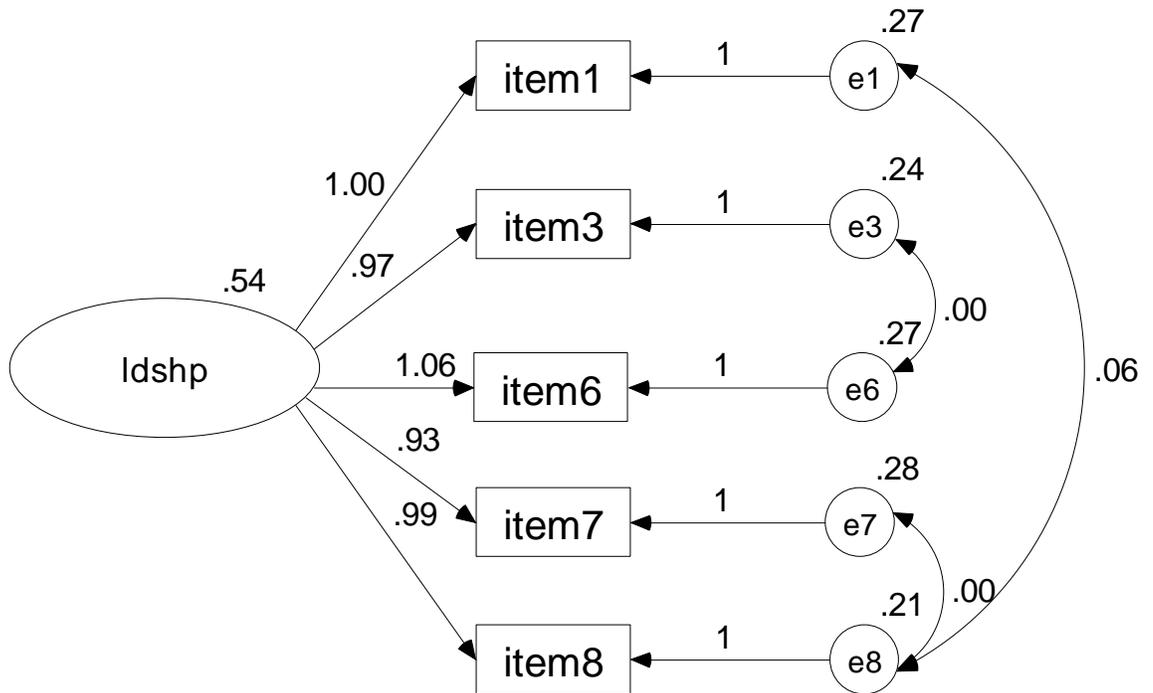


Figure 7. Factor loadings: Austria

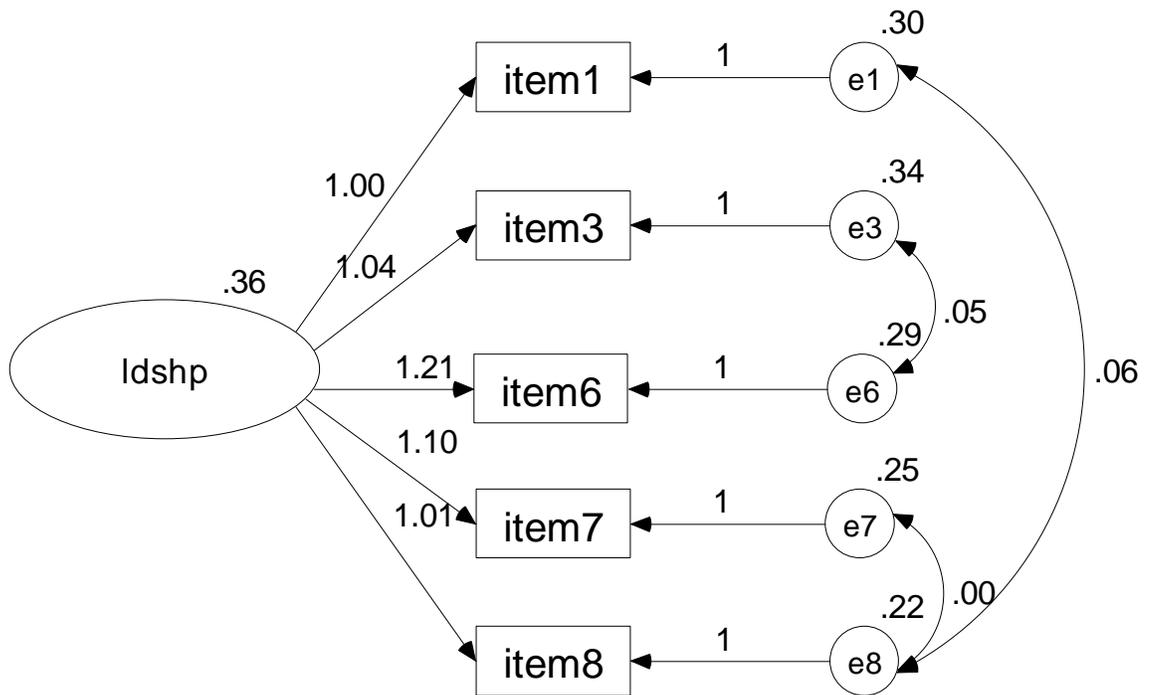


Figure 8. *Factor loadings: Spain*

