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Self-Other Differences And Perceived Effectiveness: A Look Across Culture Dimensions

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SELF-OTHER DIFFERENCES AND PERCEIVED EFFECTIVENESS: A LOOK ACROSS CULTURE DIMENSIONS

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DEDICATION

I dedicate this dissertation to my primary source of strength, guidance, and clarity: My God. Without Your presence I would not have made it this far. I also dedicate it to my husband, Antonio Guevara, whose unconditional love, support, and vision for our life has kept me going. I love you with all my heart and this marks a new and even more exciting phase of our lives.

I dedicate this work to my family, especially my parents, Nelson and Pilar, whose sacrifice has paid off. Papi y Mami, su sacrificio no ha sido en vano. Por ustedes soy quien soy y así la vida nos haya llevado por caminos diferentes a los que esperábamos, han sido caminos llenos de bendiciones y alegrías. Ustedes siempre nos inculcaron el valor de la educación y este ha sido uno de los regalos más grandes que nos han podido dar a Christian, Rubén, y a mí. Este doctorado es más de ustedes que mío. Los amo con todo lo que soy.

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A LOOK ACROSS CULTURE DIMENSIONS

Research has focused on many aspects of 360-degree feedback; however, there has been a growing concern about the extent to which differences between ratings provided by self and other raters (e.g., boss, peer, direct report) affect different outcomes (Atwater, Waldman, Ostroff, Robie, & Johnson, 2005). Several studies have investigated self-other differences, and results have indicated that self-other agreement is related to individual outcomes such as individual performance and promotability (McCaulley & Lombardo, 1990; Bass & Yammarino, 1991; Atwater, Ostroff, Yammarino, & Fleenor, 1998).

Although research in this area has increased over the past few years, little is known about the extent to which the relationship between self-other (e.g., focal leader-direct report or focal leader-peer) differences and outcomes holds across different cultures. Specifically, depending on the culture, specific values are espoused and encouraged, and this is likely to affect work behavior in different ways (Warr, 1987). To date, only one study has been conducted investigating the role culture plays in the self-other agreement as well as disagreement and performance relationship (i.e., Atwater et al., 2005). This study looked at whether the relationship between self-other agreement (and disagreement) and performance differs across the U.S. and five European countries (U.K., Germany, France, Denmark, and Italy). Although country is commonly used as a proxy to studying culture, this construct can also be investigated by using culture dimensions (e.g., individualism/collectivism). To date, no study has used this operationalization; thus, the extent to which culture moderates the self-other agreement and performance relationship is still in need of research attention.

The purpose of the present study is twofold. First, it seeks to further investigate the im-

pact that culture has on the self-other differences (i.e., leader-direct report and leader-peer) and effectiveness relationship. As indicated by Atwater et al. (2005), it is worth understanding the role that each culture dimension plays independent of each other, rather than operationalizing culture by country. By including all the dimensions identified by the Global Leadership and Organizational Behavior Effectiveness Project (GLOBE), the present study paints a more comprehensive picture of the role that culture plays in the use of 360-degree feedback. Additionally, the present study focuses on comparing culture dimensions measured as values (as the culture is) and practices (how the culture should be) in Project GLOBE (House, Hanges, Javidan, Dorfman, Gupta, et al., 2004). Thus far, there has been little research comparing different conceptualizations of measuring culture. This comparison can shine light into the cultural aspects that are most relevant when looking at self-other differences.

Leadership Development and 360-degree Feedback

Leadership development has been a topic of interest for scholars as well as for practitioners throughout the decades (Day, 2001). There have been increased resources invested into this area (The Conference Board, 1999) leading to organizations viewing leadership as a source of competitive advantage for their strategy (McCall, 1998). Typically, the emphasis on development is at the individual-level, focusing on knowledge, skills, and abilities associated with formal leadership roles (Day, 2001). Investment in these capabilities enables people to think and act in novel ways (Hooijberg, 1996; Zaccaro, Gualtieri, & Minionis, 1995). The main focus of a development strategy at this level is to build intrapersonal competence to build an effective model of oneself (Gardner, 1993), to engage in healthy attitude and identity development (Hall & Seibert, 1992), and to use that self-model to perform effectively in formal organizational roles (Day, 2001).

The intrapersonal aspects that are usually covered in leadership development programs include self-awareness (e.g., self-confidence, authentic leadership), self-regulation (e.g., self-control, trustworthiness, adaptability), and self-motivation (e.g., commitment, initiative, optimism; Manz & Sims, 1989; Neck, Manz, Stewart, Carson, & Cardy, 1996). Research on these capabilities has shown that they contribute to enhanced individual knowledge, trust, and personal power (Day, 2001).

A main approach to leadership development that focuses on self-awareness has been multi-rater feedback, through the use of 360-degree feedback surveys (Chappelow, 2004). This type of feedback involves evaluations from multiple sources such as self, peer, direct reports, and supervisors. There are variations of this type of feedback that include customer and supplier ratings. The use of 360-degree feedback instruments was called by some one of the most notable management innovations of the 1990s (Atwater & Waldman, 1998). In the 90s, nearly all Fortune 500 companies either were using 360-degree feedback or were planning on using it (Antonioni, 1996; London & Smither, 1995). From there, popularity of these instruments increased. McCauley (2001) found that 79 percent of top executives and 81 percent of other managers use 360-degree feedback for development or appraisal of their leaders. It is clear that 360-degree feedback instruments are widely used for leadership development.

The idea behind this type of feedback is that different raters observe a leader's behaviors and style in different situations (Borman, 1997). As such, each group of raters is likely to have varied perspectives regarding the leader's behaviors and overall effectiveness. Research has supported this assumption, as evidenced by the relatively low between-source correlations on leadership dimensions (e.g., Borman, 1997). Additionally, findings suggest that direct report and peer ratings both account for incremental variance in outcomes, such as task and contextual perfor-

mance, beyond that accounted for by supervisors (Conway, Lombardo, & Sanders, 2001). In general, feedback from multiple sources provides a more comprehensive representation of a leader's impact on others as well as increased credibility of information, resulting in a greater likelihood of the leader responding with action (Barbuto, 2000; Farr & Newman, 2001).

The usefulness behind 360 ratings also lies on the fact that a leader's awareness of how his or her behaviors are perceived by others is a key component to leadership effectiveness (Tornow, 1993). Research has shown that leaders are more likely to improve their performance when confronted with self-other discrepancies (Tornow, 1993). In organizational settings, this type of feedback has been used to promote leadership development in areas that are important for the organization (London & Smither, 1995).

Individual and organizational benefits can be derived from the use of 360-degree feedback instruments. Antonioni (1996) suggested that increased self-awareness can lead to increased informal communication and feedback, as well as candid discussion of both undesirable work behaviors and increased managerial learning. Other benefits include better coordination within the organization, increased employee involvement and felt respect, and change in corporate culture (e.g., Garavan, Morley, & Flynn, 1997; Morgeson, Mumford, & Campion, 2005). The major contributing factor to the wide use of 360-degree instruments is probably that ratings on these instruments are associated with increased performance appraisal ratings (Church, 2000). Overall, there is plenty of evidence that shows the benefit of 360-degree feedback; thus, it is not surprising that it is highly valued and that it has been widely used across organizations.

Self-Other Differences in 360-degree Feedback

In the literature, there have been different approaches to studying 360-degree feedback. Several studies have been conducted along self-other agreement and results have indicated that

self-other agreement is related to individual outcomes such as increased leadership performance and promotability (McCaulley & Lombardo, 1990; McCall & Lombardo, 1983; Bass & Yammarino, 1991; Atwater, et al., 1998). The rationale behind self-other agreement and increased individual outcomes stems from the idea that individuals are continuously matching their behaviors to different standards or expectations others have of the individual. If the individual senses a discrepancy between his/her behavior and expectations from a manager, for instance, he/she will alter his or her behavior to achieve alignment between behavior and expectations. Ideally, this would happen all the time; however, there are individuals who may not recognize the discrepancy and thus will not see the need to alter their behavior to change other's perceptions. Ultimately, perceptions about these individuals may not be as positive since they do not match others' expectations.

Ashford (1989) argued that employees need to be effective in evaluating their own behavior in a way that is consistent with how others perceive and evaluate their behavior. The more agreement there is between self and other assessments, the more positive outcomes can be expected, because these individuals tailor their behaviors to the demands of the organization. However, while self-other agreement is desirable, self-enhancement biases are likely to influence self perceptions; thus, self-ratings tend to be inflated when compared with other ratings (Mabe & West, 1982; Harris & Schaubroeck, 1988). High self-ratings on their own may indicate strong self-confidence. However, high self-ratings when combined with low ratings from others can be indicative of a tendency to discount others' opinions, which in turn can be associated with poor performance (Ostroff, Atwater & Feinberg, 2004).

Atwater and Yammarino (1992) understood that self and other raters may not always agree in their assessments. As such, in their study they classified subjects into over-estimators

(self-ratings higher than other ratings), under-estimators (self ratings lower than other ratings), and agreement. Their results indicate that the magnitude of the correlation between leadership behavior and individual performance varied as a function of rater differences (i.e., over-, under -estimation, or agreement). Results showed that the correlation between leadership behavior and performance was highest for those in the agreement category.

Atwater and Yammarino (1997) expanded on the categories mentioned above and proposed a four-way typology of self-other differences. Other than having over- and under-estimators, they proposed that there could be in-agreement/good (self and other ratings are equal and indicate good performance) and in-agreement/bad (self and other ratings are equal and indicate poor performance). In their model the authors suggest that leaders whose self-ratings agree with other raters as to their high level of effectiveness are more likely to be linked to positive individual and organizational outcomes. On the other hand, those whose self-ratings agree with others as to their low levels of effectiveness are more likely to be linked with negative outcomes. Later research tested these propositions. Atwater, et al. (1998) found that when there was perfect agreement, agreement at higher levels of rated leadership attributes was associated with higher performance than agreement at lower levels of rated attributes. This finding indicates that it is not merely agreement that it is related to outcomes, but rather whether there is agreement regarding good or poor behavior. In cases where there was underestimation (self-ratings were lower than other ratings), performance was higher than when there was over estimation (self-ratings were higher than other ratings). This finding indicates that underestimating one's leadership behaviors is less problematic than overestimating.

As reviewed above, raters are likely to vary in their ratings due to their individual perspectives. However, are there consistent patterns of discrepancies among raters across societal

cultures? As globalization increases and organizations are forced to compete in global talent markets, developing culturally knowledgeable managers who can work in multicultural environments becomes more important than ever (Dorfman et al., 2004). Given that development activities rely so heavily on the use of 360-degree feedback instruments, understanding whether and how culture affects ratings becomes pivotal. It is particularly important to understand how different aspects of culture impact ratings, as well as whether 360-degree ratings can be interpreted similarly (or not) across societies. Although some research studies have investigated the role culture plays when using these instruments (e.g., Shipper, Hoffman, & Rotondo, 2007; Varela & Premeaux, 2007; Adsit, London, Crom, & Jones, 1997; Gentry, Hannum, Ekelund, & de Jong, 2007), no study has compared whether different aspects of culture yield consistent results in terms of the way that culture impacts other variables. As such, studies that operationalize culture in one way may or may not be comparable to studies that operationalize culture in a different way. As mentioned previously, one of the goals of the present study is to compare whether two aspects of culture (i.e., culture values versus practices) explain cultural differences in a consistent manner. The next section reviews the current state of the culture literature and highlights the gaps in the research.

The Study of Culture

Throughout the decades, researchers have approached the topic of societal culture and several definitions have been developed describing different aspects of the construct (e.g., Hofstede, 2001; Herskovits, 1955; Hampden-Turner & Trompenaars, 1993; Adler, 2002). All of them have in common the idea that culture is shared by members of society and the impact it has on the way individuals operate and the context in which they live in. For the sake of simplicity, the current paper will focus on the definition provided by Project GLOBE, which described cul-

ture as "shared motives, values, beliefs, identities, and interpretations or meanings of significant events that result from common experiences of members of collectives that are transmitted across generations" (House & Javidan, 2004, p. 15).

Though culture has been studied in different ways, cultural dimensions, defined as the quantitative assessment of a set of values believed to differentiate one society from others, have been one of the most popular approaches to studying the construct. Several researchers have worked on the topic of culture dimensions (e.g., Kluckhohn & Strodtbeck, 1961; Hampden-Turner & Trompenaars, 1993); however, Geert Hofstede's (2001) work is well-known across the globe for developing a framework for classifying countries based on work-related values. The framework proposed by Hofstede was based on a study he conducted with managers of IBM who were located in more than 42 countries (Hofstede, 2001). Originally, Hofstede found four culture dimensions: individualism-collectivism, uncertainty avoidance, power distance, and masculini-ty-femininity. Subsequent studies have included other countries and these dimensions have been validated and used by a large number of researchers, though not without controversy. Years after the original study, the long/short term orientation dimension (Hofstede & Bond, 1991) and the indulgence versus restraint dimension (Hofstede, Hofstede, & Minkov, 2010) were added. Below, each of these dimensions is described in more detail.

Individualism-collectivism focuses on the societal differences based on independence versus interdependence; it refers to the strength of the ties between individuals in a group. In individualist societies people are expected to take care of themselves and to look after their own interest (Hofstede, 2001). They usually have looser ties to each other and value the needs or interests of the individual above those of the group. On the other hand, in collective societies people are expected to place the interest of the collective before their personal interest (Hofstede,

2001). Those in collectivist cultures have stronger and closer ties to the group and value the needs or interests of the group first (Hofstede, 2001).

Uncertainty avoidance reflects the extent to which a society avoids ambiguity and uncertain situations (Hofstede, 2001). The main premise behind this dimension is the way the society deals with the fact that the future cannot be known; either by trying to control the future, or by letting it happen (Hofstede, 2001). Individuals in societies that score high in uncertainty avoidance resist risk and unexpected events by emphasizing rules and norms, and rejecting deviant behaviors (Hofstede, 2001). These societies rely heavily on social norms and procedures to avoid unpredictability of the future. Societies that are lower on uncertainty avoidance emphasize more flexibility and encourage a more relaxed attitude in which practice is more important than principles (Hofstede, 2001).

Power distance refers to the extent to which members accept unequal distribution of power in institutions and organizations (Hofstede, 2001). This dimension of culture focuses on the extent to which members of a society believe that it is acceptable or desirable for those higher in the hierarchy to be treated with deference and respect, to be obeyed, and to have extra privileges (Hofstede, 2001). High power distance societies encourage a clear hierarchy and individuals higher in power do not see themselves as equal to those in lower levels of power. In a low power distance societies, there is a greater sense of equality regardless of position in society. Hofstede (2001) added that power distance is also associated to the concentration of authority. For instance, in high power distance societies subordinates are not likely to challenge their supervisors. In contrast, subordinates in countries low in power distance are more likely to do so.

The last culture dimension originally proposed by Hofstede (2001) was *masculinity-femininity*. Masculinity/femininity is a bipolar dimension. The assertive pole is called the mascu-

line pole and the modest, caring pole is called the feminine pole. This dimension focuses on the implications at the level of general norms, the family, the school, the workplace, politics, and ideas (Hofstede, 1998). Masculine cultures adopt dominant societal values stressing assertiveness and toughness, the acquisition of money and things, and not caring for others or for the quality of life. It is also characterized by aggressiveness, competition, and achievement orientation. In these societies, men are assertive, tough, and focus on material success; women are modest, tender and concerned with the quality of life. On the other hand, feminine cultures value warm social relationships and quality of life. In these societies, both men and women are expected to be modest and tender, and concerned with quality of life (Hofstede, 1998). In sum, this dimension refers to the extent to which a society values masculine pursuits such as strength, competitiveness, and material achievement or values feminine pursuits such as concern for others, quality of relationships, and quality of life (Hofstede, 1980).

Long/short term orientation deals with society's search for virtue. It indicates the extent to which people respect tradition, fulfill social obligations, and protect one's face (Hofstede & Bond, 1991). Societies with short-term orientation have a stronger concern with establishing the absolute truth. In these societies there is a heavy emphasis on traditions and providing steadiness and stability in one's life (Hofstede & Bond, 1991). Individuals in these societies do not put a big emphasis on saving for the future and place a big focus on achieving quick results. Societies with a long-term orientation, on the other hand, place a big emphasis on believing that the truth depends on the situation and the context. Traditions are adapted to the changed/new conditions. Individuals in these societies have a strong propensity to save and invest, to be thrifty, and to persevere in achieving results (Hofstede & Bond, 1991).

Indulgence versus restraint is a new dimension recently added by Hofstede et al. (2010).

It focuses on aspects not covered by other dimensions and it is based on the "happiness research" literature (Hofstede, 2011). According to Hofstede (2011), societies with an indulgence inclination allow relatively free gratification of basic human desires related to enjoying life and having fun. These societies also place a bigger emphasis on leisure and freedom of speech. Members of these societies hold a perception of personal life control. Societies with a restraint inclination control gratification needs and regulates them by means of strict social norms. In these societies, leisure and freedom of speech is less important. Members of this society hold a perception of helplessness (e.g., "what happens to me is not my own doing").

Another major and more recent effort to further delineate and validate culture dimensions is Project GLOBE (House et al., 2004). Project GLOBE, aimed at identifying universal leader attributes that are valued and accepted as definite leadership characteristics in all cultures along with identifying leadership characteristics that are country-specific and can be explained by the attributes and organization of that particular culture. Building on Hofstede's culture dimensions model, the GLOBE project described 64 cultures in terms of nine dimensions. These nine dimensions were also based on the work of other researchers like Trompenaars and Hampden-Turner (1997) who suggested that depending on the region of the world, different leadership styles are accepted more than others; the work of Kluckhohn and Strodtbeck (1961) who greatly emphasized values in the formation of the culture; and McClelland's Need Theory which suggests that people are motivated by satisfying their individual needs, such as need for achievement, affiliation, and power (1985). The nine dimensions described by GLOBE include: uncertainty avoidance, power distance, institutional collectivism, in-group collectivism, gender egalitarianism, assertiveness, future orientation, performance orientation, and humane orientation (Javidan & House, 2001).

The first six dimensions have their origins in the dimensions developed by Hofstede (2001). The first three scales are designed to measure the same construct as Hofstede's (2001) dimensions of uncertainty avoidance, power distance, and individualism-collectivism. Hofstede's (2001) measure of individualism and collectivism was separated into 2 dimensions, however, for the research conducted by GLOBE (*Collectivism I* and *Collectivism II*). The main distinction delineated by GLOBE researchers is that *Collectivism I* indicates the extent to which members of society support collective distribution of resources and value collective action (House, et al., 2002). On the other hand, *Collectivism II* focuses more on individuals' expression of loyalty, pride and agreement with their organization and families (House, et al., 2002).

For GLOBE researchers, Hofstede's (2001) m*asculinity-femininity* dimension was split into *Gender Egalitarianism* and *Assertiveness* (House et al., 2004). The main reason was that the measure used for masculinity (MAS index) is confounded by items that may be irrelevant to the concept of masculinity, or that measure other constructs (House & Javidan, 2004). As such, GLOBE developed two dimensions labeled *Gender Egalitarianism* and *Assertiveness* that would capture the constructs of interest. *Gender Egalitarianism* focuses on the way societies perceive the impact of gender roles and the extent to which gender biases are tolerated (House, et al., 2002). *Assertiveness* was identified as a separate aspect from the typical gender roles and it focuses more on the social interaction styles and the degree to which people tend to be aggressive, assertive, and confrontational when communicating with others (House, et al., 2002).

The seventh dimension, *Future Orientation,* was derived from Kluckhohn and Strodtbeck's (1961) Past, Present, and Future Orientation dimension, which focuses on the temporal orientation of most people in society. As mentioned by House and Javidan (2004), this dimension is conceptually, but only marginally, similar to the Hofstede and Bond's (1991) dimen-

sion *Long/Short-Term Orientation*. GLOBE defined this dimension as the degree to which individuals in societies engage in future-oriented behaviors such as planning, investing in the future, and delaying individual or collective gratification.

The last two dimensions included in GLOBE (*Performance Orientation* and *Human Orientation*) were heavily influenced by the work of McClelland (1985). Specifically, McClelland's concept of Need for Achievement (nAch) influenced the *Performance Orientation* dimension which is defined as the extent to which a collective encourages and rewards group members for performance improvements and excellence (Javidan, House, & Dorfman, 2004). McClelland's concept of Need for Affiliation (nAff) influenced the *Humane Orientation* dimensions which refers to the degree to which a collective encourages and rewards individuals for being fair, friendly, generous and kind to others (House, et al., 2002).

Values and practices. An interesting aspect discussed in the cross-cultural literature has been the differences between what the culture "is" (i.e., modal values) and what the culture "should be" (i.e., modal practices). According to Hofstede (2001), values drive practices. The way he explains this relationship is by pointing to the "onion diagram" (p. 11). In this diagram, Hofstede explains that values are the most deeply rooted aspects of a culture, forming the basis for cultural practices. Hofstede also mentions that societies differentiate based on their values and organizations differentiate based on the practices. He argues that a different set of dimensions for practices are more useful for differentiating organizations than using the same set to differentiate societies (2001). In short, in his research, Hofstede suggested that (a) there would be a positive correlation between values and practices, and (b) different cultural dimensions would operate based on whether a society or an organization was investigated.

Instead of following Hofstede's assumptions, GLOBE tested these arguments empirically

and found that (i) values and practices both serve to differentiate between societies and organizations; (ii) the values and practices each account for unique variance; (iii) the values and practices scales interact; and (iv) the dimension of values and practices can be meaningfully applied at both levels (societal and organizational; Dickson & BeShears, 2004). The main difference, however, found by GLOBE is that for seven of the culture dimensions, values and practices correlated negatively. The authors conclude that the relationship between values and practices must be much more complex than Hofstede's Onion Diagram suggests.

GLOBE researchers conducted several analyses to test the validity of the scales developed for the project. In terms of the construct-related validity, they correlated GLOBE's scales with other well-known scales such as the ones developed by Hofstede. See Table 1 for the correlation between GLOBE and Hofstede scales. Results from these analyses show that there was convergence between the GLOBE scales (for both values and practices) on many, but not all dimensions. As Hanges & Dickson (2004) point out, it is important to highlight that contrary to Hofstede's research, GLOBE's scales were developed and psychometrically tested for construct-validity from the beginning of the project. Furthermore, GLOBE's scales measure the objective (i.e., practices) and subjective (i.e., values) aspects of culture dimensions, which Hofstede scales do not separate. As results showed, depending on which aspect of culture was being measured, the pattern of relationships differed (Hanges & Dickson, 2004).

Given that GLOBE (a) sought to provide further clarity to the culture dimensions that Hofstede had originally proposed and (b) included more dimensions that would get to other aspects of culture, and (c) distinguished between cultural practices and values, the present study utilizes the GLOBE framework to define culture dimensions. The next section discusses the importance of looking at culture when studying the topic of 360-degree feedback.

Cross-cultural Leadership and 360-degree Feedback

Culture plays a major role in the way individuals perceive and interpret their surroundings. Preferences, values, and beliefs of members of society are influenced by what is or is not accepted from a cultural perspective; thus, culture serves as a boundary condition for leadership. Although several research studies have been conducted across cultures, a main drawback in the cross-cultural leadership literature is that it has a North-American bias (den Hartog & Dickson, 2004). In other words, it is unclear whether the results on this topic can be generalized beyond the North American culture (in particular the U.S.).

Even though this bias is still prevalent, in the last few years researchers have expanded the countries where research is conducted beyond North America and Western Europe. This stream of research has shown interesting findings. For instance, countries that are less egalitarian (i.e., France, England, the United States, and Russia) tend to commemorate "macho" –like military leaders, while countries that are more egalitarian (i.e., Australia, Canada, Ireland, the Netherlands, New Zealand, and the German regions of Switzerland) give less emphasis to the role of a leader (Hoppe, 2004). In high power distance societies, leaders are seen as distant and powerful; in high uncertainty avoidance societies they are seen as experts, confident and orderly; in collectivist cultures, they are seen as competitive (Chemers, 2000). Culture has also been shown to impact leadership behaviors and styles. For instance, in Asia, managers tend to place a heavy emphasis on paternalistic leadership (Redding, 1993) and group maintenance activities (Bass, Burger, Doktor, & Barrett, 1979). In India, leaders who are proactive, morally principled, ideological, bold, and assertive are preferred over leaders who are reactive, pragmatic, instrumental, and nurturing (Chhokar, 2007). Team-oriented leadership is greatly valued in Latin-America more so than in other regions of the world (Javidan, House, & Dorfman, 2004).

The extent to which 360-degree feedback instruments are used, accepted, and the impact they have maybe be affected, to some degree, by the societal culture in which they were implemented. In general, cross-cultural studies done in the area of 360-degree feedback suggest that culture matters. Dalton (1998) suggested that the appropriate use of 360-degree feedback cross-culturally depends on how acceptable and valuable it is to ask different rater groups to provide feedback. He also suggested it may depend on whether or not the feedback will be accepted as accurate by recipients. Shipper, et al. (2007), emphasize the importance of considering cultural aspects when implementing 360-degree programs given that their study suggests these programs are more effective in low power distance cultures with individualistic values.

Research has indicated that culture may affect self ratings the most. Farh, Dobbins, and Cheng (1991) proposed the cultural-relativity hypothesis which stated that raters with a collectivist orientation (preference to be treated as a group member rather than an individual) are less likely to show leniency bias in their self ratings. This hypothesis has been supported by a few studies (e.g., Farh & Cheng, 1997; Yik, Bond, & Paulhus, 1998). Similarly, Korsgaard, Meglino, & Lester (2004) found that self ratings of performance were correlated to the individuals 'other' orientation (i.e., concern for others more so than for the self). Those with other orientation also showed more agreement between self- and supervisor ratings. The authors speculated that higher agreement may be due to the extent the individual is willing to receive constructive feedback and how self aware he/she is. Gentry et al. (2007) study also found greater self-other agreement for managers in the U.S. (individualist culture) relative to European managers in certain aspects (i.e., problems with interpersonal relationships).

As reviewed above, some research has been done on the impact that culture has on 360-degree feedback. However, as pointed out by Gillespie (2005), the 360-degree instruments that

have been commonly used in the research may not have the same validity when used globally. As such, it is difficult to make sense of all the studies conducted up to date. Furthermore, the research conducted thus far has mostly focused on understanding how culture relates to self-other agreement, but has failed to understand the role that culture plays in the relationship between self-other agreement (and disagreement) and individual outcomes, such as leadership effectiveness.

There is only one study that has looked at the extent to which culture impacts self-other differences (i.e., agreement and disagreement) and performance (labeled perceived leadership effectiveness in the present study). Atwater, et al. (2005) investigated the impact of self-other differences on boss' perceptions of leadership performance among managers in five European countries and the U.S. Results indicated that self-other agreement is important for the U.S., while other ratings are most important in European countries when predicting leadership performance. In the U.S., agreement between self and other at high levels of leadership behaviors was better than agreement at low levels and agreement was generally better than over- or underestimation in terms of leadership performance. In European countries, over- and underestimation were not related to leadership performance (though in the U.S. they were). In low masculinity/individualism European countries, other ratings were related to leadership performance and the nonlinear results indicated that the positive relationship between others ratings of the leader behavior and perceptions of performance ratings becomes flatter at higher levels of the other ratings and drops sharply as others give lower ratings. In other words, in low masculinity/individualistic countries there is little distinction in terms of leadership performance between average and excellent leaders, but lower ratings relate to poorer performance. In high masculinity/individualistic European countries, results showed that as ratings from subordinates become lower, leadership perfor-

mance ratings become lower in a linear fashion; however, for peer ratings it was observed that as peer ratings become progressively lower, leadership performance ratings drop off steeply. All in all, these results showed that the U.S. and European countries differed significantly in terms of what's the best predictor of boss' perceptions of leadership performance.

Three Hundred and Sixty Degree Feedback Model

Several leadership models have been developed to capture effective leader behaviors and styles. A well established leadership development tool used in organizations is the *Denison Leadership Development Survey (DLDS)*. This instrument was developed based on leadership skills and competencies that are important to develop effective organizational cultures. Specifically, since leaders play a crucial role in the development of an organization's culture (e.g., Bennis & Nanus, 1985; Kotter & Heskitt, 1992), it is important to measure those skills and competencies that relate to the culture of an organization. Moreover, as research has shown, there is a clear link between organizational culture and bottom-line business performance (e.g., Denison & Mishra, 1995; Yilmaz & Ergun, 2008); as such, one of the most important contributions a leader can make is the culture they create (Denison, 1990). The DLDS focuses on those skills that are important in developing effective organizational cultures.

The organizational culture model that served as a basis for the DLDS was developed from a stream of research investigating the relationship between organizational culture and effectiveness (Denison, 1984; 1990; 1996; Denison & Mishra, 1995; Denison & Neale, 1996; Fey & Denison, 2003, Denison, Haaland, & Goelzer, 2004). Research on this model (i.e., "The Denison Model"), has been based on organizational culture aspects shown to influence organizational effectiveness. Specifically, this model denotes four key organizational elements, also referred to as culture traits, which contribute to organizational effectiveness: involvement, consistency,

adaptability, and mission. The importance of these culture traits as they relate to organizational effectiveness, have been investigated by other researchers as well (e.g., Gordon & DiTomaso, 1992; Kotter & Heskett, 1992).

From a research standpoint, an instrument grounded in previous theory is desired as researchers attempt to investigate the topic further (Leslie & Fleenor, 1998). As such, the DLDS follows the theory from the Denison Model and also measures four broad leadership elements, also referred to as leadership traits: involvement, consistency, adaptability, and mission. Although other existing leadership models measure behaviors related to more current leadership theories (e.g., authentic leadership), this model provides "leaders and managers with valuable feedback on the skills and practices that are important to building organizational cultures that impact bottom-line business performance" (Denison, Kotrba, & Castaño, 2012, p. 212)

Even though a more in depth description of the DLDS can be found in Denison et al.'s (2012) paper, including reliability and validity of the instrument, below is a brief description of each of the traits.

- *Involvement* describes the extent to which a leader builds human capability, ownership and responsibility. Leaders who create "high-involvement" in their teams rely on informal and implicit leadership skills to encourage others to be involved and create an environment of teamwork, as well as a sense of ownership and responsibility.

- *Consistency* describes the extent to which leaders define values and systems that are the basis of strong leadership. Consistent leaders develop a mindset and a set of operations that create an internal system of governance based on consensus. Their followers know what to expect in terms of behaviors and expectations.

- *Adaptability* describes the extent a leader is able to translate the demands of the environ-

ment into action. Successful leaders hold a system of norms and beliefs that support his or her capacity to receive and interpret signals from the environment and translate them into internal changes that increase the organization's chances for survival, growth and development.

- *Mission* describes the extent to which leaders define a meaningful long-term direction and are able to translate the mission into action. A sense of mission allows leaders to inspire, direct mission activities and formulate the strategy by envisioning a desired future state.

CHAPTER 2 - HYPOTHESES

The present study seeks to further investigate the self-other differences and perceived effectiveness relationship. To investigate this relationship, it is not only important to understand whether raters agree or disagree on the behaviors displayed by a leader, but it is also important to investigate whether rater differences (i.e., agreement and disagreement) on those behaviors ultimately predict perceptions of overall leadership effectiveness differently based on the culture. As argued by Lord and Maher (1991), leadership (including perceptions of effectiveness) is in the eye of the beholder. In other words, whether a person is considered a leader, and if so how effective a leader, depends on how others perceive that person. Furthermore, as explained by Dorfman, Hanges, and Brodbeck (2004), societal values and practices influence people's shared beliefs about leaders. Over time, people develop shared schemas, or prototypes, as part of the socialization process that occurs within the society (Lord & Maher, 1991). These shared leadership schemas or prototypes at the societal level focus on the shared beliefs about effective leaders among members of a society (Dorfman et al., 2004). Thus, understanding how perceptions of leadership behaviors impact perceptions of effectiveness as well how this relationship changes

based on the culture, can increase our understanding of who is considered an effective leader and in what cultural context.

Though some research has been done to understand the cultures in which 360-degree feedback is most effective, as described previously, only one study has looked at the relationship between self-other agreement and disagreement and performance (i.e., perceived leadership effectiveness) and whether culture moderates the relationship (i.e,. Atwater et al., 2005). As pointed out by Atwater et al. (2005), in their study they used a convenience sample which included the U.S. and some European countries; however, understanding the pattern in countries in other regions of the world (e.g., Asia, Latin America, Middle East) is valuable. Furthermore, they pointed out that rather than operationalizing culture by country, it is worth understanding the role that each culture dimension plays independent of each other. Thus, the current study seeks to add to the literature by including a broader number of countries, which in turn allows studying culture dimensions independent from each other and as continuous variables.

The first step in understanding how culture moderates the self-other differences and perceived effectiveness relationship, is investigating the main effect of self-other difference on perceived effectiveness. Though this relationship has been tested in previous research, other leadership models have been used. Thus, in the present study, this relationship will be replicated, this time using the leadership model measured by the *DLDS* (explained in a previous section). As mentioned by Atwater et al. (2005), self-other agreement predicts performance across cultures because both self-awareness and high ratings are expected to contribute to increased effectiveness regardless of the cultural norms. Furthermore, Atwater et al. (2005) showed that the relationship between self-other agreement (for both peer and direct report) and performance (i.e., perceived effectiveness as rated by boss) was nonlinear, such that when agreement is moderate to

high, performance ratings are equivalent, however, when agreement is low and decreasing, performance drops sharply. They also found that for a severe over-estimator performance was lowest; then it began to increase as the overestimation became less severe. The following hypothesis seeks to replicate findings from Atwater et al. (2005; see Figure 1 for a depiction of the model being tested). Therefore, it is hypothesized:

Hypothesis 1a: Across-cultures, self- direct report differences in leadership ratings (i.e., leadership traits) are non-linearly related with perceived leadership effectiveness, such that a sharper decrease in perceived leadership effectiveness is observed at lower levels of equally rated leadership traits (by self and direct report) and at severe cases of over- and under-estimation of leadership traits.

Hypothesis 1b: Across-cultures, self- peer differences in leadership ratings (i.e., leadership traits) are non-linearly related with perceived leadership effectiveness, such that a sharper decrease in perceived leadership effectiveness is observed at lower levels of equally rated leadership traits (by self and peer) and at severe cases of over- and under-estimation of leadership traits.

In the sections below, hypotheses are discussed based on each culture dimension described by GLOBE and on the leadership traits measured by the *DLDS* (i.e., involvement, consistency, mission, and adaptability; see table 2 for a summary of hypotheses). As mentioned previously, each of these traits have been linked to effective organizational cultures (Denison et al., 2012), thus, making these leadership traits significant to optimal organizational performance. It is important to note that hypotheses do not include leadership traits with no clear theoretical link to the culture dimension being discussed. In other words, there will not be a hypothesis for agreement and disagreement on each of the four leadership traits, unless there is a theoretical

reason to believe that culture would moderate the relationship between self-other differences on that trait and leadership effectiveness. See Figure 2 for a depiction of the model being tested in hypotheses 2 through 13 and Figure 3 for a sample response surface typically found when investigating the self-other differences to effectiveness relationship in the U.S.

Uncertainty Avoidance

Societies that score higher on uncertainty avoidance tend to formalize their interactions with others (de Luque & Javidan, 2004). They also rely on formalized policies and procedures, establishing and following rules, and verifying communication in writing. In these societies, people take moderate calculated risks and they show stronger resistance to change; they inhibit new product development, but facilitate the implementation stage through risk aversion and tight control (de Luque & Javidan, 2004).

Cultural values are expected to affect how self and other differences affect leadership effectiveness. Agreement around the consistency leadership trait indicates agreement regarding the extent to which there is a central source of integration, coordination and control promoted by the leader. There is also agreement around the systems set in place by the leader to create an internal system of governance. As such the more agreement there is between self and other raters in terms of the extent to which the leader is consistent in a culture that requires people to stick to rules, policies, and procedures (i.e., high in uncertainty avoidance), the greater the perceived leadership effectiveness that will be observed. Additionally, when there is underestimation in terms of the extent to which a leader is consistent in a culture high in uncertainty avoidance, the greater the perceived leadership effectiveness as compared to when there is overestimation. The relationship between agreement and disagreement with effectiveness is likely to be non-linear in nature, as shown by the research described previously. Thus, it is hypothesized that:

Hypothesis 2: The self-other (i.e., direct report and peer) differences (regarding consistency) and effectiveness non-linear relationship is moderated by culture, such that the pattern of the relationship in high uncertainty avoidance cultures is different from that in low uncertainty avoidance cultures.

The more agreement there is between self and other raters in terms of the extent to which the leader is adaptable in a culture that does not take risks and is resistant to change, the less the perceived leadership effectiveness that will be observed. Additionally, the greater the disagreement (i.e., over and under-estimation) there is between self and other raters on how adaptable the leader is, the lower the perceived leadership effectiveness. The relationship between agreement and disagreement with effectiveness is likely to be non-linear in nature. Therefore, it is hypothesized that:

Hypothesis 3: The self-other (i.e., direct report and peer) differences (regarding adaptability) and effectiveness non-liner relationship is moderated by culture, such that the pattern of the relationship in high uncertainty avoidance cultures is different from that in low uncertainty avoidance cultures.

Self-other differences regarding the extent to which the leader involves others will likely affect perceived leadership effectiveness. Specifically, a leader who involves employees in decisions and empowers others to give their input in a culture that avoids uncertainty will likely be perceived as more effective than a leader who does not involve others. The greater the disagreement (i.e., over and under-estimation) there is between self and other raters on how much the leader involves others, the lower the perceived leadership effectiveness. The relationship between agreement and disagreement with effectiveness is likely to be non-linear in nature, as shown previously. Therefore, it is hypothesized that:

Hypothesis 4: The self-other (i.e., direct report and peer) differences (regarding involvement) and effectiveness non-liner relationship is moderated by culture, such that the pattern of the relationship in high uncertainty avoidance cultures is different from that in low uncertainty avoidance cultures.

Power Distance

Societies that score higher on power distance have power bases that are stable and scarce (e.g., land ownership); whereas in societies that score lower on this dimension, power bases are transient and sharable (e.g., skill, knowledge; Carl, Gupta, & Javidan, 2004). Higher power distance societies also have different levels of involvement for different groups (e.g., women).

Agreement around the involvement leadership trait by self and others indicates agreement about the extent to which the leader encourages participation, development, and collaboration. The more agreement there is around the involvement encouraged by the leader in a society that discourages equal involvement by the people, the lower the perceived leadership effectiveness. Finally, the greater the disagreement (i.e., over and under-estimation) there is between self and other raters on how much the leader involves others, the lower the perceived leadership effectiveness. The relationship between agreement and disagreement with effectiveness is likely to be non-linear in nature. Therefore, it is hypothesized that:

Hypothesis 5: The self-other (i.e., direct report and peer) differences (regarding involvement) and effectiveness non-linear relationship is moderated by culture, such that the pattern of the relationship in high power distance cultures is different from that in low power distance cultures.

Future Orientation

Societies that score higher on future orientation have organizations with longer and more

strategic orientation (Ashkanasy, Gupta, Mayfield, & Trevor-Roberts, 2004). These societies emphasize visionary leadership that is capable of seeing patterns in the face of chaos and uncertainty. These societies also have flexible and adaptive organizations (Ashkanasy et al., 2004).

Agreement around the mission leadership trait indicates agreement about the extent to which the leader communicates a sense of purpose for employees and defines a clear direction, or the extent to which the leader does not portray these behaviors. The more agreement there is around the extent to which the leader is mission-oriented in a society that encourages having a longer strategic orientation and a plan for the future, the higher the perceived leadership effectiveness. Additionally, when there is underestimation in terms of the extent to which a leader is mission-oriented in a culture that encourages having a longer strategic orientation and a plan for the future, the greater the perceived leadership effectiveness as compared to when there is overestimation. The relationship between agreement and disagreement with effectiveness is likely to be non-linear in nature. Thus, it is hypothesized that:

Hypothesis 6: The self-other (i.e., direct report and peer) differences (regarding mission) and effectiveness non-linear relationship is moderated by culture, such that the pattern of the relationship in high future-oriented cultures is different from that in low future-oriented cultures.

Furthermore, the more agreement there is between self and other raters in terms of the extent to which the leader is adaptable in a culture that emphasizes flexibility, the higher the perceived leadership effectiveness. Additionally, when there is underestimation in terms of the extent to which a leader is adaptable in a culture that is future-oriented, the greater the perceived leadership effectiveness as compared to when there is overestimation. The relationship between agreement and disagreement with effectiveness is likely to be non-linear in nature. Thus, it is hy-

pothesized:

>**Hypothesis 7**: The self-other (i.e., direct report and peer) differences (regarding adaptability) and effectiveness non-linear relationship is moderated by culture, such that the pattern of the relationship in high future-oriented cultures is different from that in low future-oriented cultures.

Cultures that are lower in future orientation tend to emphasize leadership that focuses on repetition of reproducible and routine sequences (Ashkanasy et al., 2004). As such, agreement about the extent to which a leader is consistent with procedures and processes in a culture that emphasizes repetition will likely yield higher perceived leadership effectiveness. Additionally, the greater the disagreement (i.e., over and under-estimation) there is between self and other raters on how consistent the leader is in a culture that discourages flexibility, the lower the perceived leadership effectiveness. The relationship between agreement and disagreement with effectiveness is likely to be non-linear in nature. Therefore it is hypothesized that:

>**Hypothesis 8**: The self-other (i.e., direct report and peer) differences (regarding consistency) and effectiveness non-linear relationship is moderated by culture, such that the pattern of the relationship in high future-oriented cultures is different from that in low future-oriented cultures.

Institutional Collectivism and In-Group Collectivism

Societies that score higher on institutional collectivism encourage and reward collective action (Gelfand, Bhawuk, Hisae Nishi, & Bechtold, 2004). In these societies group loyalty is valued above individual goals and being accepted by other group members is important. Group cohesion is also valued in these societies (Gelfand et al., 2004). Societies that score higher on in-group collectivism encourage pride, loyalty, and interdependence in their families. Specifically,

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children take pride in the individual accomplishments of their parents and vice versa, and aging parents tend to live at home with their children.

Agreement around the involvement leadership trait by self and others indicates agreement about the extent to which the leader encourages participation, development, and collaboration. A leader who scores high on involvement is also likely to emphasize teamwork. The more agreement there is around the involvement encouraged by the leader in a society that encourages and rewards collective action, the higher the perceived leadership effectiveness. Additionally, when there is underestimation in terms of the extent to which a leader involves others in a culture that emphasizes the collective, the greater the perceived leadership effectiveness as compared to when there is overestimation. The extent to which families are emphasized in the society, on the other hand, is unlikely to moderate the self-other agreement and effectiveness relationship. The relationship between agreement and disagreement with effectiveness is likely to be non-linear in nature. Therefore, it is hypothesized that:

Hypothesis 9: The self-other (i.e., direct report and peer) differences (regarding involvement) and effectiveness non-linear relationship is moderated by culture, such that the pattern of the relationship in high institutional collectivistic cultures is different from that in low institutional collectivistic cultures.

Gender Egalitarianism

Societies that score high on gender egalitarianism are more likely to have a higher representation of women in several settings. For instance, higher gender egalitarian countries include women in positions of authority, accord women a higher status in society, and afford women a greater role in community decision making, among other settings.

A leader who scores high on involvement is also likely to empower others and creates an

environment where individuals have authority and take initiative to manage their work. The more agreement there is around the involvement encouraged by the leader in a society that encourages equal representation by both genders, the higher the perceived leadership effectiveness. Additionally, when there is underestimation in terms of the extent to which a leader involves others in a culture that emphasizes equal representation, the greater the perceived leadership effectiveness as compared to when there is overestimation. The relationship between agreement and disagreement with effectiveness is likely to be non-linear in nature, as shown by the research described previously. Therefore, it is hypothesized that:

> **Hypothesis 10**: The self-other (i.e., direct report and peer) differences (regarding involvement) and effectiveness non-linear relationship is moderated by culture, such that the pattern of the relationship is different from that in low gender egalitarian cultures.

Assertiveness

Societies that score high on assertiveness emphasize direct and unambiguous communication (Den Hartog, 2004). In these societies competition is valued more so than cooperation; results are emphasized over relationships, and capabilities are stressed over loyalty and cooperation when building relationships. The more agreement there is around the involvement encouraged by the leader in a society that encourages competition and emphasizes results, the lower the perceived leadership effectiveness. Additionally, the greater the disagreement (i.e., over and under-estimation) there is between self and other raters on how much the leader involves others, the lower the perceived leadership effectiveness. The relationship between agreement and disagreement with effectiveness is likely to be non-linear in nature. Therefore, it is hypothesized that:

> **Hypothesis 11**: The self-other (i.e., direct report and peer) differences (regarding involvement) and effectiveness non-linear relationship is moderated by culture, such that

the pattern of the relationship in high assertive cultures is different from that in low asser-
tive cultures.

Performance Orientation

Societies that score high on performance orientation emphasize results more so than loy-
alty and belongingness (Javidan, 2004). In these societies, it is expected for individuals to meet
demanding targets and in organization's performance appraisal systems emphasize achieving re-
sults (Javidan, 2004). The more agreement there is around the involvement encouraged by the
leader (e.g., being collaborative) in a society that encourages results over people, the lower the
perceived leadership effectiveness. Additionally, the greater the disagreement (i.e., over and un-
der-estimation) there is between self and other raters on how much the leader involves others, the
lower the perceived leadership effectiveness. The relationship between agreement and disagree-
ment with effectiveness is likely to be non-linear in nature, as shown by the research described
previously. Therefore, it is hypothesized that:

> **Hypothesis 12**: The self-other (i.e., direct report and peer) differences (regarding in-
> volvement) and effectiveness non-linear relationship is moderated by culture, such that
> the pattern of the relationship in high performance-oriented cultures is different from that
> in low performance-oriented cultures.

The more agreement there is around the extent to which the leader is mission-oriented
(e.g., establishes and works toward goals and sets a strategy for the organization) in a society that
is results oriented, the higher the perceived leadership effectiveness. Additionally, when there is
underestimation in terms of the extent to which a leader is mission-oriented in a culture that em-
phasizes performance, the greater the perceived leadership effectiveness as compared to when
there is overestimation. The relationship between agreement and disagreement with effectiveness

is likely to be non-linear in nature. Thus, it is hypothesized that:

Hypothesis 13: The self-other (i.e., direct report and peer) differences (regarding mission) and effectiveness non-linear relationship is moderated by culture, such that the pattern of the relationship in high performance-oriented cultures is different from that in low performance-oriented cultures.

Humane Orientation

Although humane orientation is one of the dimensions studied by GLOBE, there are significant questions about the construct validity of this dimension (M. Dickson, personal communication, May 17th, 2013). Given that the content validity and psychometric characteristics of the dimension may not be well understood, this dimension will not be used in this study.

Practices versus Values

The present study seeks to bridge the gaps in the cross-cultural leadership literature, as well as the 360-degree feedback literature. As pointed out by Atwater et al. (2005), using alternative cultural values perspectives to study the impact of culture on 360-degree feedback is necessary. As discussed before, different aspects of culture (i.e., values versus practices) have been investigated, thus, making it challenging to integrate results and have a clear understanding on the role that culture plays. Up to date, there have been no attempts to compare GLOBE culture values and practices and determine whether they yield comparable results. Thus, this study seeks to provide more clarity in the matter by comparing how GLOBE's culture values and practices impact self-other agreement ratings. As such, the following research question is proposed:

Research Question 1: Does the measurement of culture dimensions in GLOBE by values and practices yield comparable results? In other words, will values and practices as measured by GLOBE yield similar moderated relationships?

CHAPTER 3 - METHOD

Participants and Procedure

Archival data was used in the current study. Data consisted of leaders who had used the DLDS. A total of 18,512 leaders participated in the 360-degree feedback process and in addition to their self-ratings, data from 48,652 peers, 51,781 direct reports, and 16,072 bosses was also available. A data screen revealed that 75% of the leaders were from the United States. To even out the sample, a random sample of approximately 600 U.S. participants was selected. The random sample size for the U.S. was determined by the size of the second largest sample in the dataset. Previous studies have indicated that this is a best practice when conducting cross-cultural research (e.g., Wernsing, In Press). Data were also screened for missing values and outliers (by looking at standardized scores on each variable). After data screening, the following was the sample size for each rater category: 4,242 leaders, 15,583 direct reports, and 14,929 peers. Study participants belonged to 38 countries around the world.

To determine the appropriate sample size to detect the desired effects, a power analysis was conducted using Erdfelder, Faul, and Buchner's (1996) GPOWER analysis program. The power analysis used a power = .80 and α = .05, and a total of eleven predictors (see analysis section below for a description of the predictors). Since interactions normally have small effect sizes and, a conservative estimate of effect size (f^2 =.15) was used in the sample size calculation. The required sample size for each analysis is 122 participants. In other words, for each hypothesis, data for at least 122 leaders must be available.

Most of the leaders (60%) selected for this study were male. From those who indicated their age, three percent were between 20-29 years of age; 27% were between 30-39 years of age; 36% were 40-49 years of age; and 14% were 50 or older. Leaders in the sample occupied differ-

ent positions in their respective companies with the majority of the sample in middle manage-
ment (25%) and senior management (22.3%) positions. The tenure of these leaders in their com-
pany ranged from less than 6 months to more than 15 years with the majority (18%) having
worked more than 15 years in their company.

Raters that are targeted for each leader were invited to participate in the 360-degree as-
sessment process for the purpose of providing their respective leader with developmental feed-
back. All raters were assured that their individual responses would only be reported in aggregate
and that their responses would remain confidential. Raters who provided feedback chose to do so
voluntarily. Individual leader results were usually returned directly to that leader and were used
for developmental purposes. Leader ratings were usually collected on-line.

Measures

Leadership perceptions. To define leadership behaviors for this study the Denison &
Neale's (1996) leadership framework was used (See Figure 4). This framework was developed
out of over 20 years of research linking organizational culture to organizational effectiveness
(Denison, 1984; 1990; 2000; Denison, Haaland, & Goelzer, 2004; Denison & Mishra, 1995;
Denison & Neale, 1996) and as a result, focuses on capturing those leader skills and behaviors
important to creating high performing organizations. In addition, thousands of leaders have used
this framework in their leadership development efforts to gain insight into how they are per-
ceived.

The Denison Leadership Development Survey (DLDS) is a 96-item scale; where each of
the above described traits is measured with three indices made up of eight survey items each.
Items were written to focus on the skills and behaviors of effective leaders. An example item in-
cludes "Encourages others to take responsibility". The three indices for each of the scales are de-

scribed below:

- Involvement: Empowers People; Builds Team Orientation; and Develops Organizational Capability.

- Consistency: Defines Core Values; Works to Reach Agreement; Manages Coordination and Integration.

- Adaptability: Creates Change, Emphasizes Customer Focus, and Promotes Organizational Learning.

- Mission: Defines Strategic Direction and Intent; Defines Goals and Objectives; and Creates Shared Vision.

Respondents indicated the extent to which they agreed with each item using a 7-point Likert scale ranging from 1-strongly disagree to 7-strongly agree. Cross-cultural validation information for this instrument can be found in Denison, et al. (2012). Scale reliabilities (Cronbach's alpha) were computed for each rater (self, direct report, and peer) and for each trait. Reliabilities were all higher than .90.

Culture. Culture dimension practices (culture as is) and values scores (culture should be) from the GLOBE study (House et al. 2004) were used as indicators of culture in the present study. As has been used in prior research (Cullen, Parboteeah, & Hoegl, 2004; Gentry, Harris, Baker, & Leslie, 2008; Parboteeah & Cullen 2003), each country's national score that is found in House et al. (2004) and was applied to all individuals within each country and as such, each country had a score on the specific cultural dimension in question. A sample item for practices includes: "In this society, orderliness and consistency are stressed, even at the expense of experimentation and innovation." A sample item for values includes: "I believe that orderliness and consistency should be stressed, even at the expense of experimentation and innovation."

Table 3 presents descriptives for all nine culture dimensions. In general the mean for each culture dimension (values and practices) had a mean around the mid-point of the scale and had an acceptable standard deviation. The only exceptions were for the following culture dimension practices: future orientation, in-group collectivism, and performance orientation. Although these dimensions had a higher mean, the descriptive statistics resembled those presented in the GLOBE Project. Thus, there is enough justification to assume that the culture variables provide similar information as data in previous research has shown.

Effectiveness. Effectiveness was assessed by seven items included as part of the DLDS, thus this variable was measured at the same time that the leadership traits were measured. A sample item is "Overall, this individual is a highly effective leader." The final effectiveness score for each participant was the average across all seven items from the boss' perspective. Cronbach's alpha for this scale was 0.91.

Data Analysis

For the ratings used in the current study, mean intraclass correlations (ICC_2) were used to justify aggregating ratings within rater groups (LeBreton & Senter, 2008). ICC (2) for direct reports ranged from 0.94 to 0.97 across countries, and for peers they ranged from across countries. These ratings were adequate to justify aggregation given previous studies as a guideline: ICCs above .50 are adequate (e.g. Fleenor, McCauley, & Brutus, 1996; Ostroff et al., 2004).

To test all the hypotheses in this study, polynomial regression procedures (Edwards, 1994; Edwards & Parry, 1993) were used[1]. Although other analytical strategies (i.e., difference scores) have been used in past 360-degree research, they do not allow to test the functional form

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[1] Several variables (i.e., leader gender, organizational level, age, and tenure) were going to be included as covariates in the analyses; however, as indicated by Allison (1999; p. 50) for a covariate to be included in a regression analysis, it has to predict the DV and it has to be related to the IVs. In this case, none of the potential covariates mentioned above related to effectiveness ratings or to the self, direct report or peer ratings; thus, these variables were not included as covariates in the analyses.

underlying agreement, and further these indices are substantially flawed from a statistical perspective (e.g., Edwards, 1994). As suggested by Edwards (2002), commensurate variables were used in the analysis to meaningfully interpret the results. Commensurate variables mean that each variable was rated on the same scale. Self, direct report, and peer ratings were centered at the same value, based on the midpoint of their shared scale (Edwards, 1994). Scores produced after scale-centering ranged from -3 to +3.