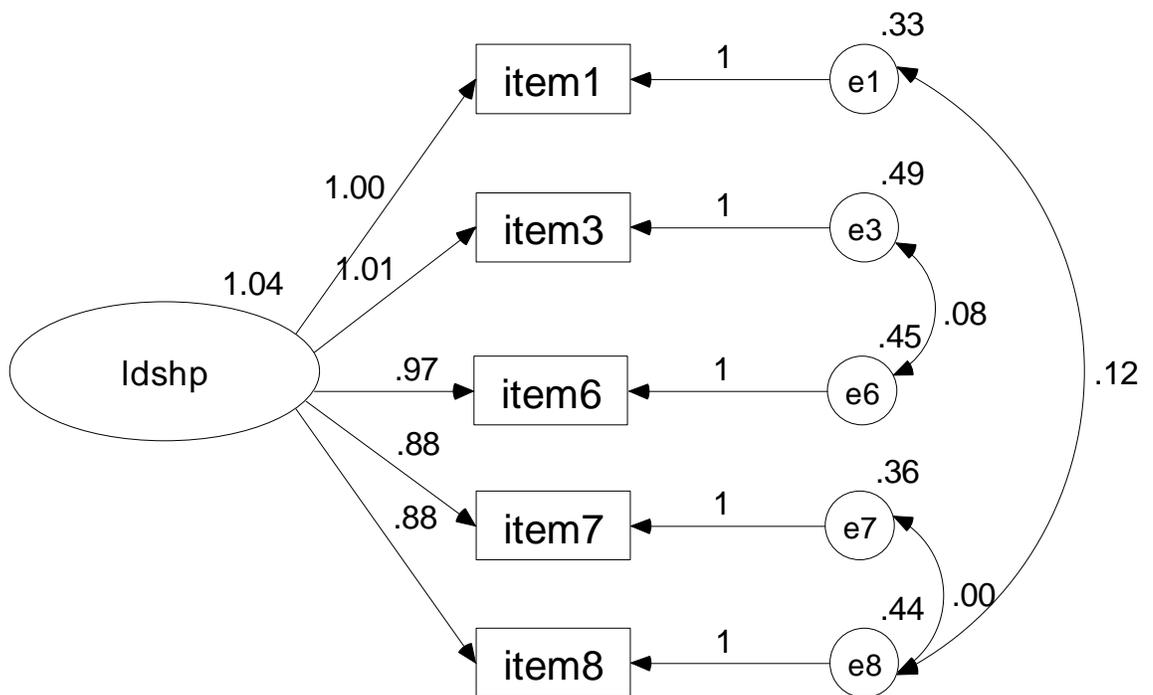


Figure 9. *Individualism and Gender Influences on Leadership Perceptions*

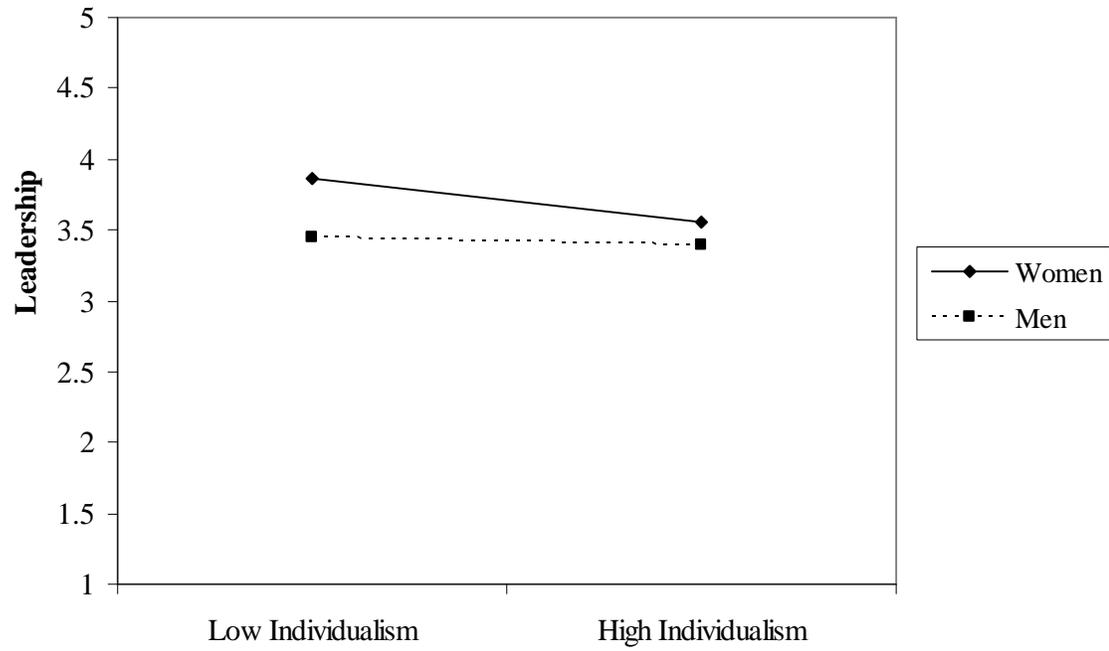


Figure 10. *Power Distance and