The polynomial regression for hypothesis one used data from all culture dimensions. The following polynomial regression equation was used:

$Z = b_0 + b_1X + b_2Y + b_3X^2 + b_4XY + b_5Y^2 + e$ *(equation 1)*

Where:

 Z = bosses' ratings of leadership effectiveness

X = self-ratings

Y = other ratings (i.e., direct report and peer)

If the quadratic equation is shown to be significant (i.e., significant *F* test), the next step is to examine the surface corresponding to the polynomial regression.

Surface response methodology provides a visual aid to get a richer and deeper understanding of polynomial equations. Edwards and Parry (1993) define the response surface methodology as an interpretive framework to show how the coefficients of the polynomial equation test the surfaces they imply. This methodology requires analyzing three key features of response surfaces, including (a) stationary point (X_o, Y_o; point at which slope of the surface is zero in all directions), (b) principal axes (lines running perpendicular to each other and intersecting at the stationary point; for convex surfaces the slope is highest along the first principal axis and minimum along the second principal axis and the slope of the concave surface is minimum along the

first principal axis and maximum along the second principal axis), and (c) slopes along lines of interest: line of perfect agreement (Y = X), line of disagreement (Y = -X), and principal axes, with the line of agreement being the line where there is congruence between self and other ratings (i.e., both the ratings are equal) and the line of disagreement being the line that runs perpendicular to the confirmation axis.

To estimate coefficients as well as the significance level of the various components of response surfaces, bootstrapping was used. For this procedure, a large number (i.e., 10,000) of samples of size N were randomly drawn with replacement. Next, each sample was used to estimate the quadratic regression equation, thus, the coefficients from each sample were used to compute the following:

- Stationary point (X_o, Y_o)

- Intercept (P_{10}) at $X = 0$ and slope (P_{11}) for the first principal axis (the slope indicates whether this axis rotates in relation to the line of perfect agreement)

- Intercept (P_{20}) at $X = 0$ and slope (P_{21}) for the second principal axis (the slope indicates whether this axis rotates in relation to the line of disagreement)

$X_o, Y_o, P_{10}, P_{11}, P_{20}, P_{21}$ are nonlinear combinations of regression coefficients. The distributions of $X_o, Y_o, P_{10}, P_{11}, P_{20}, P_{21}$ obtained from the bootstraps were used to construct confidence intervals for each of these.

Other than analyzing the stationary points and principal axes, the slopes along the lines of interest should also be looked at. First, the shape of the surface along the line of perfect agreement (Y = X) was analyzed by looking at the slope $(a_1 = b_1 + b_2;$ from equation 1) and the curvature $(a_2 = b_3 + b_4 + b_5;$ from equation 1). If a_1 differs significantly from zero and a_2 does not, there is a linear slope along the line of perfect agreement. A negative value for a_2 indicates a

concave surface along the line of perfect agreement, while a positive value indicates a convex surface. A value that is not significantly different from zero indicates that the surface (or slope) is flat. Next, the shape of the surface along the line of disagreement (Y=-X) should be examined. This line is present when, for example, self is rated at1 and other is rated at 5 on a given item. To analyze the shape along the line of disagreement and the first and second principal axes similar components are examined as before: For the line of disagreement, the slope is determined by a_3 = b_1 - b_2 (see equation 1) and the curvature by a_4 = b_3 - b_4 + b_5 (see equation 1). If a_3 significantly differs from zero and the a_4 does not, there is a linear slope along the line of disagreement. The type of curve along the line of disagreement is indicated by a_4, such that a negative value indicates a concave surface, and a positive value indicates a convex surface along the line of complete disagreement. For the first principal axis the slope is determined by a_5 = b_1 + $b_2 P_{11}$ + $b_4 P_{10}$ + $2b_5 P_{10} P_{11}$ and the curvature by a_6 = b_3 + $b_4 P_{11}$ + $b_5 P_{11}^2$ and for the second principal axis the slope is determined by a_7 = b_1 + $b_2 P_{21}$ + $b_4 P_{20}$ + $2b_5 P_{20} P_{21}$ and the curvature by a_8 = b_3 + $b_4 P_{21}$ + $b_5 P_{21}^2$. Each of these coefficients has been explained above.

For the rest of the hypotheses, moderated polynomial regression procedures were used (see equation below):

$$Z = b_0 + b_1 X + b_2 Y + b_3 X^2 + b_4 XY + b_5 Y^2 + b_6 V + b_7 XV + b_8 YV + b_9 X^2 V + b_{10} XYV + b_{11} Y^2 V + e \qquad \textit{(equation 2)}$$

Where:

  Z = bosses' ratings of leadership effectiveness

  X = self-ratings

  Y = other ratings (i.e., direct report and peer)

  V = moderator (i.e., culture dimension score)

Moderation is tested by assessing the increment in R^2 yielded by the terms XV, YV, X^2V, XYV, and Y^2V. In other words, a significant increase in R^2 indicates a significant difference in the response surfaces between country groupings. To investigate the differences between surfaces at different levels of each culture dimension, simple surfaces can be graphed at selected levels of the moderator. Each simple surface is defined by the following equation:

$$Z = (b0 + b6V) + (b1 + b7V)X + (b2+b8V)Y + (b3+b9V)X^2 + (b4+b10V)XY + (b5+b11V)Y^2 + e$$

The compound coefficients on the terms X, Y, X^2, XY, and Y^2 can be tested using procedures for testing weighted linear combinations of regression coefficients. Each surface will be analyzed in the same manner as described above.

To investigate Research Question 1, analyses for each of the hypotheses were conducted using two different measurements for the moderator - culture variable (i.e., values and practices). Thus, consistency of prediction was assessed for each dimension by investigating whether the two different ways of measuring culture dimensions for each hypothesis yielded similar results. In sum, for hypotheses 2 to 11, four different analyses were conducted for each hypothesis (i.e., separate for self-peer versus self-direct report agreement; separate for values versus practices).

CHAPTER 4 - RESULTS

Table 4 presents, reliabilities, descriptive statistics, and correlations among self, peer, direct report, and effectiveness leadership ratings. The means of self, peer, direct report, and effectiveness leadership ratings had a mean higher than the scale mid-point, which is not unusual for 360-degree data. Self, direct report, and peer ratings significantly relate to effectiveness ratings; however, direct report and peer ratings tended to correlate most strongly with effectiveness ratings as compared to self ratings. As shown in the table, the mean for the culture dimensions

tended to be higher than the scale midpoint; however, these descriptive are similar to the ones presented in the original GLOBE project (Javidian, et al., 2004, p. 31).

According to Edwards (2002) it is important to inspect the number of participants that would be considered to have discrepancies between two predictors. Since this paper will be exploring the impact of self-other agreement and exploring the impact of disagreement it is important to screen the data in this way. To inspect the data, standardized scores for each predictor variable (i.e., self, peer, and direct report ratings on all four traits) were calculated. As mentioned by Fleenor, McCauley, and Brutus (1996), any participant with a standardized score on one predictor variable that is half a standard deviation above or below the standardized score on the other predictor variable is considered to have discrepant values. Table 5 and 6 shows the percentages of ''in agreement'' values and the percentages of discrepant values in either direction (over and under-estimation) for direct reports and peers, respectively. As show in the table, nearly one third of the sample was either in the in agreement, underestimation, or overestimation category. Based on this data, it can be concluded that exploring how discrepancies between these sources of support relate to commitment makes practical sense. It is also important to check that the sample provides adequate dispersion of cases in the X-Y plane. Specifically, there needs to be enough cases at both sides of the agreement (at high and low levels of the rated behavior) and disagreement (under- and overestimation), so that differences in slopes of the line of interest can be tested. Most of the data were clustered in the upper right hand corner of the plane (i.e., when self and other raters provided the same high ratings).

Hypotheses 1a and 1b stated that self and other ratings predict perceived leadership effectiveness in a nonlinear manner. Polynomial regression with response surface methodology (Edwards 2002; Edwards and Parry 1993) was used to test these hypotheses. See Table 7 for poly-

nomial regression results; Table 8 for information on slopes along the lines of interest; and Table 9 for information on stationary points and principal axes.

Hypotheses 2-13 predicted that the pattern of relationship between self and other (peer and direct report) ratings and perceptions of leadership effectiveness would be moderated by different culture dimensions (e.g., uncertainty avoidance). Four moderated polynomial regressions were conducted for each hypothesis[2]. Each regression was a combination between self-peer or self-direct report ratings and cultural dimensions measured by GLOBE values or practices scales (Table 10 displays significant polynomial regressions per hypothesis). In a hierarchical manner, leadership effectiveness ratings were regressed on self-ratings, other ratings (peer or subordinate), the product of self times other ratings, and the square of self-ratings and square of other ratings in the first step, the moderator (culture dimension) in the second step, the product of self times the moderator, the product of peer times the moderator, the product of the square of self-ratings and the moderator, the product of the self-ratings, peer ratings and the moderator, and the product of the square of peer-ratings and the moderator, in the third step. A significant increase in R^2 when the variables in the third step are entered indicates a significant difference in the response surfaces at different levels of the culture dimension being investigated. Table 11 shows the simple quadratic equations at low and high levels for each significant moderated polynomial regression. Table 12 shows information on slopes of interest and Table 13 information on stationary points and principal axes for surfaces at low and high levels of the moderator for those polynomial regressions that were significant.

Hypothesis 1

For Hypothesis 1a, four polynomial regressions were conducted, one for each leadership

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[2] Although a large number of regressions were performed, Type I error is not a concern given that different predictors and moderators are used across the analyses.

trait being measured (i.e., mission, consistency, involvement, and adaptability). The overall R^2 for the polynomial regression on self-direct report ratings on *involvement* was .05 ($F = 37.62$, $p < .01$). The surfaces was flat (see Figure 5), with its stationary point located at $Xo = 3.99$, $p > .01$; $Yo = 9.12$, $p > .01$. The first principal axis ran parallel to the Y = X line, as evidenced by a P_{11} value that was not significantly different than one. The quantity -p10/(p11+1) was 0.17 and its 95% confidence interval included zero, indicating that the axis did not shift from the Y = X line. Correspondingly, the second principal axis ran parallel to the Y = -X line, as evidenced by a P_{21} value that was not significantly different than negative one. The quantity -p20/(p21+1) was -18.26 and its 95% confidence interval included zero, indicating that the axis did not shift from the Y = -X line. The surface had a positive linear shape along the Y = X line and the first principal axis, as indicated by a positive slope at X = 0 Y = 0 (a_1 and a_5, respectively) and a non-significant curvature (a_2 and a_6, respectively). The surface was flat along the Y = -X line and the second principal axis, as shown by a slope of 0 at X = 0 Y = 0 (a_3 and a_7, respectively) and a non-significant curvature (a_4 and a_8, respectively). These results indicate that higher agreement between self and direct report regarding *involvement* are likely to yield higher ratings of leadership effectiveness across culture dimensions, while disagreement on this trait between self and direct report does not seem to have much of an impact on effectiveness ratings.

The overall R^2 for the polynomial regression on self-direct report ratings on *consistency* was .06 ($F = 45.26$, $p < .01$). The surface was flat (see Figure 6), with its stationary point located at $Xo = 2.53$, $p > .01$; $Yo = 6.25$, $p > .01$. The first principal axis rotated counterclockwise to the Y = X line, as evidenced by a P_{11} value that was significantly greater than one. The quantity -p10/(p11+1) was 2.07 and its 95% confidence interval included zero, indicating that the axis did not shift from the Y = X line. Correspondingly, the second principal axis ran parallel to the Y = -

X line, as evidenced by a P_{21} value that was not significantly different than negative one. The quantity $-p_{20}/(p_{21}+1)$ was -6.77 and its 95% confidence interval included zero, indicating that the axis did not shift from the Y = -X line. The surface had a positive linear shape along the Y = X line and the first principal axis, as indicated by a positive slope at X = 0 Y = 0 (a_1 and a_5, respectively) and a non-significant curvature (a_2 and a_6, respectively). The surface was flat along the Y = -X line and the second principal axis, as shown by a slope of 0 at X = 0 Y = 0 (a_3 and a_7, respectively) and a non-significant curvature (a_4 and a_8, respectively). These results indicate that higher agreement between self and direct report regarding *consistency* are likely to yield higher ratings of leadership effectiveness across culture dimensions, while disagreement on these traits between self and direct report does not seem to have much of an impact on effectiveness ratings.

The overall R^2 for the polynomial regression on self-direct report ratings on *adaptability* was .06 ($F = 45.99$, $p < .01$). The surface for was a concave (see Figure 7) with its stationary point located at X_o = -16.75, $p < .01$; Y_o = -7.18, $p < .01$. The first principal axis rotated clockwise to the Y = X line, as evidenced by a P_{11} value that was significantly less than one. The quantity $-p_{10}/(p_{11}+1)$ was -1.55 and its 95% confidence interval excluded zero, indicating that the axis was shifted to the left of the Y = X line. Correspondingly, the second principal axis rotated clockwise to the Y = -X line, as evidenced by a P_{21} value that was significantly different than negative one. The quantity $-p_{20}/(p_{21}+1)$ was -49.08 and its 95% confidence interval excluded zero, indicating that the axis shifted to the left of the Y = -X line. Since this shift puts the second principal axis outside the range of the data, it should be disregarded when interpreting the surface. The surface had a positive linear shape along the Y = X line, as indicated by a positive slope at X = 0 Y = 0 (a_1) and a non-significant curvature (a_2). Along the Y = -X line, the surface had a negative slope at X = 0 Y = 0 (a_3) and downward curvature (a_4). The surface displayed a

positive linear shape along the first principal axis, as indicated by a positive slope at the point X = 0 (a5) and a non-significant curvature (a6). In conjunction, these results indicate that across cultures effectiveness increases as self and direct report ratings on *adaptability* increase. Additionally, effectiveness is high when self ratings are slightly higher than direct report ratings. These results also showed that effectiveness decreases at a decreasing rate as self ratings approach direct report ratings and continue to decrease more sharply when self ratings exceed direct report ratings.

The overall R^2 for the polynomial regression on self-direct report ratings on *mission* was .05 ($F = 37.53$, $p < .01$). The surface was flat (see Figure 8) with its stationary point located at $X_o = -1.86$, $p > .01$; $Y_o = 4.39$, $p > .01$. The first principal axis ran parallel to the Y = X line, as evidenced by a P_{11} value that was not significantly different than one. The quantity $-p_{10}/(p_{11}+1)$ was -3.84and its 95% confidence interval excluded zero, indicating that the axis was shifted to the left of the Y = X line. Since this shift puts the first principal axis outside the range of the data, it should be disregarded when interpreting the surface. Correspondingly, the second principal axis ran parallel to the Y = -X line, as evidenced by a p_{21} value that was not significantly different than negative one. The quantity $-p_{20}/(p_{21}+1)$ was -0.87 and its 95% confidence interval included zero, indicating that the axis did not shift from the Y = -X line. The surface had a positive linear shape along the Y=X line, as indicated by a positive slope at X = 0 Y = 0 (a1) and a non-significant curvature (a2). Along the Y = -X line, it showed negative linear shape, as indicated by a negative slope at X = 0 Y = 0 (a3) and a non-significant curve (a4). The surface was flat along the second principal axis (a7 and a8). These results indicate that across cultures, perceived effectiveness increases as both self and direct report ratings on *mission* increase, while effectiveness is likely to decrease as underestimation becomes less severe and will continue to decrease as over-

estimation becomes severe.

For Hypotheses 1b, four polynomial regressions were conducted, similarly to hypothesis 1a. The overall R^2 for the polynomial regression on self-peer ratings on *involvement* was .06 (F = 47.19, $p < .01$). The surface was flat (see Figure 9) with its stationary point located at $Xo = 3.92$, $p > .01$; $Yo = -1.50$, $p > .01$. The first principal axis ran parallel to the $Y = X$ line, as evidenced by a P_{11} value that was not significantly different than one. The quantity $-p10/(p11+1)$ was 4.52 and its 95% confidence interval included zero, indicating that the axis did not shift from the $Y = X$ line. Correspondingly, the second principal axis ran parallel to the $Y = -X$ line, as evidenced by a P_{21} value that was not significantly different than negative one. The quantity $-p20/(p21+1)$ was 1.91 and its 95% confidence interval excluded zero, indicating that the axis shifted to the right of the $Y = -X$ line. The surfaces had a positive linear shape along the $Y = X$ line, as indicated by a positive slope at $X = 0$ $Y = 0$ ($a1$) and a non-significant curvature ($a2$). Along the $Y = -X$ line, the surfaces were essentially flat as indicated by a slope of 0 at $X = 0$ $Y = 0$ ($a3$) and a non-significant curve ($a4$). The surface was flat at the point $X = 0$ ($a5$) and had an upward curvature ($a6$) along the first principal axis. Along the second principal axis, the surface was flat ($a7$ and $a8$). These results indicate that across culture dimensions effectiveness ratings are likely to increase at an increasing rate as self and peer agreement regarding *involvement* increases. The increase is steeper when ratings increase from low levels to medium levels of rated behaviors. Disagreement on these traits between self and direct report does not seem to have much of an impact on effectiveness ratings.

The overall R^2 for the polynomial regression on self-peer ratings on *consistency* was .07 (F = 56.88, $p < .01$). The surface was flat (see Figure 10) with its stationary point located at $Xo = 3.50$, $p > .01$; $Yo = -1.98$, $p > .01$. The first principal axis ran parallel to the $Y = X$ line, as evi-

denced by a *P11* value that was not significantly different than one. The quantity -p10/(p11+1) was 3.79 and its 95% confidence interval excluded zero, indicating that the axis shifted to the right of the Y = X line. Since this shift puts the first principal axis outside the range of the data, it should be disregarded when interpreting the surface. Correspondingly, the second principal axis ran parallel to the Y = -X line, as evidenced by a *P21* value that was not significantly different than negative one. The quantity -p20/(p21+1) was 2.19 and its 95% confidence interval excluded zero, indicating that the axis shifted to the right of the Y = -X line. The surfaces had a positive linear shape along the Y = X line, as indicated by a positive slope at X = 0 Y = 0 (a1) and a non-significant curvature (a2). Along the Y = -X line, the surfaces were essentially flat as indicated by a slope of 0 at X = 0 Y = 0 (a3) and a non-significant curve (a4). Along the second principal axis, the surface was flat (a7 and a8). These results indicate that across culture dimensions effectiveness ratings are likely to increase as self and peer agreement regarding *consistency* increases, while disagreement on these traits between self and peer does not seem to have much of an impact on effectiveness ratings.

The overall *R²* for the polynomial regression on self-peer ratings on *adaptability* was .08 (*F = 61.51, p < .01*). The surface was convex (see Figure 11) with its stationary point located at Xo = -0.69, p < .05; Yo = -.40, p < .05. The first principal axis was rotated counterclockwise to the Y = X line, as evidenced by a *P11* value that was significantly greater than one. The quantity -p10/(p11+1) was -0.38 and its 95% confidence interval included zero, indicating that the axis did not shift from the Y = X line. Correspondingly, the second principal was rotated counterclockwise to the Y = -X line, as evidenced by a *P21* value that was significantly greater than negative one. The quantity -p20/(p21+1) was 1.12 and its 95% confidence interval included zero, indicating that the axis did not shift from the Y = -X line. Along the Y = X line, the surface was flat at

X = 0 Y = 0 (a1) and had an upward curvature along the Y = X line (a2). Similarly, the surface was flat at X = 0 (a5) and had an upward curvature (a6) along the first principal axis. Along the Y = -X line and the second principal axis, the surface was flat (a3, a4, a7, a8). These results show that as self and peer ratings on *adaptability* increase, effectiveness increases at an increasing rate. When self was high, effectiveness also increases when peer ratings are slightly higher than self ratings. Extreme levels of overestimation and underestimation seemingly do not have an impact on effectiveness ratings.

The overall R^2 for the polynomial regression on self-direct report ratings on *mission* was .08 ($F = 59.53$, $p < .01$). The surface was a concave surface (see Figure 12) with its stationary point located at Xo = -0.40, $p > .05$ Yo = -1.94, $p > .05$. The first principal axis was rotated counterclockwise from the Y = X line, as evidenced by a P_{11} value significantly greater than one. The quantity -p10/(p11+1) was -0.303, but its 95% confidence interval included zero, thereby failing to reject the null hypothesis of no lateral shift from the Y = X line. The second principal axis ran parallel to the Y = -X line, as evidenced by a P_{21} value that was not significantly different than negative one. The quantity -p20/(p21+1) was 1.31 and its 95% confidence interval excluded zero, indicating that the axis significantly shifted to the right of the Y = -X line. The surface had a positive slope at X = 0 Y = 0 (a1) and an upward curvature along (a2) along the Y = X line. Along the Y = -X line, the surface was flat (a3 and a4). The surface was flat at X = 0 (a5) and had an upward curvature (a6) along the first principal axis, while the surface was essentially flat along the second principal axis (a7 and a8). Substantively, these results show that as self and peer ratings on *mission* increase, effectiveness increases at an increasing rate. Extreme levels of overestimation and underestimation seemingly do not have an impact on effectiveness ratings.

Hypothesis 2 and 3

For hypothesis 2, the increment in R^2 was not significant for any of the polynomial regressions conducted. For hypothesis 3, moderation was found for self-peer ratings on *adaptability* at different levels of GLOBE uncertainty avoidance values and practices. For self-peer ratings with GLOBE uncertainty avoidance values as the moderator, the overall R^2 from the moderated polynomial regression was .08 ($F = 59.53$, $p < .01$). This analysis also revealed that a significant .4% additional variance ($p < .05$) was accounted for by the variables in the third step of the regression. For self-peer ratings with GLOBE uncertainty avoidance practices as the moderator, the overall R^2 from the moderated polynomial regression was .08 ($F = 59.53$, $p < .01$). This analysis also revealed that a significant .3% additional variance ($p < .05$) was accounted for by the variables in the third step of the regression.

The surface for self-peer ratings at one standard deviation below the mean for uncertainty avoidance values (see Figure 13) was a flat surface, with its stationary point located at $Xo = 65.48$, $p < .01$; $Yo = 0$. The first principal axis was rotated clockwise from the $Y = X$ line, as evidenced by a P_{11} value that was significantly less than one. The quantity -p10/(p11+1) was 69.40 and its 95% confidence interval excluded zero, indicating that the axis was shifted to the right of the $Y=X$ line. Since this shift puts the first principal axis outside the range of the data, it should be disregarded when interpreting the surface. The second principal axis ran parallel to the $Y=-X$ line, as evidenced by a P_{21} value that was not significantly different than negative one. The quantity -p20/(p21+1) was 1.38 and its 95% confidence excluded zero, indicating that the axis was shifted to the right of the $Y = -X$ line. The surface was flat along the $Y = X$, $Y = -X$, and second principal axis. These results indicate that in lower uncertainty avoidance cultures (measured by GLOBE values), neither self-peer agreement nor disagreement on *adaptability* impact

ratings of effectiveness.

The surface for self-peer ratings at one standard deviation above the mean for uncertainty avoidance values (see Figure 14) was a flat surface, with its stationary point located at Xo = 119.06, p < .05; Yo = 44.17, p < .05. The first principal axis ran parallel to the Y = X line, as evidenced by a P11 value that was not significantly different than one. The quantity -p10/(p11+1) was 222.99 and its 95% confidence interval excluded zero, indicating that the axis was shifted to the right of the Y=X line. Since this shift puts the first principal axis outside the range of the data, it should be disregarded when interpreting the surface. The second principal axis ran parallel to the Y=-X line, as evidenced by a P21 value that was not significantly different than negative one. The quantity -p20/(p21+1) was 1.55 and its 95% confidence excluded zero, indicating that the axis was shifted to the right of the Y = -X line. The surface was flat along the Y = X, Y = -X, and second principal axis. These results indicate that in higher uncertainty avoidance cultures (measured by GLOBE values), neither self-peer agreement nor disagreement on *adaptability* impact ratings of effectiveness.

The surface for self-peer ratings at one standard deviation below the mean for uncertainty avoidance practices (see Figure 15) was a flat surface, with its stationary point located at Xo = -40.17, *p* < .05; Yo = -7.34, *p* < .05. The first principal axis was rotated clockwise from the Y = X line, as evidenced by a *P11* value significantly less than one. The quantity -p10/(p11+1) was -47.82 and its 95% confidence interval excluded zero, indicating that the axis was shifted to the left of the Y=X line. Since this shift puts the first principal axis outside the range of the data, it should be disregarded when interpreting the surface. The second principal axis ran parallel to the Y=-X line, as evidenced by a *P21* value that was not significantly different than negative one. The quantity -p20/(p21+1) was 1.56 and its 95% confidence excluded zero, indicating that the

axis was shifted to the right of the Y = -X line. The surface was flat along the Y = X, Y = -X, and second principal axis. Similar to results with uncertainty avoidance values, these results indicate that in lower uncertainty avoidance cultures (measured by GLOBE practices), neither self-peer agreement nor disagreement on *adaptability* impact ratings of effectiveness.

The surface for self-peer ratings at one standard deviation above the mean for uncertainty avoidance practices (see Figure 16) was a flat surface, with its stationary point located at Xo = 26.02, $p < .05$; Yo = 4.67, $p < .05$. The first principal axis ran parallel to the Y = X line, as evidenced by a P_{11} value that is not significantly different than one. The quantity -p10/(p11+1) was 36.23 and its 95% confidence interval excluded zero, indicating that the axis was shifted to the right of the Y=X line. Since this shift puts the first principal axis outside the range of the data, it should be disregarded when interpreting the surface. The second principal axis ran parallel to the Y=-X line, as evidenced by a P_{21} value that was not significantly different than negative one. The quantity -p20/(p21+1) was 1.46 and its 95% confidence excluded zero, indicating that the axis as shifted to the right of the Y = -X line. The surface was flat along the Y = -X, and second principal axis; whereas the surface had a positive linear shape along the Y = X line. These results show that in higher uncertainty avoidance cultures (as measured by GLOBE practices) effectiveness increases as both self and peer ratings on *adaptability* increase. Disagreement between self and peers seem to not impact effectiveness ratings.

Hypothesis 4 and 5

For hypothesis 4, the increment in R^2 was not significant for any of the polynomial regressions conducted. For hypothesis 5, moderation was found for self-direct report and self-peer ratings on *involvement* at different levels of GLOBE power distance practices. For self-direct report ratings with power distance practices as the moderator, the overall R^2 from the moderated

polynomial regression was .05 ($F = 37.77, p < .01$). This analysis also revealed that a significant .5% additional variance ($p < .01$) was accounted for by the variables in the third step of the regression. For self-peer ratings with GLOBE power distance practices as the moderator, the overall R^2 from the moderated polynomial regression was .06 ($F = 47.67, p < .01$). This analysis also revealed that a significant .4% additional variance ($p < .01$) was accounted for by the variables in the third step of the regression.

The surface for self-direct report ratings at one standard deviation below the mean for power distance practices (see Figure 17) was a concave surface, with its stationary point located at Xo = 3.23, $p < .05$; Yo = 3.06, $p > .05$. The first principal axis ran parallel to the Y = X line, as evidenced by a P_{11} value that is not significantly different than one. The quantity -p10/(p11+1) was -2.12 and its 95% confidence interval included zero, thus indicating that the axis was not shifted from the Y=X line. The second principal axis was rotated clockwise from the Y=-X line, as evidenced by a P_{21} value that was significantly less than negative one. The quantity -p20/(p21+1) was 4.57 and its 95% confidence included zero, thus indicating that the axis was not shifted from the Y = -X line. The surface had a positive linear shape along the Y = X line; it was flat along the Y = -X, and first principal axis; and it had a positive slope at X = 0 and downward curvature along the second principal axis. These results show that in cultures lower in power distance (as measured by GLOBE practices) effectiveness increases as both self and direct report ratings on *involvement* increase. Additionally, in these cultures, effectiveness decreases at a decreasing rate as underestimation becomes less severe and continues to decrease as overestimation increases

The surface for self-direct report ratings at one standard deviation above the mean for power distance practices (see Figure 18) was flat along the Y = X and Y = -X lines, and both ax-

es. These results showed that in higher power distance cultures (as measured by GLOBE practices) neither agreement nor disagreement between self and direct report on *involvement* seem to impact effectiveness.

The surface for self-peer ratings at one standard deviation below the mean for power distance practices (see Figure 19) was a convex surface, with its stationary point located at $Xo = 5.85$, $p < .05$, $Yo = 0$. The first principal axis ran parallel to the $Y = X$ line, as evidenced by a P_{11} value that is not significantly different than one. The quantity $-p10/(p11+1)$ was 17.17 and its 95% confidence interval included zero, thus indicating that the axis did not shift from the $Y=X$ line. The second principal axis ran parallel to the $Y=-X$ line, as evidenced by a P_{21} value that was not significantly different than negative one. The quantity $-p20/(p21+1)$ was .86 and its 95% confidence excluded zero, indicating that the axis shifted to the right of the $Y = -X$ line. The surface had a positive linear shape along the $Y = X$ line and it was flat along the $Y = -X$. The surface was flat at $X = 0$ and had an upward curvature along the first principal axis, and was flat along the second principal axis. These results show that in lower power distance cultures (as measured by GLOBE practices) effectiveness increases at an increasing rate as both self and peer ratings on *involvement* increase. Additionally, neither overestimation nor underestimation seem to impact effectiveness ratings.

The surface for self-peer ratings at one standard deviation above the mean for power distance practices (see Figure 20) was a flat surface along the $Y = X$ and $Y = -X$ line. These results show that in higher power distance cultures (as measured by GLOBE practices) neither agreement nor disagreement between self and peer on *involvement* seem to impact effectiveness.

Hypothesis 6

For hypothesis 6, moderation was found for self-direct report ratings on *mission* at differ-

ent levels of GLOBE future-orientation values. The overall R^2 from the moderated polynomial regression was .05 ($F = 37.53$, $p < .01$). This analysis also revealed that a significant .3% additional variance ($p < .05$) was accounted for by the variables in the third step of the regression.

The surface for self-direct report ratings at one standard deviation below the mean for future-orientation values (see Figure 21) was a flat surface along the Y = X and Y = -X line. These results show that in lower future oriented cultures (as measured by GLOBE values) neither agreement nor disagreement (over- or underestimation) between self and direct report on *mission* impact effectiveness ratings.

The surface for self-direct report ratings at one standard deviation above the mean for future-orientation values (see Figure 22) was a flat, with its stationary point located at Xo = 0, Yo = 0. The first principal axis ran parallel to the Y = X line, as evidenced by a P_{11} value that is not significantly different than one. The quantity -p10/(p11+1) was -2.40 and its 95% confidence interval excluded zero, indicating that the axis shifted to the left of the Y=X line. The second principal axis ran parallel to the Y=-X line, as evidenced by a P_{21} value that was not significantly different than negative one. The quantity -p20/(p21+1) was .077 and its 95% confidence included zero, indicating that the axis did not shift from the Y = -X line. The surface was flat along the Y = X, and had a negative linear shape along the Y = -X. The surface was flat along both principal axes. These results show that in higher future oriented cultures (as measured by GLOBE values) agreement between self and direct report on *mission* does not impact effectiveness ratings; however, results show that effectiveness decreases as underestimation becomes less severe and continues to decrease as overestimation becomes severe.

Hypothesis 7

For hypothesis 7, moderation was found for self-direct report and self-peer ratings on

adaptability at different levels of GLOBE future-orientation values, and for self-peer ratings on adaptability at different levels of GLOBE future-orientation practices. For self-direct report ratings with future-orientation values as the moderator the overall R^2 was .06 ($F = 45.99$, $p < .01$). This analysis also revealed that a significant .4% additional variance ($p < .01$) was accounted for by the variables in the third step of the regression. For self-peer ratings with future-orientation values as the moderator, the overall R^2 from the moderated polynomial regression was .08 ($F = 59.53$, $p < .01$). This analysis also revealed that a significant .5% additional variance ($p < .05$) was accounted for by the variables in the third step of the regression. For self-peer ratings with future-orientation practices as the moderator, the overall R^2 from the moderated polynomial regression was .08 ($F = 59.53$, $p < .01$). This analysis also revealed that a significant .3% additional variance ($p < .05$) was accounted for by the variables in the third step of the regression.

The surface for self-direct report ratings on *adaptability* at one standard deviation below the mean for future orientation values (Figure 23) was a concave surface, with its stationary point located at Xo = 3.30, $p < .05$; Yo = 2.52, $p < .05$. The first principal axis ran parallel to the Y = X line, as evidenced by a P_{11} value that was not significantly different than one. The quantity -p10/(p11+1) was -2.03, and its 95% confidence interval excluded zero, indicating a shift to the left of the Y = X line. Correspondingly, the second principal axis rotated clockwise from the Y = -X line, as evidenced by a P_{21} value that was significantly less than negative one. The quantity -p20/(p21+1) was 3.89 and its 95% confidence interval included zero, indicating that the axis did not shift from the Y = -X line. The surface had a positive slope at X = 0 Y = 0 and a downward curvature along the Y = X line. Along the Y = -X line, the surface had a negative slope at X = 0 Y = 0 and a downward curvature. The surface was flat along the first principal axis, while it had a positive slope at X = 0 and a downward curvature along the second principal axis. Substantive-

ly, these results show that in lower future oriented cultures (as measured by GLOBE values) a sharper decrease in effectiveness is observed at lower levels of *adaptability* by both self and direct reports, while at moderate and high levels of *adaptability* by both self and direct reports, effectiveness increases at a decreasing rate. Results also showed that perceived effectiveness was high for severe underestimation, but it decreases sharply as underestimation became less severe and continued to decrease as overestimation increased.

The surface for self-direct report ratings on *adaptability* at one standard deviation above the mean for future orientation values (Figure 24) was a concave surface, with its stationary point located at Xo = 2.62, *p* < .05; Yo = 2.08, *p* < .05. The first principal axis ran parallel to the Y = X line, as evidenced by a *P11* value that was not significantly different than one. The quantity -p10/(p11+1) was -1.88, and its 95% confidence interval included zero, indicating that the axis did not shift from the Y = X line. The second principal axis rotated clockwise from the Y = -X line, as evidenced by a *P21* value that was significantly less than negative one. The quantity -p20/(p21+1) was 2.85 and its 95% confidence interval included zero, indicating that the axis did not shift from the Y = -X line. The surface had a positive slope at X = 0 Y = 0 and a downward curvature along the Y = X line. Along the Y = -X line, the surface had a negative slope at X = 0 Y = 0 and a downward curvature. The surface was flat along the first principal axis, while it had a positive slope at X = 0 and a downward curvature along the second principal axis. Substantively, these results show that in higher future oriented cultures (as measured by GLOBE values) at moderate and high levels of *adaptability* by both self and direct reports, effectiveness increases at a decreasing rate. At lower levels effectiveness decreases more sharply. It is interesting to note that in high future-oriented cultures, effectiveness increases more rapidly than in low future-oriented cultures. Results also showed that perceived effectiveness was high for severe underes-

timation, but it decreases sharply as underestimation became less severe and continued to decrease as overestimation increased. This decrease is greater in high future-oriented cultures than in low future-oriented cultures.

The surface for self-peer ratings on *adaptability* at one standard deviation below the mean for future orientation values (Figure 25) was a convex surface, with its stationary point located at X_o = -18.88, $p < .05$; Y_o = -1.93, $p < .05$. The first principal axis was rotated clockwise from the Y = X line, as evidenced by a *P11* value that was significantly less than one. The quantity $-p10/(p11+1)$ was -20.94, and its 95% confidence interval excluded zero, indicating a shift to the left of the Y = X line. Since this shift puts the first principal axis outside the range of the data, it should be disregarded when interpreting the surface. Correspondingly, the second principal axis ran parallel to the Y = -X line, as evidenced by a *P21* value that was not significantly different than negative one. The quantity $-p20/(p21+1)$ was 0.21 and its 95% confidence interval included zero, indicating that the axis did not shift from the Y = -X line. The surface was flat at X = 0 Y = 0 and had an upward curvature along the Y = X line. Along the Y = -X line, the surface was flat at X = 0 Y = 0 and had an upward curvature, while it was flat along the second principal axis. Substantively, these results show that in lower future oriented cultures (as measured by GLOBE values) effectiveness increased at a rapid rate as ratings on *adaptability* by both self and peer increase from moderate to high. Additionally, effectiveness decreases at a rapid rate as underestimation became less severe and increases as overestimation becomes more severe.

The surface for self-peer ratings on *adaptability* at one standard deviation above the mean for future orientation values (Figure 26) had its stationary point located at X_o = 26.57, $p < .05$; Y_o = 12.96, $p < .05$. The first principal axis ran parallel to the Y = X line, as evidenced by a *P11* value that was not significantly different than one. The quantity $-p10/(p11+1)$ was 105.86, and its

95% confidence interval excluded zero, indicating a shift to the right of the Y = X line. Since this shift puts the first principal axis outside the range of the data, it should be disregarded when interpreting the surface. Correspondingly, the second principal axis ran parallel to the Y = -X line, as evidenced by a *P21* value that was not significantly different than negative one. The quantity -p20/(p21+1) was 2.86 and its 95% confidence interval excluded zero, indicating that the axis shifted to the right of the Y = -X line. The surface had a positive linear shape along the Y = X line and was technically flat along the Y = -X line. The surface was flat along the second principal axis. These results show that in higher future oriented cultures (as measured by GLOBE values) effectiveness increases as both self and peer ratings on *adaptability* increase. Additionally, over- and underestimation seem to yield similar effectiveness ratings.

The surface for self-peer ratings on *adaptability* at one standard deviation below the mean for future orientation practices (Figure 27) was a convex surface, with its stationary point located at X_o = -3.36, *p* < .05; Y_o = -1.76, *p* < .05. The first principal axis was rotated clockwise from the Y = X line, as evidenced by a P11 value that was significantly less than one. The quantity -p10/(p11+1) was -4.15, and its 95% confidence interval included zero, indicating no shift from the Y = X line. The second principal axis ran parallel to the Y = -X line, as evidenced by a *P21* value that was not significantly different than negative one. The quantity -p20/(p21+1) was 1.16 and its 95% confidence interval excluded zero, indicating that the axis shifted to the right of the Y = -X line. The surface was flat along the Y = X and Y = -X lines, and the second principal axis. The surface had a positive slope at X = 0 and an upward curvature along the first principal axis. Substantively, these results show that in lower future oriented cultures (as measured by GLOBE practices) effectiveness is high as long as peer ratings on *adaptability* are high (regardless of self ratings). As peer ratings decrease, effectiveness decreases at a decreasing rate.

The surface for self-peer ratings on *adaptability* at one standard deviation above the mean for future orientation practices (Figure 28) was flat and had its stationary point located at $X_o = 11.46$, $p < .05$; $Y_o = 0$. The first principal ran parallel to the $Y = X$ line, as evidenced by a P_{11} value that was not significantly different than one. The quantity $-p_{10}/(p_{11}+1)$ was 17.39, and its 95% confidence interval excluded zero, indicating a shift to the right of the $Y = X$ line. Since this shift puts the first principal axis outside the range of the data, it should be disregarded when interpreting the surface. The second principal axis ran parallel to the $Y = -X$ line, as evidenced by a P_{21} value that was not significantly different than negative one. The quantity $-p_{20}/(p_{21}+1)$ was 1.96 and its 95% confidence interval excluded zero, indicating that the axis shifted to the right of the $Y = -X$ line. The surface had a positive linear shape along the $Y = X$ and it was flat along the $Y = -X$ line and the second principal axis. Substantively, these results show that in high future oriented cultures (as measured by GLOBE practices) effectiveness increases as both self and peer ratings on *adaptability* increase. Additionally, over- and underestimation seem to not have an impact on effectiveness ratings.

Hypothesis 8

For hypothesis 8, moderation was found for self-direct report ratings on consistency at different levels of GLOBE future-orientation practices. The overall R^2 for this moderated polynomial regression was .06 ($F = 45.27$, $p < .01$). This analysis also revealed that a significant .4% additional variance ($p < .01$) was accounted for by the variables in the third step of the regression.

The surface for self-direct report on *consistency* at one standard deviation below the mean for future orientation practices (Figure 29) was a concave surface, with its stationary point located at $X_o = 0$, $Y_o = 0$. The first principal axis rotated counterclockwise to the $Y = X$ line, as

evidenced by a *P11* value that was significantly higher than one. The quantity -p10/(p11+1) was 2.01, and its 95% confidence interval included zero, indicating the axis did not shift from the Y = X line. The second principal axis ran parallel to the Y = -X line, as evidenced by a *P21* value that was not significantly different than negative one. The quantity -p20/(p21+1) was -5.98 and its 95% confidence interval included zero, indicating that the axis did not shift from the Y = -X line. The surface had a positive linear shape along the Y = X line and was flat along the Y = -X line. The surface had a positive slope at X = 0 and a downward curvature along the first principal axis and was flat along the second principal axis. Substantively, these results show that in lower future oriented cultures (as measured by GLOBE practices) effectiveness increases as both self and direct report ratings on *consistency* increase. Additionally, when self ratings are high, effectiveness is also high when direct report ratings are higher than self ratings and it decreases rapidly as direct report approach self ratings. Neither extreme under- nor overestimation yielded different effectiveness ratings.

The surface for self-direct report on *consistency* at one standard deviation above the mean for future orientation practices (Figure 30) was a concave surface, with its stationary point located at Xo = 0, Yo = 0. The first principal axis rotated counterclockwise to the Y = X line, as evidenced by a *P11* value that was significantly higher than one. The quantity -p10/(p11+1) was 2.12, and its 95% confidence interval included zero, indicating the axis did not shift from the Y = X line. The second principal axis ran parallel to the Y = -X line, as evidenced by a *P21* value that was not significantly different than negative one. The quantity -p20/(p21+1) was -6.16 and its 95% confidence interval included zero, indicating that the axis did not shift from the Y = -X line. The surface had a positive linear shape along the Y = X line and was flat along the Y = -X line. The surface had a positive slope at X = 0 and a downward curvature along the first principal axis

and was flat along the second principal axis. These results show that in higher future-oriented cultures (as measured by GLOBE practices) effectiveness increases as both self and direct report ratings on *consistency* increase. Additionally, effectiveness is also high when direct report ratings are slightly higher than self ratings, but decrease sharply as direct report ratings approach self ratings. This decrease is sharper in higher future-oriented cultures than in lower future-oriented cultures. Extreme under- and overestimation did not yield different effectiveness ratings.

Hypothesis 9 and 10

For hypothesis 9, the increment in R^2 was not significant for any of the polynomial regressions. For hypothesis 10, moderation was found for self-peer ratings on *involvement* at different levels of GLOBE gender egalitarianism practices. The overall R^2 for this moderated polynomial regression was .06 ($F = 47.58$, $p < .01$). This analysis also revealed that a significant .3% additional variance ($p < .05$) was accounted for by the variables in the third step of the regression.

The surface for self-peer ratings on *involvement* at one standard deviation below the mean for gender egalitarianism practices (Figure 31) was a convex surface, with its stationary point located at $X_o = 0$, $Y_o = -6.93$, $p < .05$. The first principal axis rotated clockwise to the $Y = X$ line, as evidenced by a P_{11} value that was significantly less than one. The quantity -p10/(p11+1) was 5.93, and its 95% confidence interval included zero, indicating the axis did not shift from the $Y = X$ line. The second principal axis ran parallel to the $Y = -X$ line, as evidenced by a P_{21} value that was not significantly different than negative one. The quantity -p20/(p21+1) was 6.83 and its 95% confidence interval excluded zero, indicating that the axis shifted to the right of the $Y = -X$ line. Since this shift puts the second principal axis outside the range of the data, it should be disregarded when interpreting the surface. The surface had a positive linear

shape along the Y = X line and was flat along the Y = -X. The surface was flat at X = 0 and an

upward curvature along the first principal axis. These results show that in lower gender egalitari-

an cultures (as measured by GLOBE practices) effectiveness increases as both self and peer rat-

ings on *involvement* increase. Additionally, effectiveness decreases at a decreasing rate as peer

ratings decrease (regardless of whether there is over or under estimation). Finally, neither ex-

treme overestimation nor underestimation seem to differ on effectiveness ratings.

The surface for self-peer ratings on *involvement* at one standard deviation above the mean

for gender egalitarianism practices (Figure 32) was a convex surface, with its stationary point

located at $X_o = 0$, $Y_o = -2.39$, $p < .05$. The first principal axis rotated clockwise to the Y = X

line, as evidenced by a P_{11} value that was significantly less than one. The quantity -p10/(p11+1)

was -5.98, and its 95% confidence interval included zero, indicating the axis did not shift from

the Y = X line. The second principal axis ran parallel to the Y = -X line, as evidenced by a P_{21}

value that was not significantly different than negative one. The quantity -p20/(p21+1) was 1.23

and its 95% confidence interval excluded zero, indicating that the axis shifted to the right of the

Y = -X line. The surface was flat along the Y = X and Y = -X line. The surface was flat at X = 0

and had an upward curvature along the first principal axis and was flat along the second principal

axis. Substantively, these results show that in higher gender egalitarian cultures (as measured by

GLOBE practices) effectiveness decreases at a decreasing rate as peer ratings on involvement

approach self ratings (regardless of whether there is over or under estimation) and hits its lowest

point when both self and peer ratings are moderate. Additionally, agreement between self and

peer does not have an impact on effectiveness ratings.

Hypothesis 11

For hypothesis 11, moderation was found for self-peer ratings on *involvement* at different

levels of GLOBE assertiveness values. The overall R^2 for this moderated polynomial regression was .06 ($F = 47.19$, $p < .01$). This analysis also revealed that a significant .4% additional variance ($p < .05$) was accounted for by the variables in the third step of the regression.

The surface for self-peer ratings on *involvement* at one standard deviation below the mean for assertiveness values (Figure 33) was flat, with its stationary point located at $X_o = 3.07$, $p < .05$, $Y_o = 0$. The first principal axis ran parallel to the $Y = X$ line, as evidenced by a P_{11} value that was not significantly different than one. The quantity $-p_{10}/(p_{11}+1)$ was 4.22, and its 95% confidence interval excluded zero, indicating the axis shifted to the right of the $Y = X$ line. Since this shift puts the first principal axis outside the range of the data, it should be disregarded when interpreting the surface. The second principal axis ran parallel to the $Y = -X$ line, as evidenced by a P_{21} value that was not significantly different than negative one. The quantity $-p_{20}/(p_{21}+1)$ was .37 and its 95% confidence interval included zero, indicating that the axis did not shift from the $Y = -X$ line. The surface had a positive linear shape along the $Y = X$ line and was flat along the $Y = -X$. The surface had a positive linear shape along the second principal axis. Substantively, these results show that in cultures lower in assertiveness (as measured by GLOBE values) effectiveness increases as both self and peer ratings on *involvement* increase. Additionally, the surface also shows that effectiveness ratings increase as underestimation becomes less severe and continues to increase as overestimation increases.

The surface for self-peer ratings on *involvement* at one standard deviation above the mean for gender egalitarianism practices (Figure 34) was a flat surface, with its stationary point located at $X_o = -5.57$, $p < .05$; $Y_o = -10.70$, $p < .05$. The first principal axis rotated counterclockwise to the $Y = X$ line, as evidenced by a P_{11} value that was significantly greater than one. The quantity $-p_{10}/(p_{11}+1)$ was -1.73, and its 95% confidence interval included zero, indicating the axis did not

shift from the Y = X line. The second principal axis ran parallel to the Y = -X line, as evidenced by a *P21* value that was not significantly different than negative one. The quantity -p20/(p21+1) was 17.95 and its 95% confidence interval excluded zero, indicating that the axis shifted to the right of the Y = -X line. Since this shift puts the second principal axis outside the range of the data, it should be disregarded when interpreting the surface. The surface was flat along the Y = X and Y = -X line. The surface had a positive linear shape along the first principal axis. Substantively, these results show that in cultures higher in assertiveness (as measured by GLOBE values) effectiveness is high when peer ratings are high (regardless of whether self ratings are high or not) and decreases linearly as peer ratings decrease.

Hypothesis 12

For hypothesis 12, moderation was found for self-peer ratings on *involvement* at different levels of GLOBE performance orientation practices. The overall R^2 for this moderated polynomial regression was .06 ($F = 47.19$, $p < .01$). This analysis also revealed that a significant .5% additional variance ($p < .05$) was accounted for by the variables in the third step of the regression.

The surface for self-peer ratings on *involvement* at one standard deviation below the mean for performance orientation practices (Figure 35) was a convex surface, with its stationary point located at Xo = 3.13, $p < .05$, Yo = 0. The first principal axis ran parallel to the Y = X line, as evidenced by a *P11* value that was not significantly different than one. The quantity -p10/(p11+1) was 3.15, and its 95% confidence interval included zero, indicating the axis did not shift from the Y = X line. The second principal axis ran parallel to the Y = -X line, as evidenced by a *P21* value that was not significantly different than negative one. The quantity -p20/(p21+1) was .33 and its 95% confidence interval included zero, indicating that the axis did not shift from

the Y = -X line. The surface was flat along the Y = X and Y = -X. The surface was flat at X = 0 and had an upward curvature along the first principal axis and was flat along the second principal axis. Substantively, these results show that in lower performance-oriented cultures (as measured by GLOBE values), effectiveness increases at an increasing rate as self and peer ratings on *involvement* increase. Additionally, the surface shows that disagreement does not yield different effectiveness ratings.

The surface for self-peer ratings on *involvement* at one standard deviation above the mean for assertiveness practices (Figure 36) was flat along the Y = X and Y = -X lines. These results show that for high performance-oriented, neither self-peer agreement nor disagreement have an impact on effectiveness ratings.

Hypothesis 13

For hypothesis 13, moderation was found for self-peer ratings on *mission* at different levels of GLOBE performance orientation values and practices. For self-peer ratings with performance orientation values as the moderator the overall R^2 was .08 ($F = 61.51$, $p < .01$). This analysis also revealed that a significant .4% additional variance ($p < .01$) was accounted for by the variables in the third step of the regression. For self-peer ratings with performance orientation practices as the moderator the overall R^2 was .08 ($F = 61.51$, $p < .01$). This analysis also revealed that a significant .7% additional variance ($p < .01$) was accounted for by the variables in the third step of the regression.

The surface for self-peer ratings on *mission* at one standard deviation below the mean for performance orientation values (Figure 37) was a convex surface, with its stationary point not significantly different from 0. The first principal axis ran parallel to the Y = X line, as evidenced by a P_{11} value that was not significantly different than one. The quantity -p10/(p11+1) was -1.54,

and its 95% confidence interval included zero, indicating the axis did not shift from the Y = X line. The second principal axis rotated counterclockwise to the Y = -X line, as evidenced by a *P21* value that was significantly greater than negative one. The quantity -p20/(p21+1) was -.16 and its 95% confidence interval included zero, indicating that the axis did not shift from the Y = -X line. The surface was flat along the Y = X and had an upward curvature along the Y = -X. The surface was flat at X = 0 and had an upward curvature along the first principal axis and was flat along the second principal axis. Substantively, these results show that in lower performance-oriented cultures (as measured by GLOBE values), perceived effectiveness increases at an increasing rate when self and peer ratings on *mission* increase. Furthermore, results show that as peer ratings approach self ratings, effectiveness decreases at a decreasing rate and it increases at an increasing rate as overestimation increases.

The surface for self-peer ratings on *mission* at one standard deviation above the mean for performance orientation values (Figure 38) was a convex surface, with its stationary point not significantly different from 0. The first principal axis ran parallel to the Y = X line, as evidenced by a *P11* value that was not significantly different than one. The quantity -p10/(p11+1) was -2.09, and its 95% confidence interval included zero, indicating the axis did not shift from the Y = X line. The second principal axis rotated counterclockwise to the Y = -X line, as evidenced by a *P21* value that was significantly greater than negative one. The quantity -p20/(p21+1) was -.12 and its 95% confidence interval included zero, indicating that the axis did not shift from the Y = -X line. The surface was flat along the Y = X and had an upward curvature along the Y = -X. The surface was flat at X = 0 and had an upward curvature along the first principal axis and was flat along the second principal axis. Substantively, these results show that in higher performance-oriented cultures (as measured by GLOBE values), perceived effectiveness increases at an in-

creasing rate when self and peer ratings on *mission* increase. Furthermore, results show that as peer ratings approach peer ratings, effectiveness decreases at a decreasing rate and it increases at an increasing rate as overestimation increases. In higher performance-oriented cultures this decrease seems less sharp.

The surface for self-peer ratings on *mission* at one standard deviation below the mean for performance orientation practices (Figure 39) was a convex surface, with its stationary point at Xo = -6.26, $p < .05$; Yo = 0. The first principal axis rotated clockwise to the Y = X line, as evidenced by a *P11* value that was significantly lower than one. The quantity -p10/(p11+1) was -6.79, and its 95% confidence interval included zero, indicating the axis did not shift from the Y = X line. The second principal axis ran parallel to the Y = -X line, as evidenced by a *P21* value that was not significantly different than negative one. The quantity -p20/(p21+1) was -.47 and its 95% confidence interval included zero, indicating that the axis did not shift from the Y = -X line. The surface was flat along the Y = X and Y = -X lines, as well as the second principal axis. The surface had a positive slope at X = 0 and had an upward curvature along the first principal axis. Substantively, these results show that in lower performance-oriented cultures (as measured by GLOBE values), perfect agreement between self and peer at high and low levels of rated behavior do not yield different effectiveness ratings. However, results showed that as long as peer ratings are high, effectiveness is high, and as peer ratings decrease (regardless of self ratings) effectiveness decreases at a decreasing rate.