Gender Influences on Leadership Perceptions*

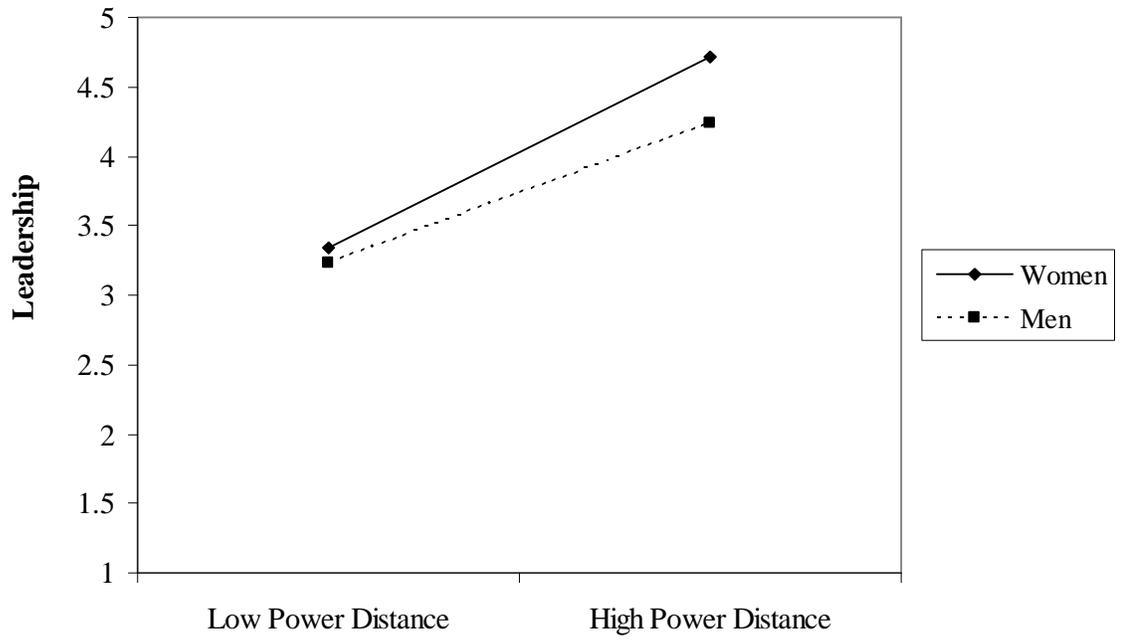


Figure 11. *Masculinity-Femininity and Gender Influences on Leadership Perceptions*