The surface for self-peer ratings on *mission* at one standard deviation above the mean for performance orientation practices (Figure 40) was a convex surface, with its stationary point at not different from zero. The first principal axis ran parallel to the Y = X line, as evidenced by a *P11* value that was not significantly different than one. The quantity -p10/(p11+1) was 6.97, and

its 95% confidence interval included zero, indicating the axis did not shift from the $Y = X$ line. The second principal axis ran parallel to the $Y = -X$ line, as evidenced by a *P21* value that was not significantly different than negative one. The quantity $-p20/(p21+1)$ was 35.36 and its 95% confidence excluded zero, indicating that the axis shifted from the $Y = -X$ line. Since this shift puts the second principal axis outside the range of the data, it should be disregarded when interpreting the surface. The surface was flat along the $Y = X$ and both axes. However, the surface had a negative linear shape along the $Y = -X$ line. These results show that in higher performance-oriented cultures (as measured by GLOBE values) perfect agreement at low and high levels of *mission* ratings do not yield different effectiveness ratings. Furthermore, results show that as underestimation becomes less severe, effectiveness decreases in a linear fashion and continues to decrease as overestimation increases.

Summary

Overall, results showed that across cultures, self-direct report agreement has a positive linear relationship with effectiveness for all traits. This result goes contrary to the quadratic relationship that was originally hypothesized. Self-direct report disagreement, on the other hand, only made a difference for the *adaptability* trait in a quadratic form (i.e, effectiveness decreased at a decreasing rate as underestimation on adaptability ratings became less severe) and for *mission* in a linear form (i.e., effectiveness decreased as underestimation on mission ratings became less severe). Hypothesis 1a was not supported.

The relationship for self-peer differences and effectiveness across cultures differed from the one described above for self-direct report differences. Self-peer agreement had a positive quadratic relationship with effectiveness for the *involvement*, *adaptability*, and *mission* traits (i.e., as self and peer ratings on the traits increased, effectiveness increased at an increasing rate).

Although the relationship originally hypothesized was quadratic, the direction was negative. Interestingly, disagreement between self and peers did not relate to effectiveness across cultures. Hypothesis 1b was not supported.

Some general patterns across analyses indicate that although moderation was found for some culture dimensions, the shape of the surface differed from what was originally hypothesized, in most cases. Specifically, for the most part agreement was found to have a linear relationship to effectiveness, instead of a non-linear relationship, as it was hypothesized. Where a relationship was found for disagreement, it was a usually a positive quadratic relationship (i.e., effectiveness decreased sharply as self approached other ratings). Interestingly, for some culture dimensions, no relationship was found between self-other differences (i.e., agreement and disagreement) and effectiveness, at either high or low levels of that dimension.

Taken together, these results indicate that there are differences across culture dimensions in terms of the extent to which self-other differences impact perceptions of leadership effectiveness. For uncertainty avoidance, no moderation was found when rating the leader in terms of the *consistency* or *involvement* trait; thus, hypothesis 2 and 4 were not supported. Moderation was found, however, when leaders were rated in terms of the *adaptability* trait. Specifically, it was found that uncertainty avoidance (as measured by values and practices) moderates the relationship between self-peer differences and effectiveness, but it did not moderate it for self-direct report differences. It is important to note that although the moderation for uncertainty avoidance as measured by values was significant, it may not be meaningful given that for both high and low levels of this culture dimension, neither agreement nor disagreement related to effectiveness. Finally, for low levels of uncertainty avoidance (as measured by practices), neither agreement nor disagreement related to effectiveness; however, in high uncertainty avoidance cultures (as meas-

ured by practices), agreement was linearly related to effectiveness. Thus, Hypothesis 3 was partially supported.

A look into the power distance dimension showed that self-other (direct report and peer) differences when rating a leader on the *involvement* trait related to effectiveness. Furthermore, results showed that power distance as measured by practices help explain the moderation effect, whereas values did not moderate the relationship. Results showed that in low power distance cultures, self-direct report agreement had a linear positive relationship with effectiveness; however, self-peer agreement had a positive quadratic relationship with effectiveness (i.e., effectiveness increased at an increasing rate as both self and peer ratings on the involvement trait increased). It seems that agreement between the leader and peer on the involvement trait influences perceptions of effectiveness more so than agreement between the leader and direct reports. At low levels of power distance, disagreement had a negative curvilinear relationship for direct reports, but it did not matter to peers (i.e., neither over- nor underestimation related to effectiveness). In high power distance cultures, neither agreement nor disagreement between self and others (direct report and peer) related to effectiveness. In sum, hypothesis 5 was partially supported.

Several hypotheses investigated the role that future orientation played in the self-other differences and effectiveness relationship. Results showed that self-direct report differences when rating a leader on the *mission* trait related to effectiveness. Self-peer differences did not impact effectiveness. Furthermore, results showed that future orientation as measured by values helped explain the moderation effect, whereas practices did not moderate the relationship. At low levels of future orientation, neither agreement nor disagreement impacted effectiveness ratings. At high levels of future orientation, agreement did not impact effectiveness ratings, however, for disagreement a negative quadratic relationship was found, indicating that effectiveness

decreased as self ratings approach direct report ratings. Hypothesis 6 was partially supported.

Results showed that self-other differences (direct report and peer) when rating a leader on the *adaptability* trait related to effectiveness. Furthermore, results showed that future orientation as measured by values help explain the moderation effect for self-peer and self-direct report differences, whereas practices moderated the relationship for self-peer differences only. For direct reports, the moderated relationship was as hypothesized. Future orientation values and practices moderated the self-peer differences and effectiveness relationship in different ways. The surface for higher future orientation values and practices were similar, whereas the surface for lower future orientation practices showed different relationships. The main difference was that for future orientation practices, effectiveness ratings seemed to be driven by variability in peer ratings, whereas for future orientation values, effectiveness was impacted by agreement and disagreement between self and peers. Hypothesis 7 was partially supported.

Results showed that self-direct report differences when rating a leader on the *consistency* trait relate to effectiveness. Self-peer differences did not impact effectiveness. Furthermore, results showed that future orientation as measured by practices help explain the moderation effect, whereas values did not moderate the relationship. The surfaces for higher and lower future orientation practices were similar; however, the surface in higher future orientation cultures had a sharper decrease in effectiveness ratings as direct report ratings approach self ratings when effectiveness is high and direct report ratings are slightly higher than self ratings. Thus, Hypothesis 8 was supported.

For institutional collectivism, no moderation was found when rating the leader in terms of the involvement trait; thus, hypothesis 9 was not supported. For the rest of the culture dimensions (i.e., gender egalitarianism, assertiveness, and performance orientation) moderation was

found for self-peer differences only. Moreover, depending on the dimension, neither practices nor values moderated the relationship.

Results for gender egalitarianism practices showed that agreement on *involvement* is linearly related to effectiveness in lower gender egalitarianism cultures, but does not relate to effectiveness in higher gender egalitarianism cultures. Interestingly, effectiveness decreases at a decreasing rate as peer ratings approach self ratings (regardless of whether there is over or under estimation) and this decrease is sharper in higher gender egalitarianism cultures. Hypothesis 10 is partially supported.

Assertiveness values moderated the self-peer differences on *involvement* and effectiveness relationship. At lower levels of assertiveness, agreement was linearly related to effectiveness as well as disagreement (i.e., as underestimation became less severe, effectiveness increased and continued to increase as overestimation increases). At higher levels of assertiveness, effectiveness is high as long as peer ratings are high and decrease linearly as peer ratings decrease. Hypothesis 11 was partially supported.

Performance orientation practices moderated the self-peer differences and effectiveness relationship for the *involvement* trait. At low levels of performance orientation, agreement on the involvement trait was linearly related to effectiveness, while disagreement did not relate to effectiveness. At high levels of performance orientation, neither agreement nor disagreement on involvement related to effectiveness. Thus, Hypothesis 12 was partially supported.

Finally, moderation was also found for self-peer ratings on the *mission* trait at low and high levels of performance orientation values and practices; although the moderation effect differed for each. For values, effectiveness increased at an increasing rate when there is agreement between self and peers. In terms of the effect of disagreement, effectiveness decreases rapidly as

underestimation becomes less severe. This decrease is sharper in lower performance orientation cultures. For practices, results showed that variability in peer ratings drove the differences in effectiveness, more so than agreement between self and peer. Overall, hypothesis 13 was partially supported.

In sum, it seems that different aspects of culture influence self-other differences in distinct ways. For self-peer differences, uncertainty avoidance, power distance, future orientation, gender egalitarianism, and performance orientation dimensions moderated the relationship with effectiveness; for direct reports, power distance and future orientations dimensions moderated the relationship with effectiveness. Furthermore, these results indicate that depending on the way culture is operationalized (i.e., values versus practices) results will vary.

CHAPTER 5 - DISCUSSION

The present study sought to further investigate the impact that culture has on the self-other differences and effectiveness relationship. The Denison Model was used to capture leadership characteristics; thus, self-other ratings were captured in terms of the following traits: consistency, involvement, adaptability, and mission. Additionally, it also focused on comparing culture dimensions measured as values and practices in the Project GLOBE to determine whether both aspects of culture dimensions yield consistent results. Several hypotheses investigated whether the relationship between rater differences on specific leadership traits and effectiveness were moderated by each of the culture dimensions investigated in Project GLOBE.

The current results showed that across cultures self-direct report agreement was linearly related to effectiveness for all the leadership traits. The more agreement there is in terms of consistency, involvement, adaptability, and mission the higher the perceptions of effectiveness (from a boss perspective). This confirms past findings that indicate that it is not only agreement that is

important, but rather agreeing on the good behaviors portrayed by the leader (Atwater et al., 1998). The present findings, however, differ from findings reported by Atwater et al. (2005) in that their results indicated that there was a sharper decrease in performance at lower levels of rated behaviors.

Results for self-direct report disagreement showed that disagreement did not impact effectiveness ratings for involvement or consistency, but it had a negative quadratic relationship for adaptability and a negative linear relationship for mission. Previous findings have typically shown that for a severe over-estimator performance was lowest; then it began to increase as the overestimation becomes less severe. However, the present results showed that effectiveness decreased as self ratings approach direct report ratings, for the adaptability trait only. This finding may indicate that disagreement on the extent to which a leader is adaptable to the external environment has a more direct impact on boss' perception of leadership effectiveness, than any other leadership trait. Furthermore they show that underestimating one's ability to adapt to the external environment is not as problematic given that as underestimation increases (direct report's ratings get are higher than self ratings) perceptions of effectiveness increase as well.

A different relationship between self-peer agreement for the involvement, adaptability, and mission traits across countries was found. Specifically, results showed a positive quadratic relationship with effectiveness, such that as agreement at higher levels of the rated behavior increase, effectiveness increases at an increasing rate. Although previous findings have shown a quadratic relationship in the past, the relationship was negative, such that at lower levels of rated behaviors, a sharper decrease in effectiveness was observed, while at higher levels, effectiveness leveled off. Additionally, present results showed that self-peer agreement for consistency was linearly related to effectiveness, which again differs from the quadratic relationship found in the

past. Surprisingly, self-peer disagreement did not impact boss' perceptions of leadership effectiveness.

All in all, these results varied from past research findings on the overall effect of self-other differences to effectiveness relationship. Unlike past research, the present study operationalized leadership into four different traits, whereas previous studies have usually operationalized it as a single factor. Past operationalizations may have constrained our understanding about how different aspects of leadership are impacted by self-other differences. Furthermore, these results show that the self-direct report differences and effectiveness relationship differ from the relationship with self-peer differences. Specifically, the current findings indicate that agreement between self and peer has a greater impact on effectiveness on most of the leadership traits (i.e., effectiveness increases at an increasing rate for self-peer agreement), more so than agreement with direct reports. Previous research had shown similar relationships for both direct report and peer. These findings suggest that the extent to which effectiveness is affected by self-other differences depends on whether the other rater is a peer or a direct report.

Culture impacted the way self-other differences related to ratings of leadership effectiveness. Results showed that in some cases neither agreement nor disagreement impacted effectiveness, but in others depending on the level of the culture dimension (high versus low), the relationship between self-other differences and effectiveness varied. In some other cases either only agreement or disagreement mattered. All culture dimensions moderated the relationship, except for institutional collectivism. Additionally, more moderated relationships were found for peers than for direct reports. Although only one other study had investigated the effect of culture on self-other differences and effectiveness, some comparisons can be made. Specifically, Atwater et al. (2005) found that for European countries (i.e., either low in masculinity and individualism, or

high masculinity and individualism) self-other differences did not impact effectiveness ratings, whereas they did for the U.S (highest on masculinity and individualism). For European countries, other ratings were more important than agreement between self and other. The current results help clarify what aspect of culture (i.e., specific culture dimension) and at what level (i.e., level of the moderator) self-other differences impact effectiveness.

An important aspect that the present study investigated in an exploratory manner was whether GLOBE values and practices would yield comparable results. As discussed previously, results were not consistent across values and practices. Specifically, for some culture dimensions moderation was found for values, but not for practices (or vice versa). Moreover, more moderation effects were found for practices than for values. All in all, contrary to what Hofstede suggested (i.e., values and practices should not be separated), the present results show that depending on the way culture is operationalized, the degree to which culture impacts the self-other differences and effectiveness relationship will vary. Thus, it is important to understand which aspect of the culture is the most relevant to include when conducting cross-cultural research.

Implications

This study was a first attempt to look at all the culture dimensions as measured by GLOBE to investigate the extent to which rater differences impact leadership effectiveness. Previous research had only looked at select culture dimensions, but no comprehensive investigation had been carried out until now. As pointed out by Atwater et al. (2005) it is important to investigate how self-other differences work in cultures that are high versus low in all culture dimensions, not only in a select few.

These results have implications for cross-cultural management, specifically on the way 360-degree feedback is given across cultures. As the present results show, agreement and disa-

greement between raters will impact leadership effectiveness differently depending on the culture values that are most prevalent. However, since most of the research in this area has been done in the U.S. and results in this country have shown that a lack of self-awareness is related to lower performance (cf. Atwater, Roush, & Fischthal, 1995; Church, 1997) and to career derailment (McCall & Lombardo, 1983), it is especially important to not generalize these findings to countries with different cultures. As shown by these results, in a country that rates high on power distance (e.g., Russia), for instance, neither agreement nor disagreement relate to leadership effectiveness ratings. In this case, the feedback to the leader may need to have a different focus from comparing self ratings to others, since that difference is not as meaningful when thinking about leadership effectiveness. The feedback could focus on self perceptions and how those are related to the individual's career goals, more so than discrepancy with other ratings. Whereas in the U.S., the feedback would focus on making the ratings between self and other more alike, in a country like Russia the 360-degree feedback debrief session needs to have a different focus. Similarly, in a country that is high on uncertainty avoidance (e.g., China) although agreement relates to effectiveness, disagreement does not. In this case, the debrief session in this country should focus on coaching the leader to align ratings around the right type of behaviors and the right level of desired behaviors in order to increase effectiveness. In this country, neither over- nor underestimation will likely impact how effective the leader may be perceived, thus the focus should not be on how discrepant the ratings are. Given these results, depending on the culture, focusing on rater differences may or may not be important in terms of boss' perceptions of effectiveness. Overall, the focus of the 360-degree feedback debrief should vary to accomplish behavior change for the leader taking into account the culture that the leader operates in.

The present results can also help those expatriates who are managing leaders from a dif-

ferent culture. By being aware that agreement and disagreement impact effectiveness differently based on the cultural expectation, they will be able to coach their leaders more effectively. If in the host culture rater differences do not impact effectiveness, the expatriate needs to monitor expectations that may be carried from his/her home culture and adapt to what is relevant to the host culture. It is especially important for North American expatriates to know how to interpret agreement and disagreement between raters based on the culture where they are operating in order to provide adequate development to their direct reports.

Limitations and Future Research

This study does not come without its limitations. First, a convenience sample was used, thus obtaining samples that were representative of the population and that are comparable was not possible. As stated by Matsumoto and Hee Yoo (2006), ensuring representative and equivalent samples is important when conducting cross-cultural research. Future studies should attempt to use other methods for collecting data and most importantly, perform all the necessary checks to ensure that the data are comparable. When data are collected from different cultures, researchers should also attempt to correct for response bias (e.g., extreme response bias, or acquiescence bias) or at least be aware of it and understand how it influences the results (Matsumoto and Hee Yoo, 2006). In the present study, the culture data was gathered from the GLOBE study, which was conducted several years ago; thus, response bias could not be corrected. Along these lines, a second limitation was that the culture data are several years old. Because of globalization, the culture ratings may have changed as the years have passed; thus, measuring culture at the individual level and then performing the adequate analyses to group data should be done in future research studies.

The third limitation of the present study deals with the analyses performed in the data.

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Although there was good dispersion of the data in terms of having agreement and disagreement (good and bad), all the data was clustered along higher levels of the rated behaviors. Edwards (2002) suggests having data at both ends of the line (i.e., agreement at high *and* low levels of the rated behaviors; low and high levels of underestimation and overestimation). As such, these findings may only apply to higher levels of the rated behavior. Perhaps the relationships captured with these data are different from past research due to data restriction. Furthermore, future research should attempt to use a hierarchical linear modeling when running the polynomial regressions and using response surface methodology. Such analyses will help parse out variability due to error across groups (e.g., organizations, countries).

Finally, as shown by the current study, different aspects of culture (i.e., values versus practices) yield different results, more specifically practices helped explain more culture moderation effects than values. As such, future research should investigate these differences further.

All in all, this research study sought to advance our understanding of self-other differences and the impact on leadership effectiveness. As researchers take interest in continuing to explore the impact of culture, better guidance can be provided when using and implementing recommendations based on 360-degree feedback.

APPENDIX A: TABLES

Table 1. *Convergent Validity Coefficients Between GLOBE and Hofstede Scales*

GLOBE Scales		Hofstede Scales
		Power Distance
Power Distance	Practices	0.61**
	Values	-0.03
		Uncertainty Avoidance
Uncertainty Avoidance	Practices	-0.61**
	Values	0.32**
		Individualism
Institutional Collectivism	Practices	0.15
	Values	-0.55
In-group Collectivism	Practices	-0.82
	Values	-0.20
		Masculinity
Gender Egalitarianism	Practices	-0.16
	Values	0.11
Assertiveness	Practices	0.42**
	Values	-0.12

$** = p < .01$

Table 2. *List of Hypotheses*

	Uncertainty Avoidance	Power Distance	Future Orientation	Institutional Collectivism	Gender Egali-tarianism	Assertiveness	Performance Orientation
Involvement	H4	H5		H9	H10	H11	H12
Consistency	H2		H8				
Mission			H6				H13
Adaptability	H3		H7				

Table 3. *Means, standard deviations, correlations, and reliabilities for self, subordinate, and peer ratings of leadership traits and boss ratings of leadership effectiveness*

	Mean	SD	Correlations												
			1	2	3	4	5	6	7	8	9	10	11	12	13
1. Self-Consistency	5.76	0.52	(.90)												
2. Self-Involvement	5.81	0.53	.74**	(.91)											
3. Self-Adaptability	5.67	0.59	.74**	.69**	(.91)										
4. Self-Mission	5.58	0.69	.72**	.73**	.75**	(.95)									
5. DR-Consistency	5.66	0.59	.14**	.16**	.11**	.13**	(.96)								
6. DR -Involvement	5.59	0.67	.12**	.21**	.12**	.15**	.89**	(.97)							
7. DR -Adaptability	5.64	0.60	.14**	.18**	.20**	.16**	.85**	.83**	(.96)						
8. DR -Mission	5.53	0.68	.15**	.20**	.15**	.22**	.86**	.86**	.86**	(.98)					
9. Peer-Consistency	5.59	0.57	.12**	.07**	.05**	.05**	.35**	.30**	.27**	.27**	(.96)				
10. Peer-Involvement	5.50	0.62	.11**	.15**	.08**	.10**	.38**	.39**	.35**	.34**	.84**	(.96)			
11. Peer-Adaptability	5.50	0.58	.11**	.10**	.16**	.10**	.31**	.29**	.35**	.29**	.80**	.80**	(.95)		
12. Peer-Mission	5.43	0.65	.11**	.12**	.10**	.15**	.32**	.31**	.32**	.34**	.78**	.83**	.84**	(.97)	
13. Effectiveness	5.58	0.90	.10**	.06**	.09**	.09**	.24**	.23**	.24**	.23**	.26**	.25**	.26**	.27**	(0.91)

Note: DR = Direct Report; N (self) = 4242; N (direct report) = 15,583; N (Peer) = 14,929; N (Effectiveness) = 5208; ** p < .01

Table 4. *Ns, means, standard deviations, minimums and maximums for culture dimension variables*

	Mean	SD	Min	Max
Values				
Power Distance	4.84	0.40	3.89	5.63
Uncertainty Avoidance	4.54	0.40	2.88	5.32
Gender Egalitarianism	3.45	0.20	2.50	4.08
Assertiveness	4.29	0.24	3.38	4.79
Future Orientation	4.29	0.35	2.88	5.07
Institutional Collectivism	4.25	0.23	3.53	5.22
In-Group Collectivism	4.20	0.48	3.53	5.92
Performance Orientation	4.41	0.28	3.32	4.94
Practices				
Power Distance	2.67	0.22	2.04	3.65
Uncertainty Avoidance	3.82	0.54	3.16	5.61
Gender Egalitarianism	4.90	0.27	3.68	5.17
Assertiveness	3.75	0.55	2.66	5.56
Future Orientation	5.15	0.26	4.33	6.20
Institutional Collectivism	4.47	0.34	3.89	5.62
In-Group Collectivism	5.53	0.30	4.99	6.25
Performance Orientation	5.89	0.26	4.92	6.42

Note: Number of countries = 38; Sample size = 4242

Table 5. *Percentages of underestimation, agreement, and over-estimation for direct reports*

	%
Self_Involv < DR_Involv	33.70
In agreement	33.10
Self_Involv > DR_Involv	33.10
Self_Consist < DR_Consist	34.90
In agreement	32.40
Self_Consist > DR_Consist	32.60
Self_Adapt < DR_Adapt	34.20
In agreement	32.40
Self_Adapt > DR_Adapt	33.50
Self_Miss < DR_Miss	32.30
In agreement	34.20
Self_Miss > DR_Miss	33.50

Note: Involv = involvementt; Consist = Consistency; Adapt = Adaptability; Miss = Mission; DR = Direct report

Table 6. *Percentages of underestimation, agreement, and over-estimation for peers*

	%
Self_Involv < Peer_Involv	34.80
In agreement	32.30
Self_Involv > Peer_Involv	33.00
Self_Consist < Peer_Consist	34.60
In agreement	32.60
Self_Consist > Peer_Consist	32.70
Self_Adapt < Peer_Adapt	34.70
In agreement	32.10
Self_Adapt > Peer_Adapt	33.20
Self_Miss < Peer_Miss	32.20
In agreement	34.10
Self_Miss > Peer_Miss	32.70

Note: Involv = involvementt; Consist = Consistency; Adapt = Adaptability; Miss = Mission;

Table 7. *Polynomial Regression Results - Hypothesis 1a and 1b*

	Consistency				Involvement			
	R^2	*F*	B	*SE*	R^2	*F*	B	*SE*
Self-Direct Report	0.06	45.26**			0.05	37.62**		
Self			0.38**	0.14			0.16	0.13
Direct Report			0.45**	0.11			0.31**	0.09
Self squared			-0.08*	0.04			-0.05	0.04
Self * Direct Report			0.00	0.05			0.03	0.04
Direct Report Squared			-0.04	0.03			-0.02	0.02
Self-Peer	0.07	56.88**			0.06	47.19**		
Self			0.41*	0.14			0.21	0.13
Peer			0.34*	0.11			0.29*	0.09
Self squared			-0.07*	0.04			-0.03	0.04
Self * Peer			-0.04	0.05			-0.03	0.04
Peer Squared			0.05	0.03			0.05*	0.02

*Note: * p < .05, ** p < .01*

Table 7. *Polynomial Regression Results - Hypothesis 1a and 1b (Continued)*

	Adaptability				Mission			
	R^2	*F*	B	*SE*	R^2	*F*	B	*SE*
Self-Direct Report	0.06	45.99**			0.05	37.53**		
Self			0.00	0.10			0.00	0.10
Direct Report			0.42**	0.08			0.42**	0.08
Self squared			-0.02	0.03			-0.02	0.03
Self * Direct Report			0.08**	0.02			0.08**	0.02
Direct Report Squared			-0.06*	0.03			-0.06*	0.03
Self-Peer	0.08	61.51**			0.08	59.53**		
Self			0.02	0.06			0.01	0.09
Peer			0.19**	0.06			0.11	0.07
Self squared			0.01	0.02			-0.02	0.03
Self * Peer			0.01	0.03			0.08**	0.02
Peer Squared			0.08**	0.02			0.70**	0.02

*Note: * p < .05, ** p < .01*

Table 8. *Slopes along lines of interest for hypothesis 1*

	Y = X		Y = -X		First Principal Axis		Secondary Principal Axis	
	a1	a2	a3	a4	a5	a6	a7	a8
Self-Direct Report								
Involvement	0.47*	-0.05	-0.16	-0.10	0.97*	-0.12	0.53	-0.07
Consistency	0.83*	-0.11	-0.08	-0.12	60.76*	-12.01	0.41	-0.08
Adaptability	0.42*	0.00	-0.42*	-0.16*	0.25*	0.01	-11.67*	-0.35*
Mission	0.26*	0.02	-0.38*	-0.04	0.10	0.03	-1.75	-0.47
Self-Peer								
Involvement	0.50*	-0.02	-0.09	0.05	-11.18	1.43*	0.30	-0.04
Consistency	0.75*	-0.06	0.08	0.02	-15.33*	2.19*	0.53	-0.08
Adaptability	0.12	0.13*	-0.11	-0.03	0.87	0.64*	-0.06	-0.04
Mission	0.21*	0.10*	-0.17	0.08	14.02	17.35*	0.01	0.01

*Note: * p < .05*

Table 9. *Stationary points and principal axes for hypothesis 1*

	Stationary Point		First Principal Axis		Secondary Principal Axis	
	Xo	Yo	P10	P11	P20	P21
Self-Direct Report Agreement						
Involvement	3.99	9.12	-0.59	2.43	10.76	-0.41
Consistency	2.53	6.25	-39.21*	17.96*	6.39	-0.06
Adaptability	-16.75*	-7.18*	2.45*	0.57*	-36.33*	-1.74*
Mission	-1.86	4.39	4.92*	0.28	-2.23	-3.56
Self-Peer Agreement						
Involvement	3.92	-1.50	18.12	-5.01	-2.29*	0.20
Consistency	3.50	-1.98	20.14	-6.32	-2.54*	0.16
Adaptability	-0.68	-0.40	1.33	2.52*	-0.67	-0.40*
Mission	-0.40	-1.94	4.81*	14.87*	-1.22*	-0.07

*Note: * p < .05*

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Table 10. *Significant polynomial regressions for hypotheses 2 to 11*

Hypotheses	Direct Report		Peer	
	Values	Practices	Values	Practices
Hypothesis 2 (Mod: Uncertainty Avoidance IV: Consistency)				
Hypothesis 3 (Mod: Uncertainty Avoidance IV: Adaptability)			+	+
Hypothesis 4 (Mod: Uncertainty Avoidance IV: Involvement)				
Hypothesis 5 (Mod: Power Distance IV: Involvement)		+		+
Hypothesis 6 (Mod: Future Orientation IV: Mission)	+			
Hypothesis 7 (Mod: Future Orientation IV: Adaptability)	+		+	+
Hypothesis 8 (Mod: Future Orientation IV: Consistency)		+		
Hypothesis 9 (Mod: Institutional collectivism IV: Involvement)				
Hypothesis 10 (Mod: Gender Egalitarianism IV: Involvement)				+
Hypothesis 11 (Mod: Assertiveness IV: Involvement)			+	
Hypothesis 12 (Mod: Performance Orientation IV: Involvement)				+
Hypothesis 13 (Mod: Performance Orientation IV: Mission)			+	+

Note: Moderators are in parentheses; + = significant change in R^2

    Mod = moderator

    IV = independent variable (i/e., self-other difference on hypothesized trait

Table 11. *Simple quadratic equation at low and high levels of the moderator for hypotheses 2 to 13*

	Intercept	X	Y	X²	XY	Y²
Hypothesis 3 (Adaptability trait)						
S-P (UA values – low)	4.78*	0.13	0.25	0.00	-0.01	0.08
S-P (UA values – high)	4.89*	0.07	0.36*	0.01	-0.05	0.07
S-P (UA practices - low)	4.92*	0.07	0.28*	0.00	-0.02	0.07*
S-P (UA practices - high)	4.70*	0.16	0.33*	0.00	-0.04	0.07
Hypothesis 5 (Involvement trait)						
S-DR (PD practices – low)	4.68*	0.19	0.59*	-0.04	0.02	-0.11*
S-DR (PD practices – high)	5.34*	0.07	0.11	-0.06	0.07	0.01
S-P (PD practices – low)	4.51*	0.29	0.47*	0.00	-0.13	0.07
S-P (PD practices – high)	5.26*	0.09	0.11	-0.07	0.08	0.02
Hypothesis 6 (Mission trait)						
S-DR (FO values – low)	5.14*	0.03	0.24	0.03	-0.02	0.00
S-DR (FO values – high)	5.16*	-0.15	0.38*	0.02	0.07	-0.05
Hypothesis 7 (Adaptability trait)						
S-DR (FO values – low)	4.52*	0.15	0.87*	-0.03	0.03	-0.19*
S-DR (FO values – High)	4.26*	0.24	1.19*	-0.05	0.02	-0.30*
S-P (FO values – low)	4.90*	0.13	0.08	0.00	-0.03	0.16*
S-P (FO values – high)	4.79*	0.07	0.45*	0.01	-0.04	0.03
S-P (FO practices – low)	4.97*	0.04	0.24*	0.01	-0.02	0.09
S-P (FO practices – high)	4.68*	0.16	0.39*	0.00	-0.05	0.06
Hypothesis 8 (Consistency trait)						
S-DR (FO practices – low)	4.67*	0.36*	0.44*	-0.08*	0.00	-0.04
S-DR (FO practices – high)	4.53*	0.40*	0.48*	-0.09*	0.00	-0.04
Hypothesis 10 (Involvement trait)						
S-P (GE practices – low)	4.72*	0.12	0.43*	-0.02	-0.01	0.03
S-P (GE practices – high)	4.86*	0.08	0.28*	0.02	-0.03	0.08*
Hypothesis 11 (Involvement trait)						
S-P (Assert values - low)	4.54*	0.53*	0.23	-0.08	-0.09	0.09*
S-P (Assert values – high)	5.12*	0.00	0.34*	-0.02	0.02	0.01
Hypothesis 12 (Involvement trait)						
S-P (PO practices – low)	4.90*	0.35	0.15	-0.07	-0.07	0.10*
S-P (PO practices – high)	4.75*	0.10	0.48*	0.00	-0.01	0.00
Hypothesis 13 (Mission trait)						
S-P (PO values – low)	-0.59	-0.09	-1.12	-1.73	0.25	0.58*
S-P (PO values – high)	-0.82	-0.26	-1.76	-1.84	0.19	0.54*
S-P (PO practices – low)	-6.27*	-0.93	-93.99*	-14.85*	-0.5	0.07
S-P (PO practices – high)	5.61	-8.46*	-14.67	1.11	-3.39	-0.9

*Note: * p < .05; S-P = self-peer; S-DR = self-direct report; UA = uncertainty avoidance; PD = power distance; FO = future orientation; GE = gender egalitarianism; Assert = Assertiveness; PO = performance orientation.*

Table 12. *Slopes along lines of interest for hypotheses 2-13*

	Y = X		Y = -X		First Principal Axis		Secondary Principal Axis	
	a1	a2	a3	a4	a5	a6	a7	a8
Hypothesis 3 (Adaptability trait)								
S-P (UA values – low)	0.38	0.07	-0.13	0.09	-3680.75*	28.11*	0.14	0.00
S-P (UA values – high)	0.42	0.02	-0.29	0.13	-138.39*	0.58*	0.21	0.00
S-P (UA practices - low)	0.35	0.06	-0.21	0.10	322.25*	4.01*	0.11	0.00
S-P (UA practices - high)	0.49*	0.04	-0.17	0.11	-70.15*	1.35*	0.25	0.00
Hypothesis 5 (Involvement trait)								
S-DR (PD practices – low)	0.78*	-0.13	-0.40	-0.17	0.26	-0.04	24.11*	-3.73*
S-DR (PD practices – high)	0.18	0.02	-0.04	-0.12	0.29	0.21	-0.12	-0.09
S-P (PD practices – low)	0.76*	-0.06	-0.18	0.20	-5.06	0.43*	0.63	-0.05
S-P (PD practices – high)	0.20	0.03	-0.02	-0.13	0.26	0.22	-0.11	-0.10
Hypothesis 6 (Mission trait)								
S-DR (FO values – low)	0.27	0.02	-0.21	0.05	1.36*	0.04	0.87	0.02
S-DR (FO values – high)	0.23	0.03	-0.54*	-0.10	0.08	0.04	-1.10	-0.51
Hypothesis 7 (Adaptability trait)								
S-DR (FO values – low)	1.02*	-0.20*	-0.73*	-0.26*	0.21	-0.03	151.78*	-22.99*
S-DR (FO values – High)	1.43*	-0.33*	-0.95*	-0.38	0.28	-0.05	756.09*	-144.12*
S-P (FO values – low)	0.21	0.14*	0.04	0.19*	754.32*	19.98*	0.14	0.00
S-P (FO values – high)	0.52*	-0.01	-0.38	0.08	-7.24*	0.14	0.41	-0.01
S-P (FO practices – low)	0.28	0.08	-0.20	0.12	34.19*	5.09*	0.07	0.01
S-P (FO practices – high)	0.55*	0.01	-0.23	0.10	-16.02	0.70*	0.31	-0.01
Hypothesis 8 (Consistency trait)								
S-DR (FO practices – low)	0.79*	-0.12	-0.08	-0.12	197.24*	-44.00*	0.37	-0.08
S-DR (FO practices – high)	0.88*	-0.13	-0.08	-0.13	543.92*	-119.85*	0.41	-0.09
Hypothesis 10 (Involvement trait)								
S-P (GE practices – low)	0.55*	0.00	-0.31	0.02	-15.75	1.30*	0.22	-0.02
S-P (GE practices – high)	0.36	0.07	-0.19	0.13	17.18	2.04*	0.13	0.02
Hypothesis 11 (Involvement trait)								
S-P (Assert values - low)	0.75*	-0.08	0.30	0.10	-10.60	1.72*	0.60*	-0.10
S-P (Assert values – high)	0.34	0.01	-0.34	-0.03	1.77*	0.16	-0.27	-0.02
Hypothesis 12 (Involvement trait)								
S-P (PO practices – low)	0.50	-0.04	0.20	0.09	-13.90	2.76*	0.39	-0.08
S-P (PO practices – high)	0.58	-0.02	-0.38	0.00	-0.65	0.00	2.28	-0.01
Hypothesis 13 (Mission trait)								
S-P (PO values – low)	0.02	0.24	0.43	1.26*	3.18	2.67*	0.13	0.11
S-P (PO values – high)	0.08	0.19	0.25	0.89*	3.44	2.11*	0.13	0.08
S-P (PO practices – low)	0.13	0.08	-0.07	0.11	259.74*	20.73*	0.04	0.00
S-P (PO practices – high)	0.34	0.10	-0.40*	0.03	-1.27	0.11	-0.28	0.03

Note: $* p < .05$; S-P = self-peer; S-DR = self-direct report; UA = uncertainty avoidance; PD = power distance; FO = future orientation; GE = gender egalitarianism; Assert = Assertiveness; PO = performance orientation.

Table 13. *Stationary points and principal axes for hypotheses 2-13*

	Stationary Point		First Principal Axis		Secondary Principal Axis	
	Xo	Yo	P10	P11	P20	P21
Hypothesis 3 (Adaptability trait)						
S-P (UA values – low)	65.48*	2.13	1196.96*	-18.25*	-1.46	0.05
S-P (UA values – high)	119.06*	44.17*	350.21*	-2.57	-2.15*	0.39
S-P (UA practices - low)	-40.17*	-7.34*	-297.02*	-7.21*	-1.77*	0.14
S-P (UA practices - high)	26.02*	4.67	108.90*	-4.01	-1.83*	0.25
Hypothesis 5 (Involvement trait)						
S-DR (PD practices – low)	3.23*	3.06	2.49	0.18	21.50*	-5.70*
S-DR (PD practices – high)	-0.69	-2.37	-0.5	2.71	-2.62	-0.37
S-P (PD practices – low)	5.87*	2.08	12.07	-1.7	-1.37*	0.59
S-P (PD practices – high)	-0.58	-2.04	-0.65	2.4	-2.28	-0.42
Hypothesis 6 (Mission trait)						
S-DR (FO values – low)	-18.32*	-67.27*	-72.40*	-0.28	-1.83	3.57*
S-DR (FO values – high)	-1.08	2.91	3.33*	0.39	0.12	-2.57
Hypothesis 7 (Adaptability trait)						
S-DR (FO values – low)	3.30*	2.52*	2.22*	0.09	38.32*	-10.85*
S-DR (FO values – High)	2.62*	2.08*	1.96*	0.05	59.49*	-21.88*
S-P (FO values – low)	-18.88*	-1.93*	-211.46*	-11.10*	-0.23	0.09
S-P (FO values – high)	26.57	12.96	52.78	-1.5	-4.77	0.67
S-P (FO practices – low)	-3.36	-1.76	-27.05*	-7.52*	-1.32*	0.13
S-P (FO practices – high)	11.46*	1.09	36.80*	-3.12	-2.58*	0.32
Hypothesis 8 (Consistency trait)						
S-DR (FO practices – low)	2.24	5.74	-69.92*	33.75*	5.8	-0.03
S-DR (FO practices – high)	2.27	6.01	-117.69*	54.51*	6.05	-0.02
Hypothesis 10 (Involvement trait)						
S-P (GE practices – low)	6.08	-6.93*	35.31*	-6.95*	-7.80*	0.14
S-P (GE practices – high)	-4.22	-2.38	-22.41*	-4.75*	-1.5	0.21
Hypothesis 11 (Involvement trait)						
S-P (Assert values - low)	3.07*	0.32	12.5	-3.97	-0.46	0.25
S-P (Assert values – high)	-5.57*	-10.70*	7.34	3.24*	-12.41*	-0.31
Hypothesis 12 (Involvement trait)						
S-P (PO practices – low)	2.51*	0.1	12.93	-5.1	-0.4	0.2
S-P (PO practices – high)	85.58*	-71.63*	36.72*	-1.27	-139.23*	0.79
Hypothesis 13 (Mission trait)						
S-P (PO values – low)	-0.59	-0.09	-1.12	-1.73	0.25	0.58*
S-P (PO values – high)	-0.82	-0.26	-1.76	-1.84	0.19	0.54*
S-P (PO practices – low)	-6.27*	-0.93	-93.99*	-14.85*	-0.5	0.07
S-P (PO practices – high)	5.61	-8.46*	-14.67	1.11	-3.39	-0.9

Note: $* p < .05$; S-P = self-peer; S-DR = self-direct report; UA = uncertainty avoidance; PD = power distance; FO = future orientation; GE = gender egalitarianism; Assert = Assertiveness; PO = performance orientation.

APPENDIX B: FIGURES

Figure 1. Main effect: Self-other differences to effectiveness relationship

Figure 2. Moderated effect: Self-other differences to effectiveness relationship as moderated by culture dimensions
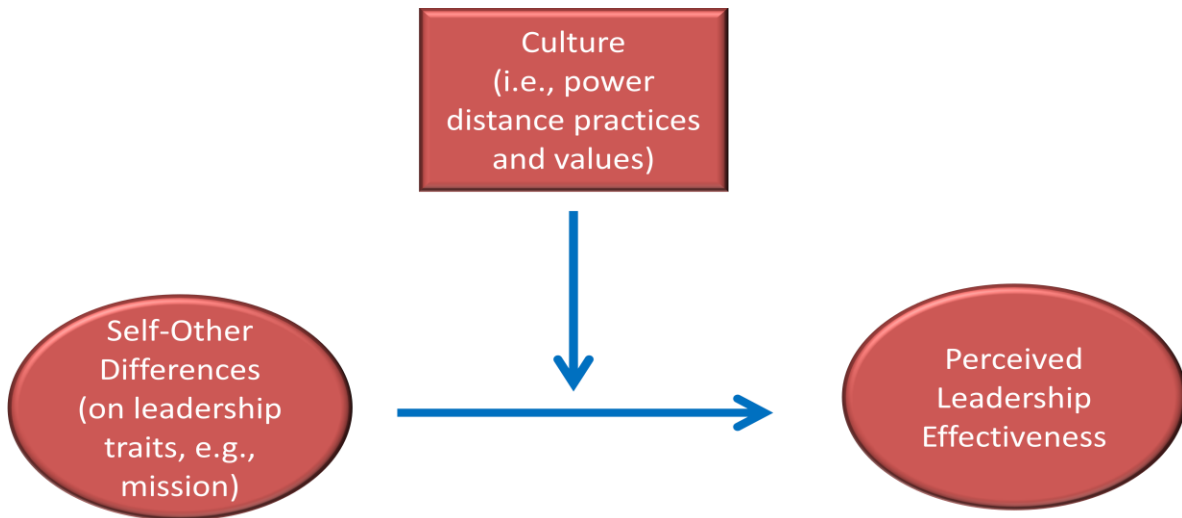
Figure 3. Self-other differences to effectiveness relationship in the U.S.
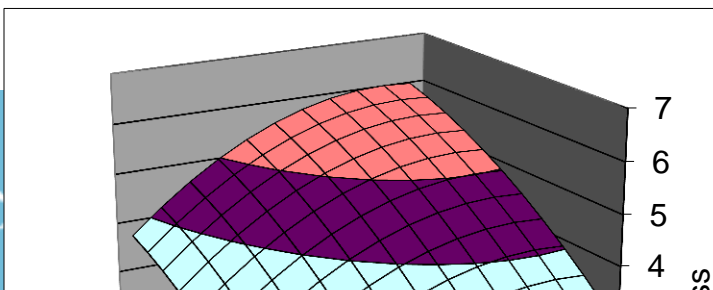
Figure 4. Denison & Neale's (1996) leadership framework.
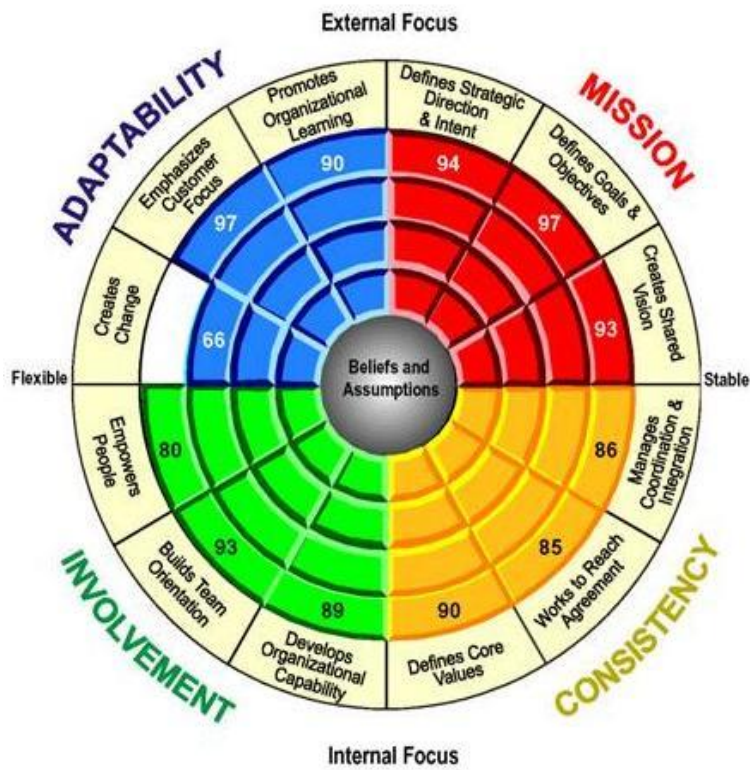
Figure 5. Hypothesis 1a Surface – Involvement
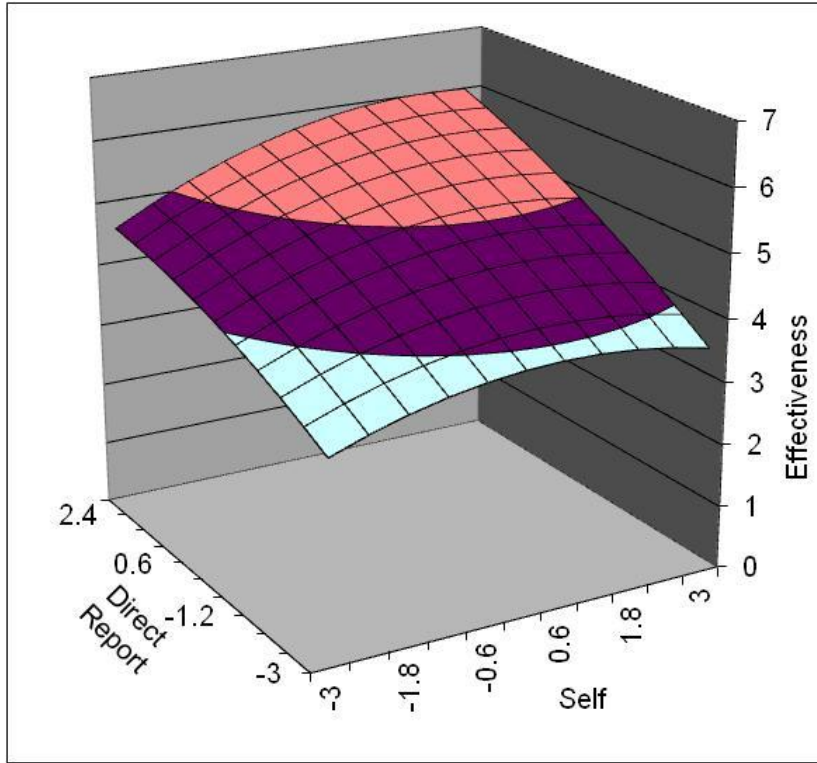
Figure 6. Hypothesis 1a Surface – Consistency
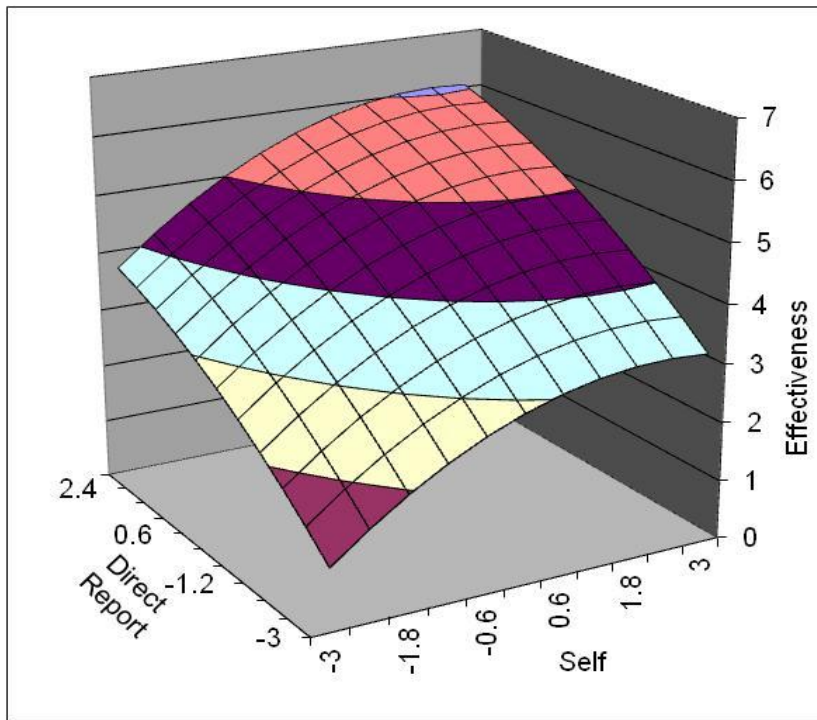
Figure 7. Hypothesis 1a Surface – Adaptability
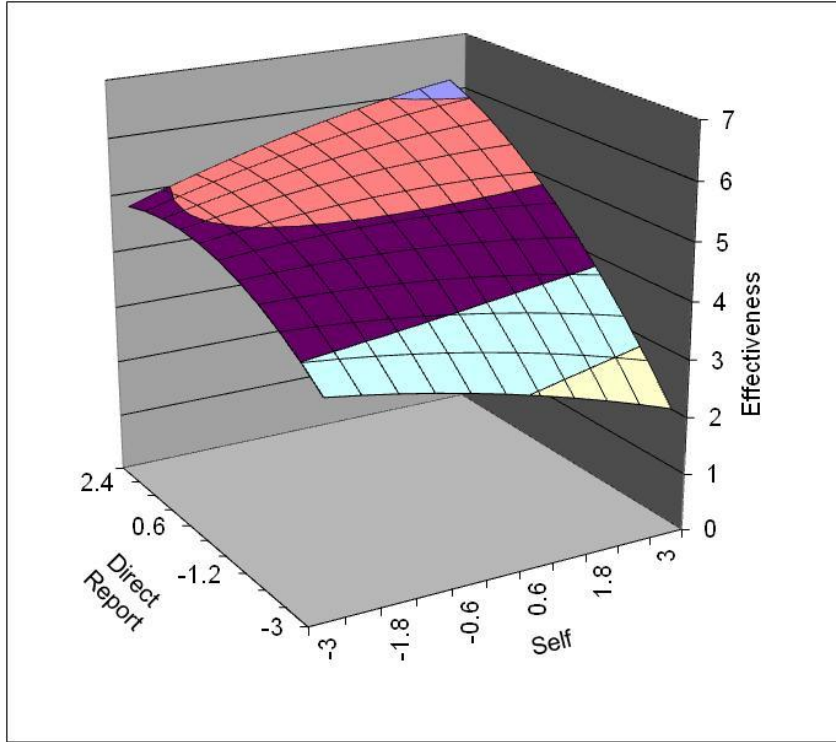
Figure 8. Hypothesis 1a Surface – Mission
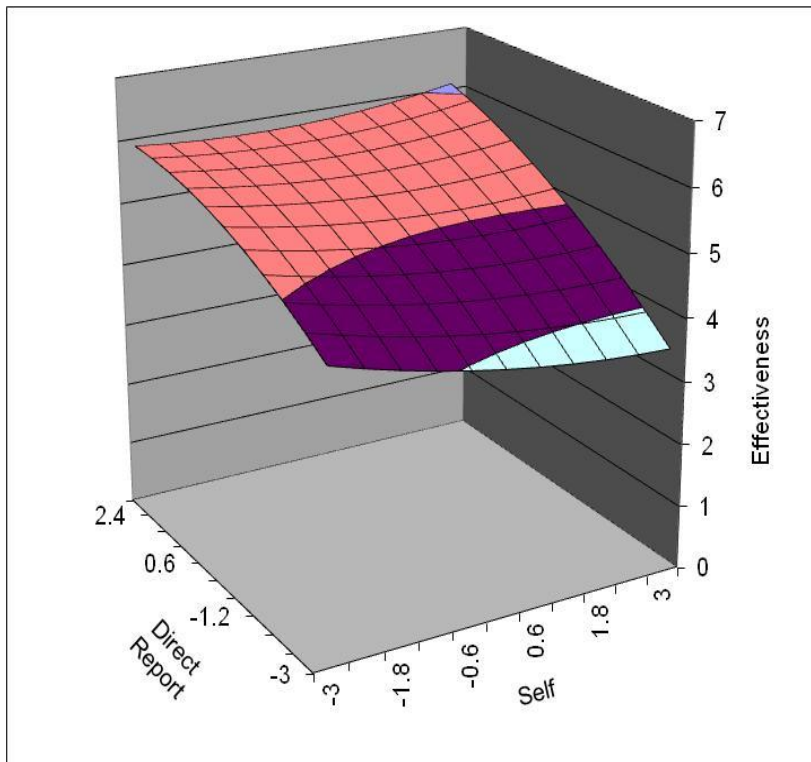
Figure 9. Hypothesis 1b Surface – Involvement
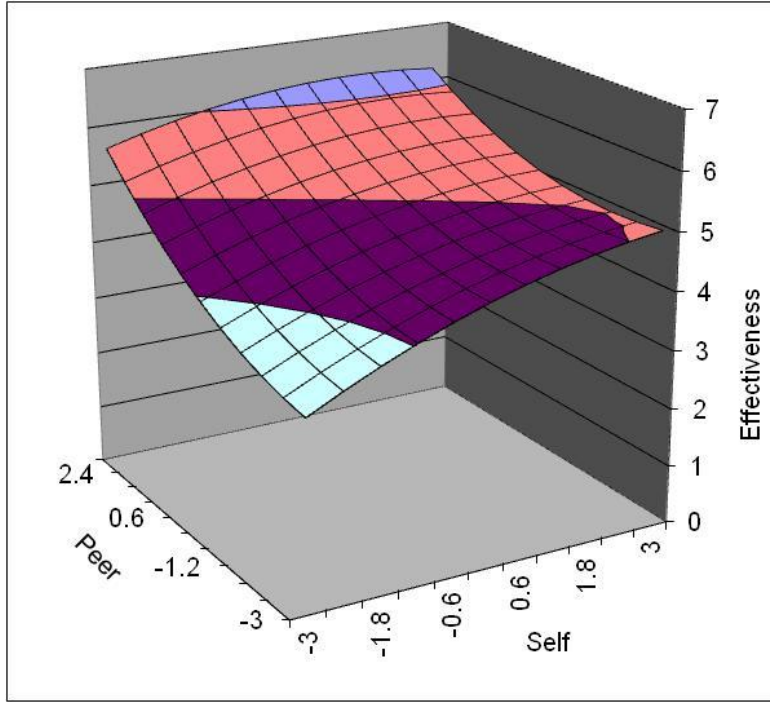
Figure 10. Hypothesis 1b Surface – Consistency
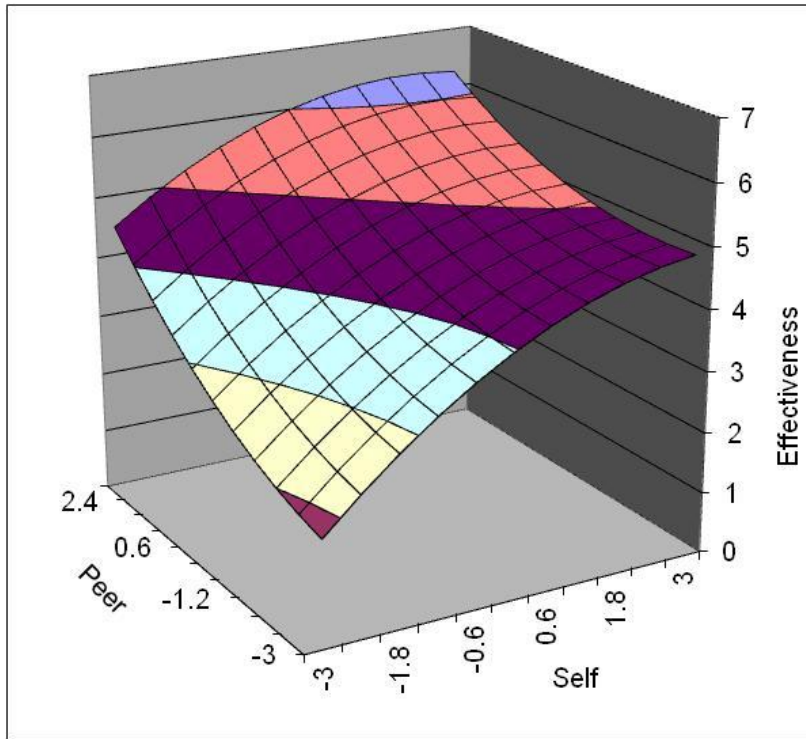
Figure 11. Hypothesis 1b Surface – Adaptability
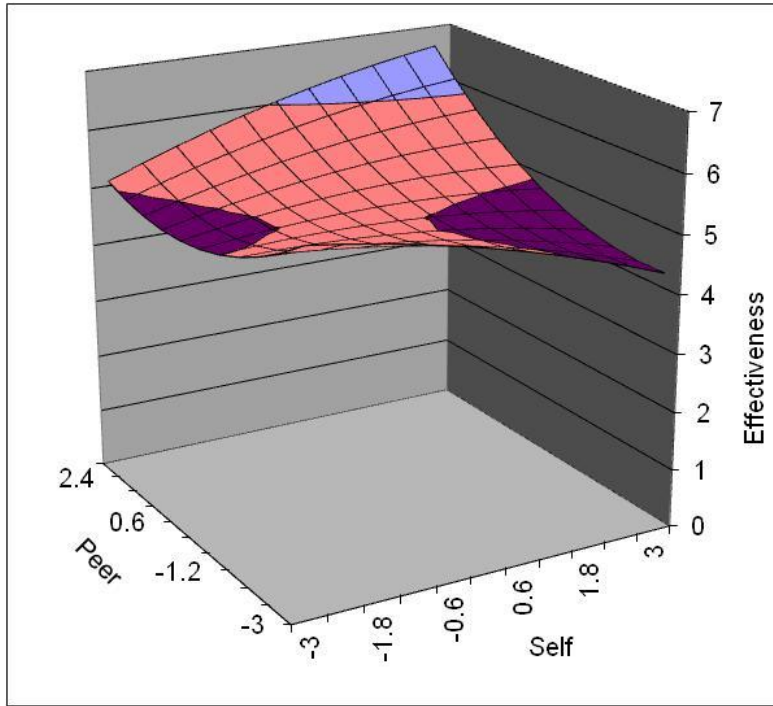
Figure 12. Hypothesis 1b Surface – Mission
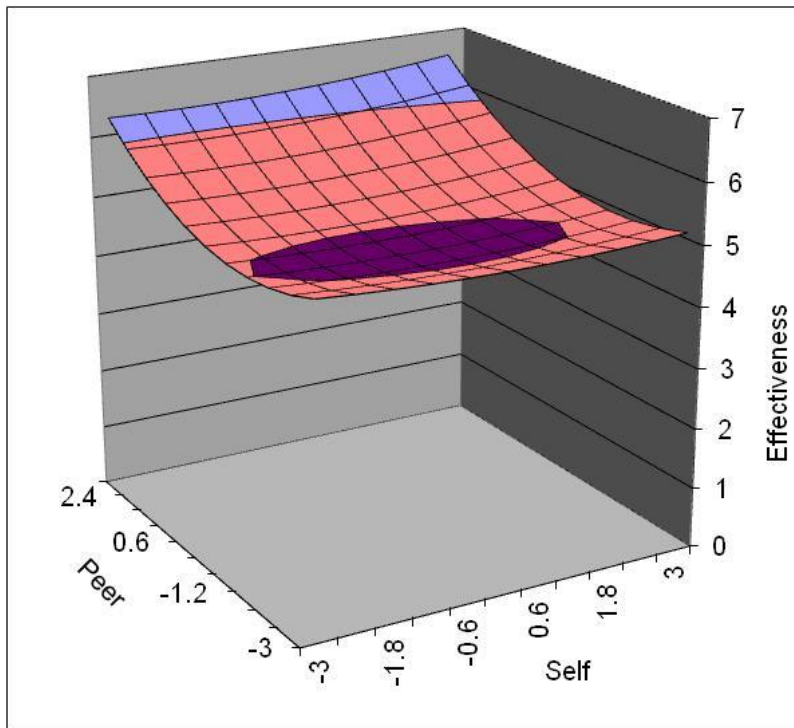
Figure 13. Hypothesis 3 (Self-Peer) Surface – Uncertainty Avoidance (Values) Low
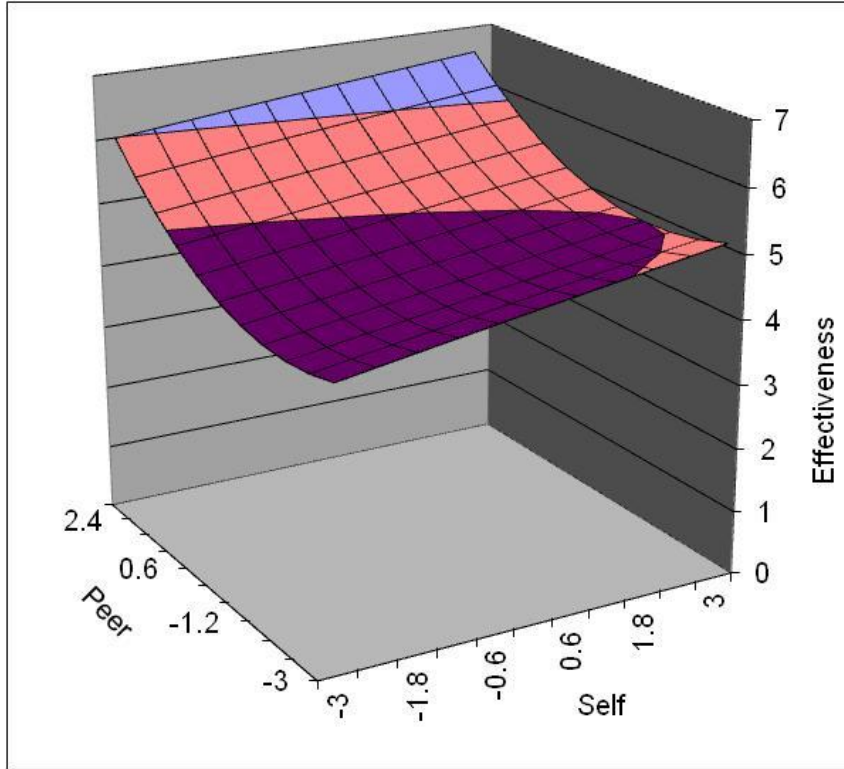
Figure 14. Hypothesis 3 (Self-Peer) Surface – Uncertainty Avoidance (Values) High
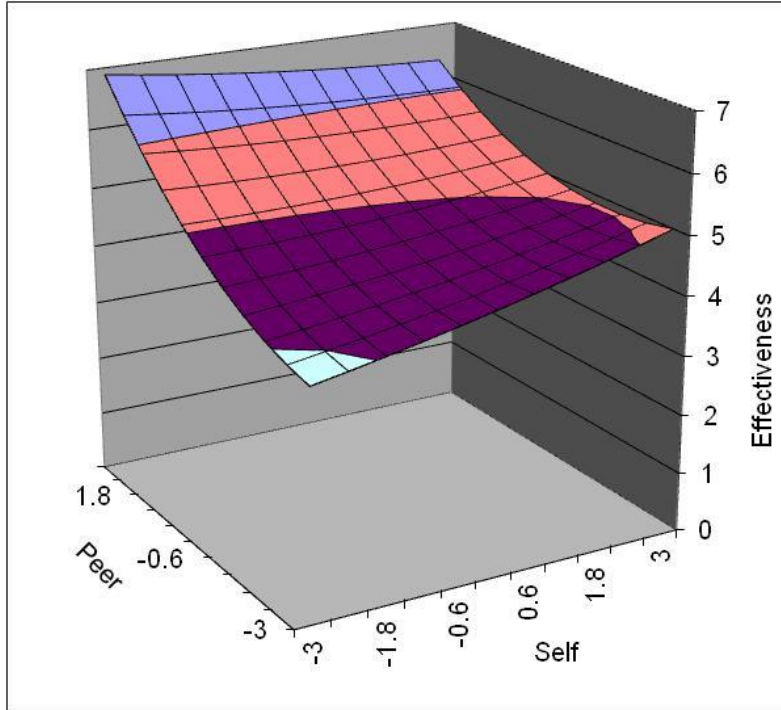
Figure 15. Hypothesis 3 (Self-Peer) Surface – Uncertainty Avoidance (Practices) Low
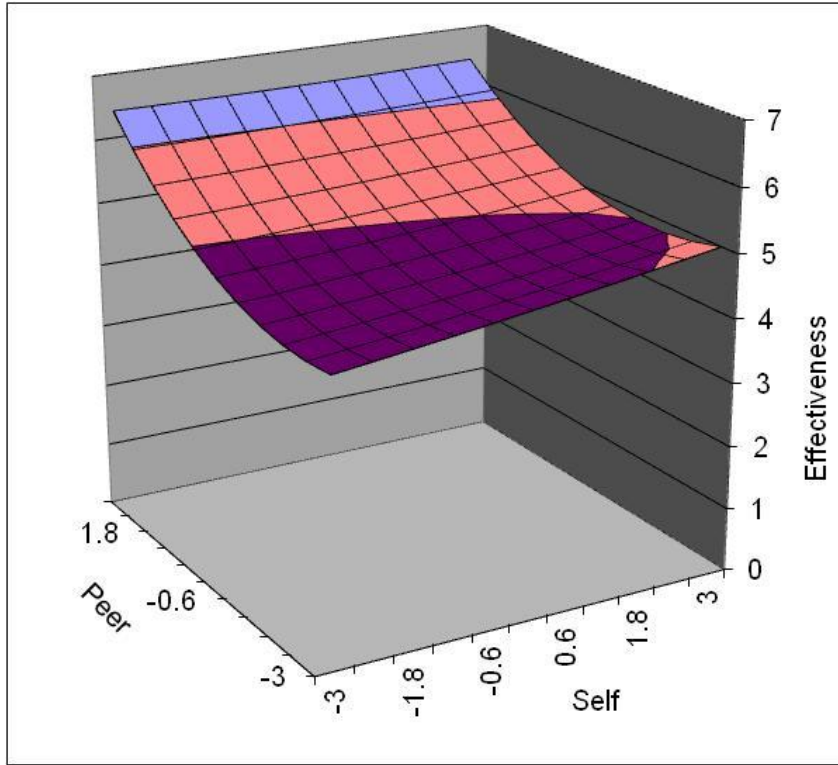
Figure 16. Hypothesis 3 (Self-Peer) Surface – Uncertainty Avoidance (Practices) High
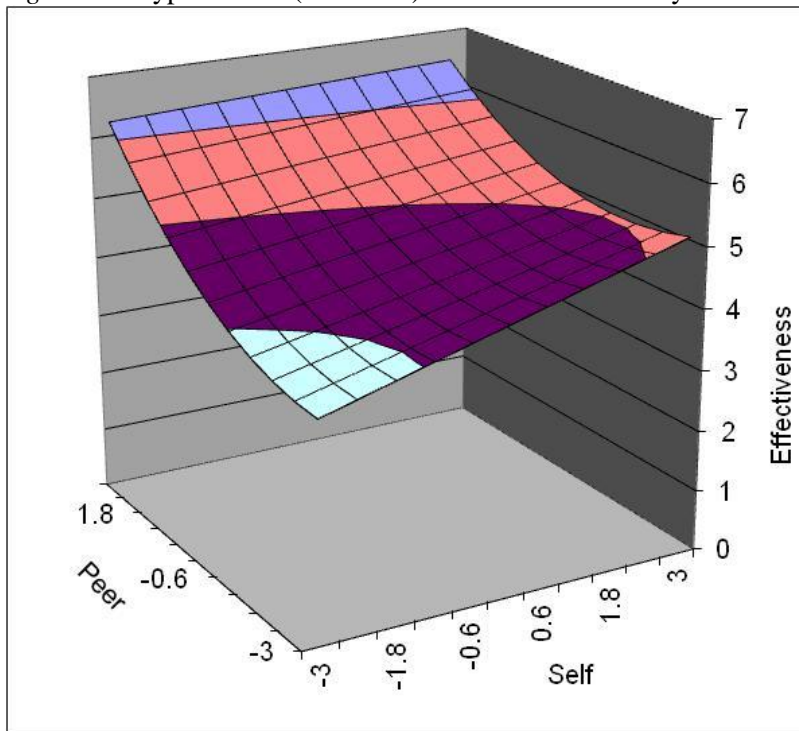
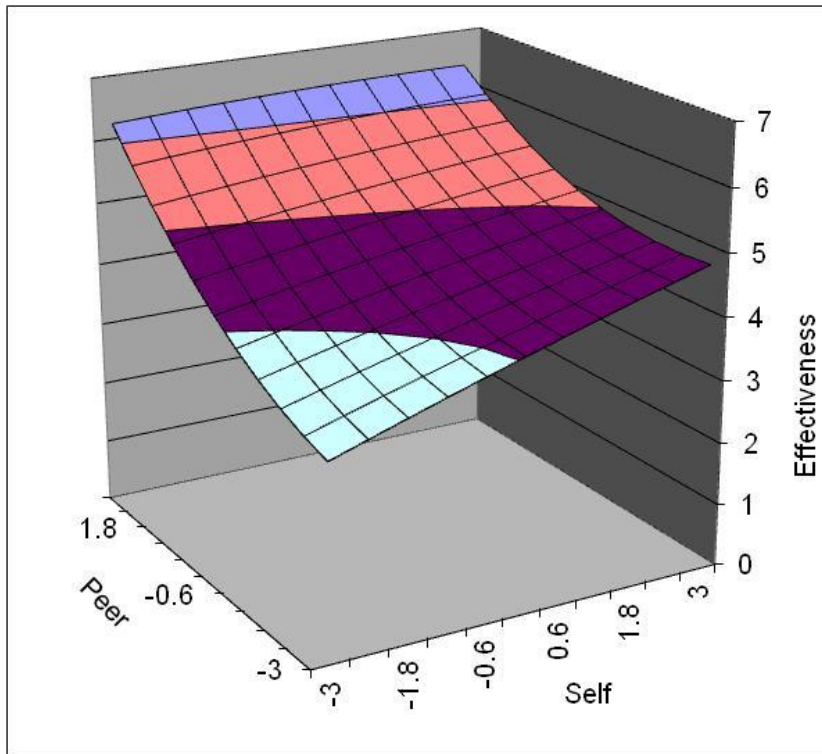*Figure 17*. Hypothesis 5 (Self-Direct Report) Surface – Power Distance (Practices) Low
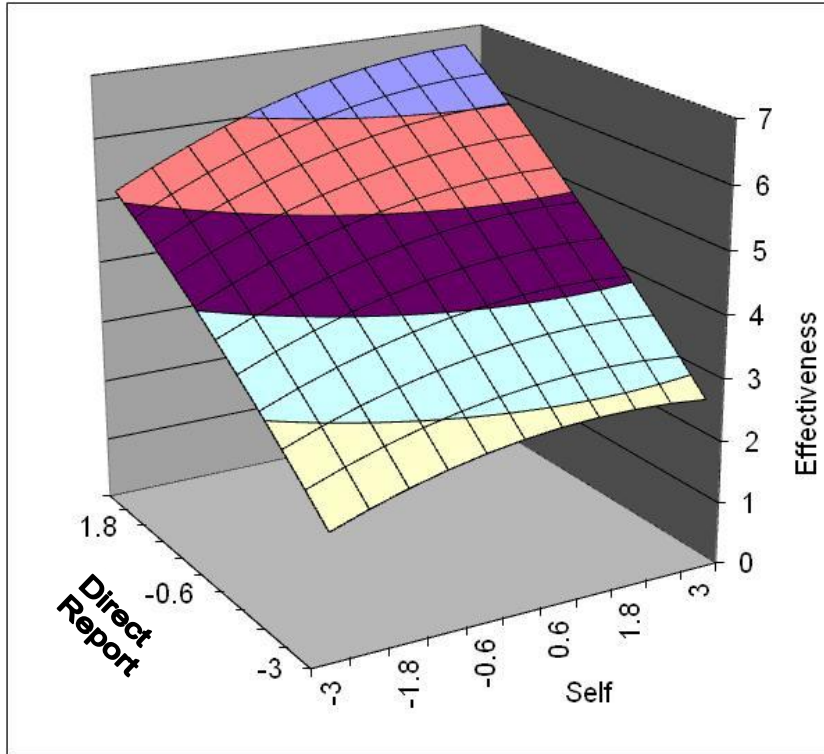
Figure 18. Hypothesis 5 (Self-Direct Report) Surface – Power Distance (Practices) High
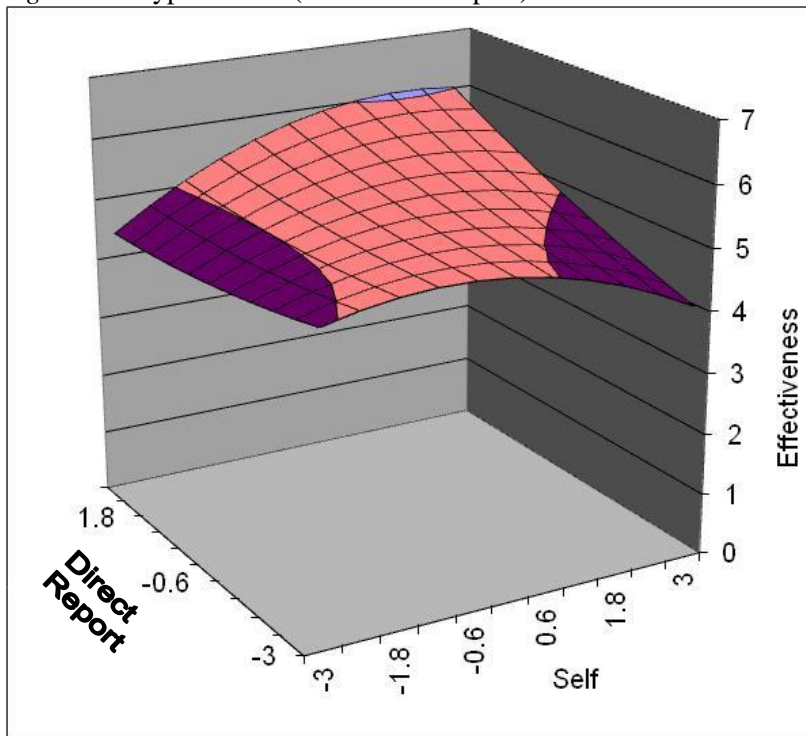
Figure 19. Hypothesis 5 (Self-Peer) Surface – Power Distance (Practices) Low

99
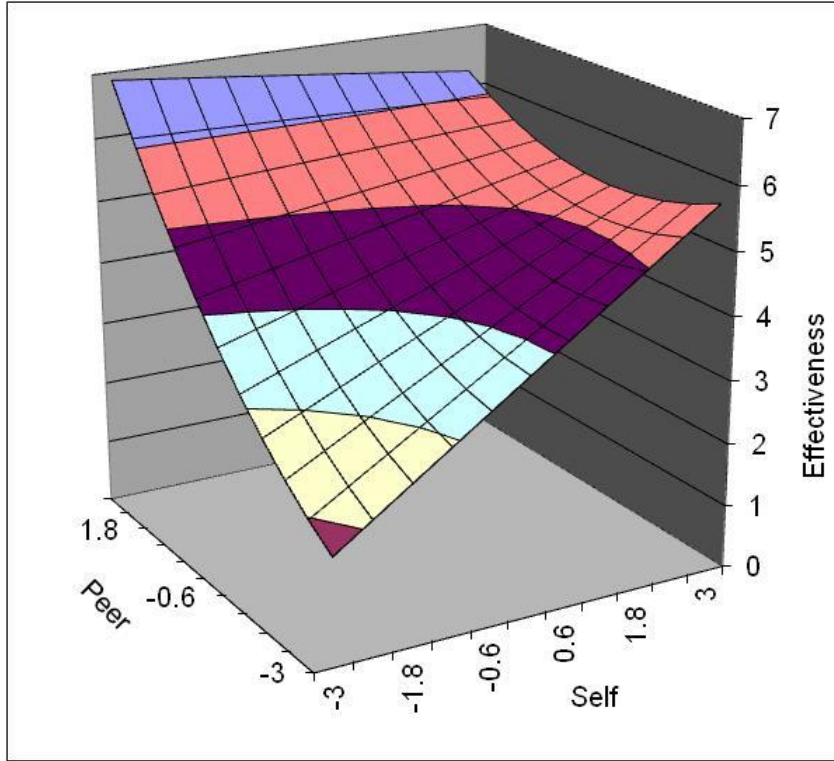
Figure 20. Hypothesis 5 (Self-Peer) Surface – Power Distance (Practices) High
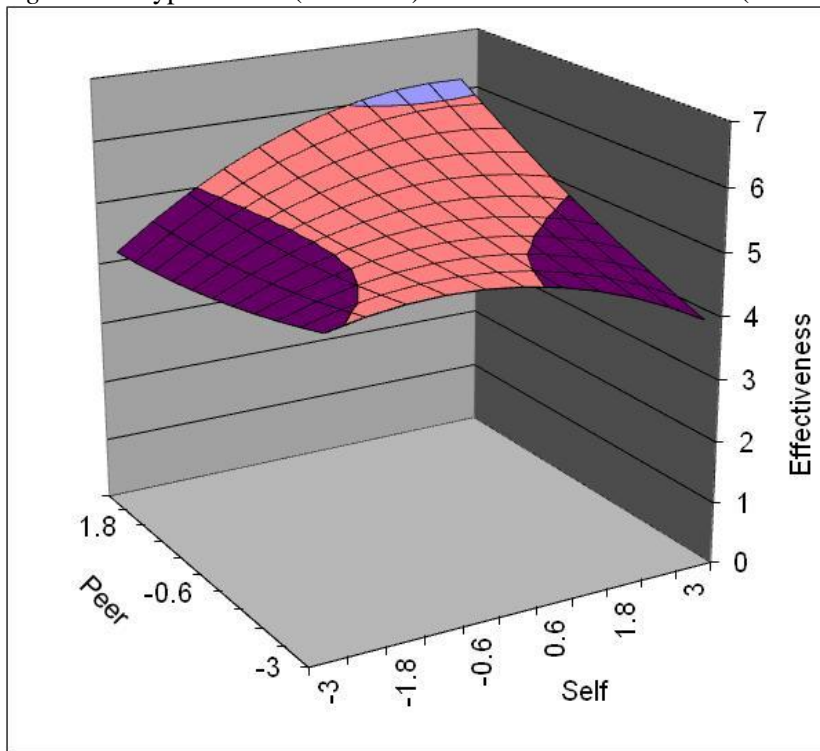
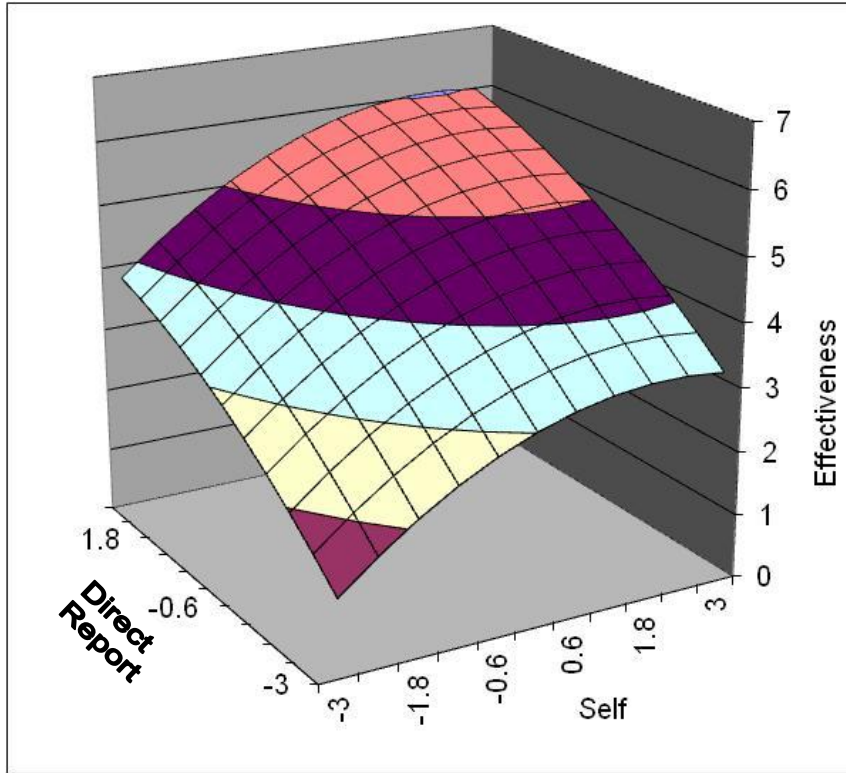*Figure 21*. Hypothesis 6 (Self-Direct Report) Surface – Future Orientation (Values) Low

100
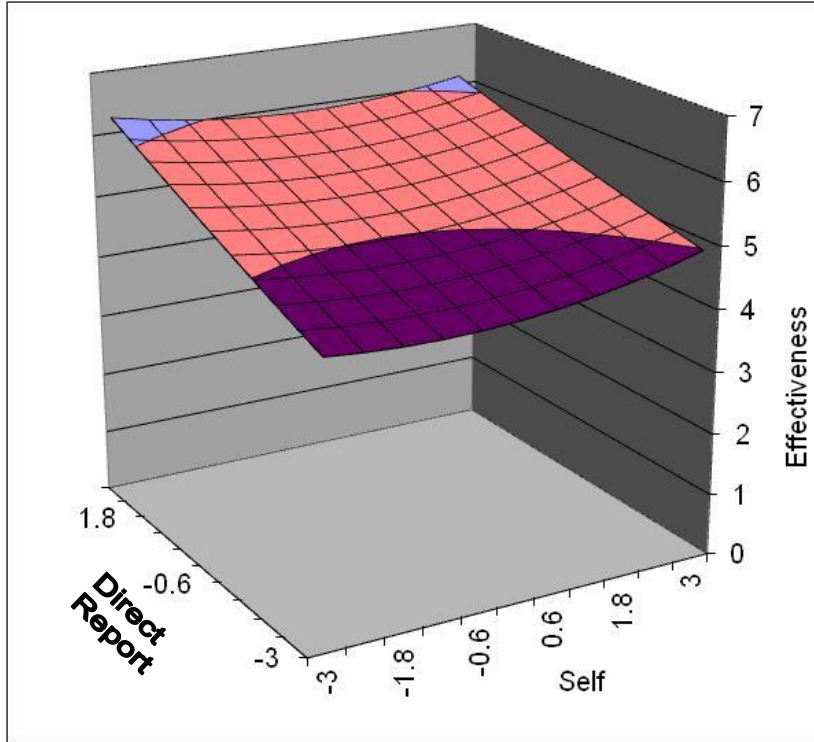
Figure 22. Hypothesis 6 (Self-Direct Report) Surface – Future Orientation (Values) High
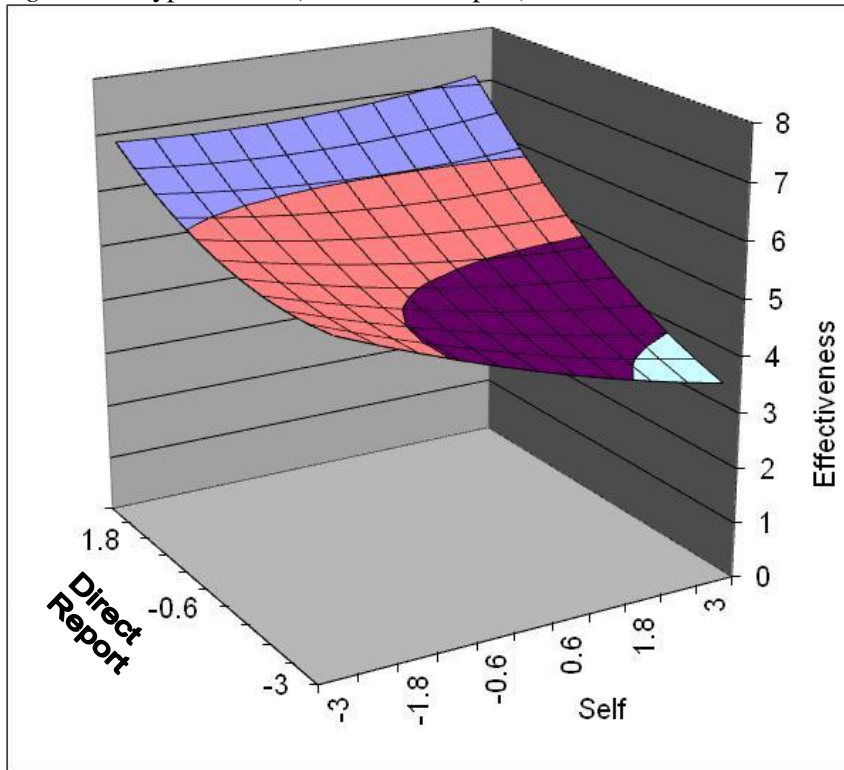
Figure 23. Hypothesis 7 (Self-Direct Report) Surface – Future Orientation (Values) Low

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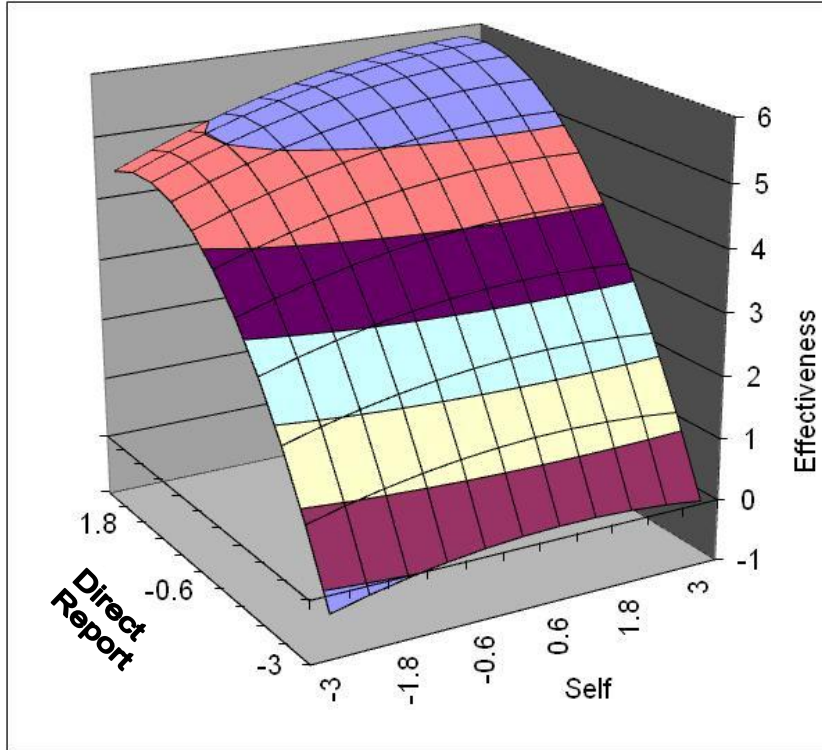
Figure 24. Hypothesis 7 (Self-Direct Report) Surface – Future Orientation (Values) High
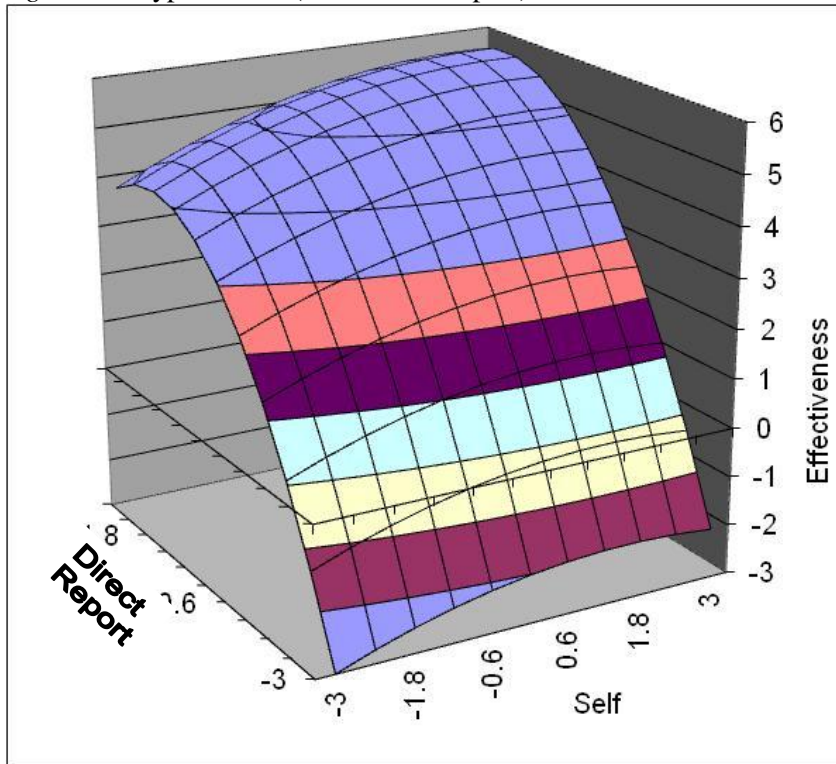
Figure 25. Hypothesis 7 (Self-Peer) Surface – Future Orientation (Values) Low
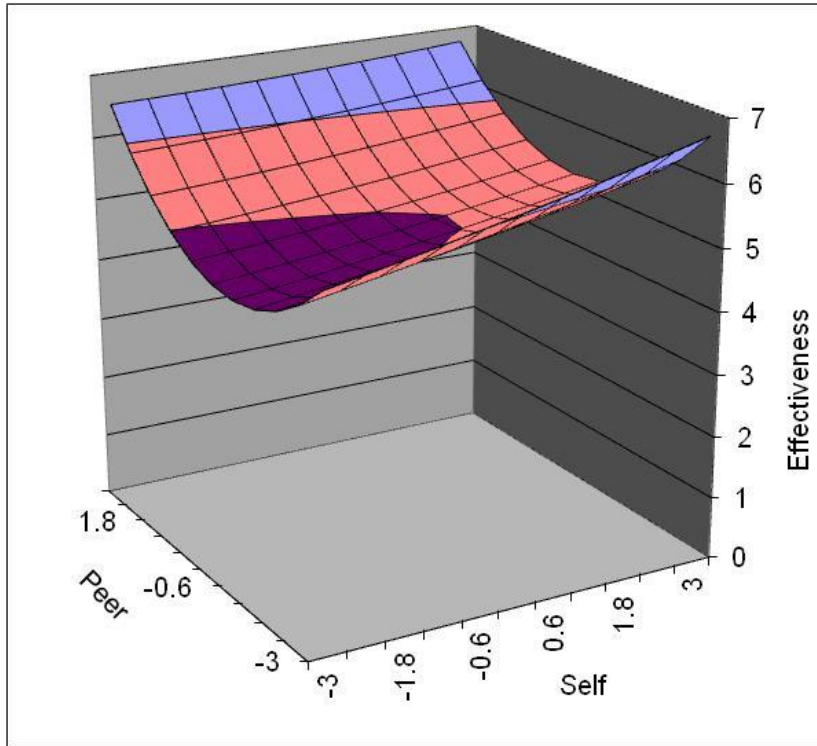
Figure 26. Hypothesis 7 (Self-Peer) Surface – Future Orientation (Values) High
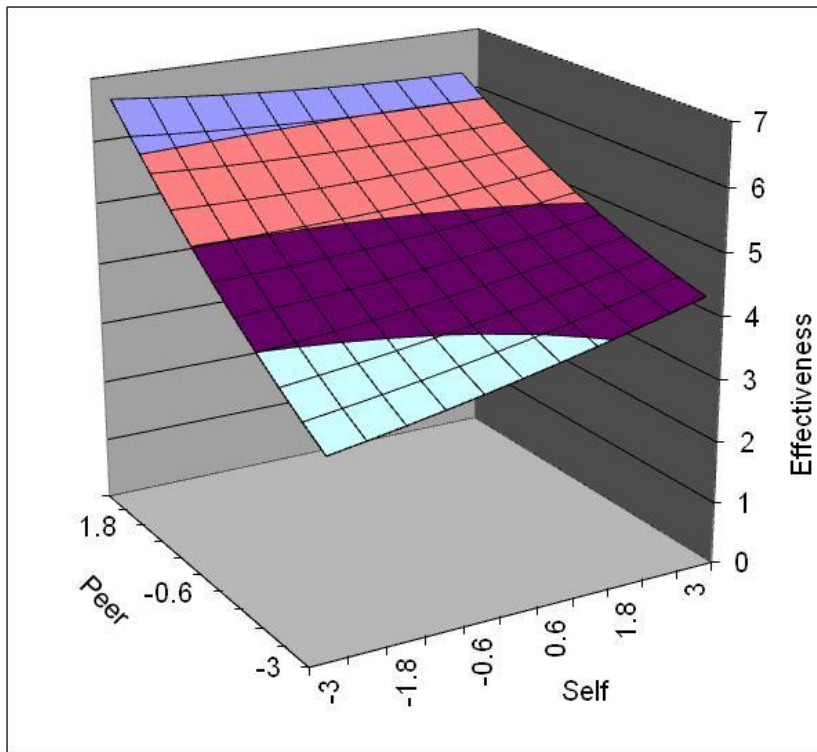
Figure 27. Hypothesis 7 (Self-Peer) Surface – Future Orientation (Practices) Low
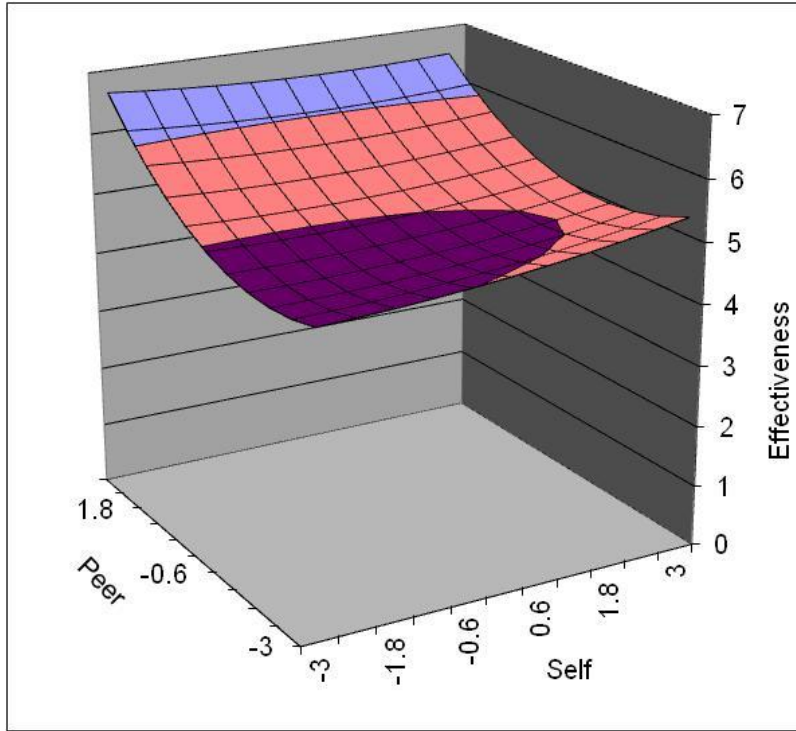
Figure 28. Hypothesis 7 (Self-Peer) Surface – Future Orientation (Practices) High

Figure 29. Hypothesis 8 (Self-Direct Report) Surface – Future Orientation (Practices) Low

Figure 30. Hypothesis 8 (Self-Direct Report) Surface – Future Orientation (Practices) High
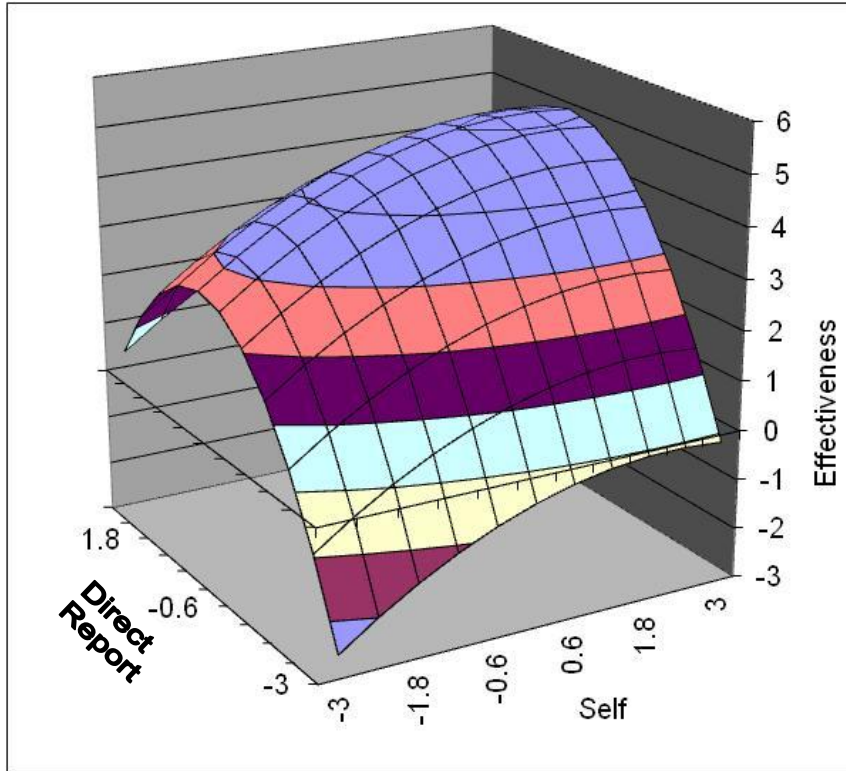
Figure 31. Hypothesis 10 (Self-Peer) Surface – Gender Egalitarianism (Practices) Low
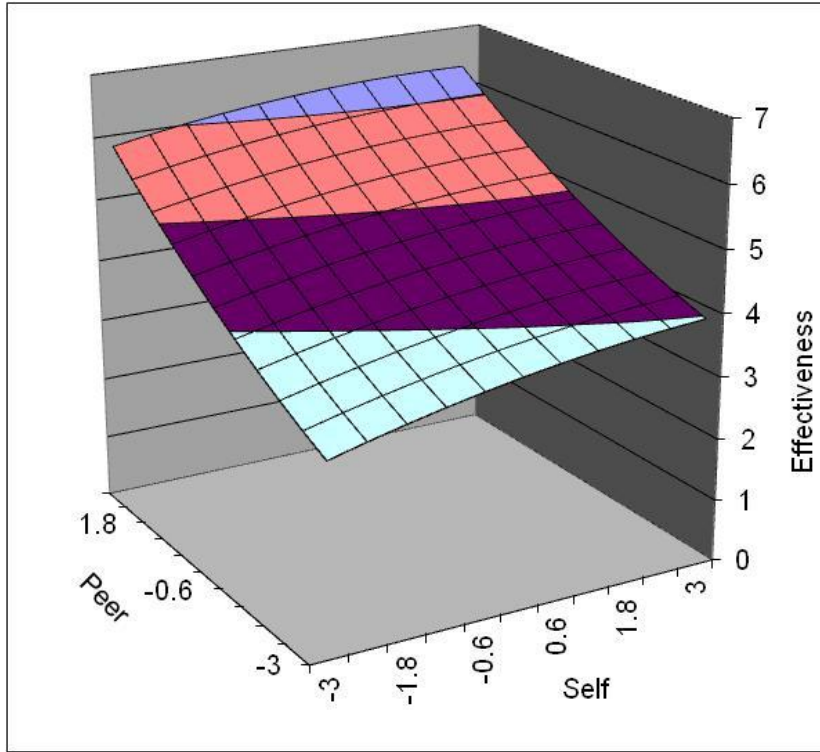
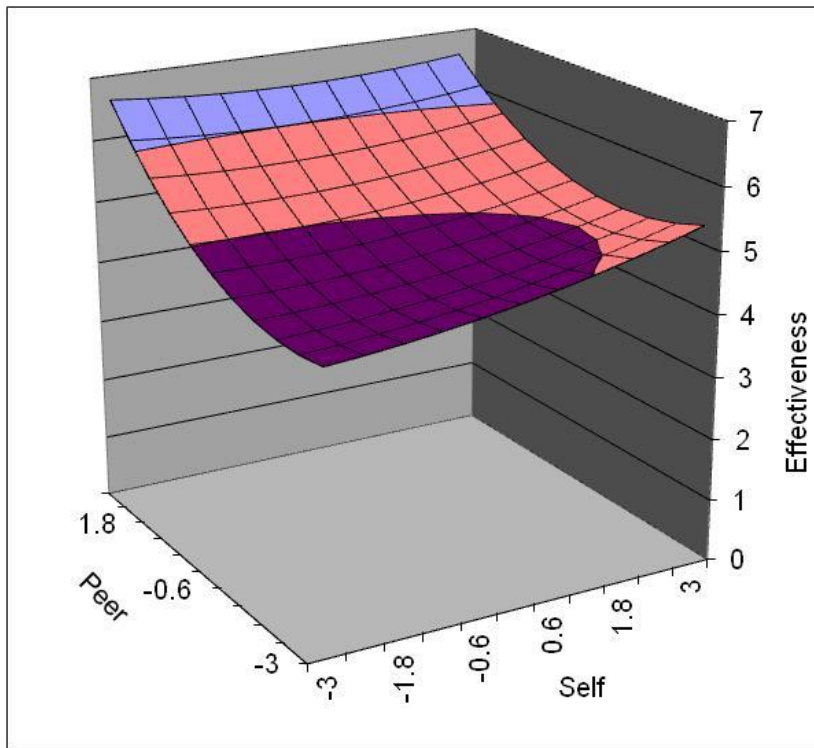*Figure 32*. Hypothesis 10 (Self-Peer) Surface – Gender Egalitarianism (Practices) High

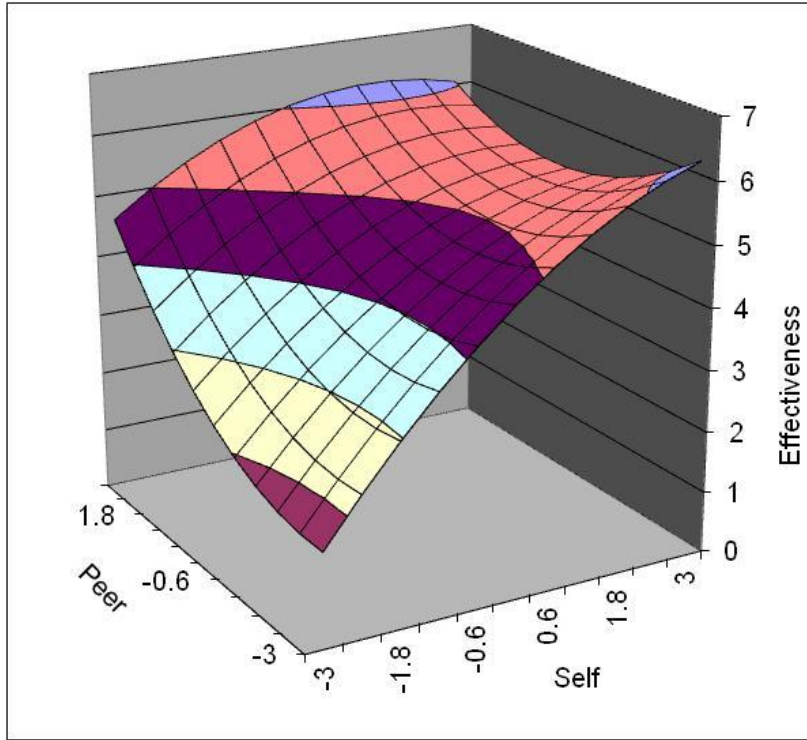*Figure 33*. Hypothesis 11 (Self-Peer) Surface – Assertiveness (Values) Low

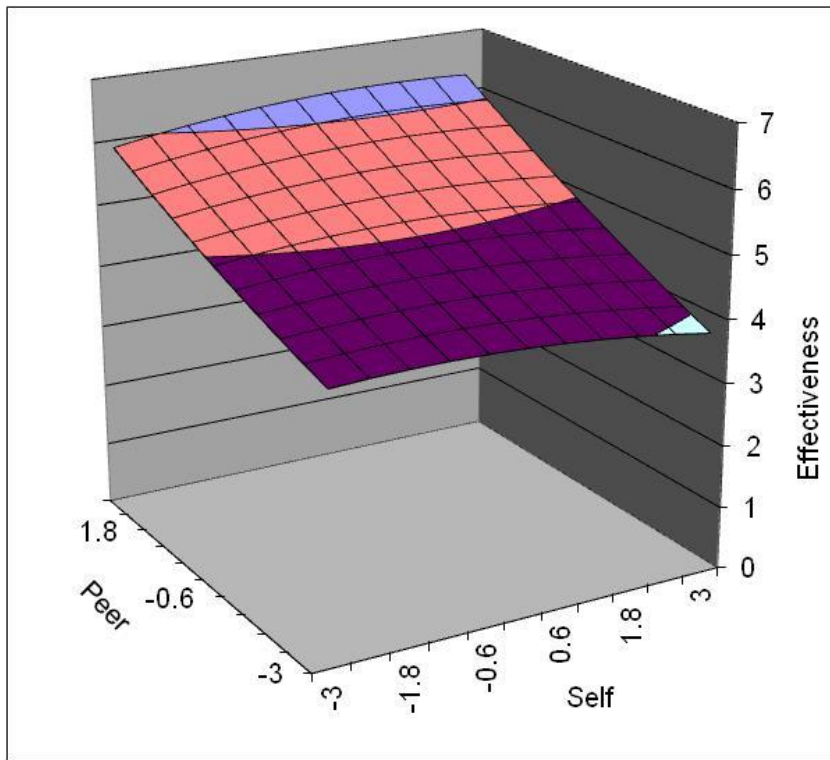*Figure 34*. Hypothesis 11 (Self-Peer) Surface – Assertiveness (Values) High

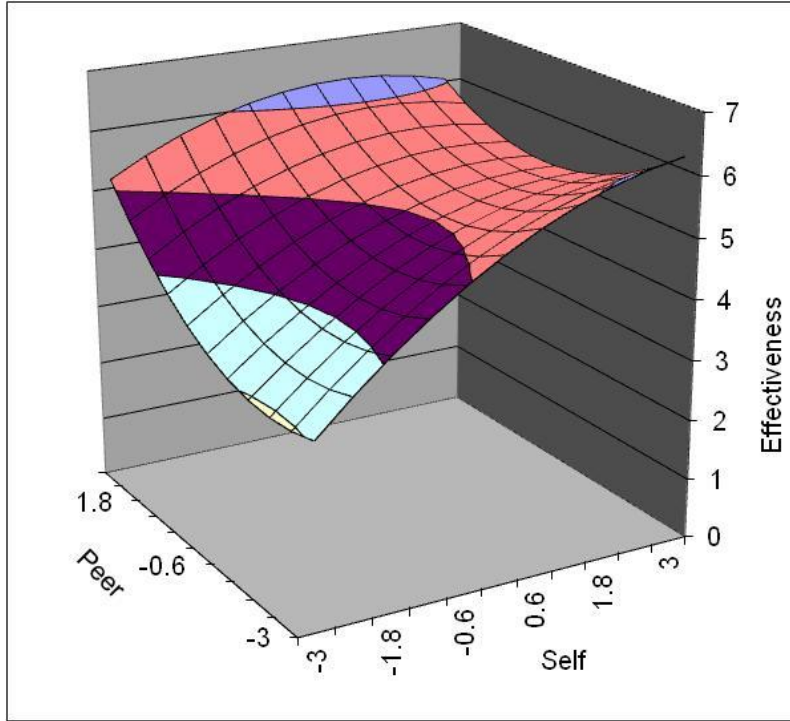*Figure 35*. Hypothesis 12 (Self-Peer) Surface – Performance Orientation (Practices) Low

Figure 36. Hypothesis 12 (Self-Peer) Surface – Performance Orientation (Practices) High
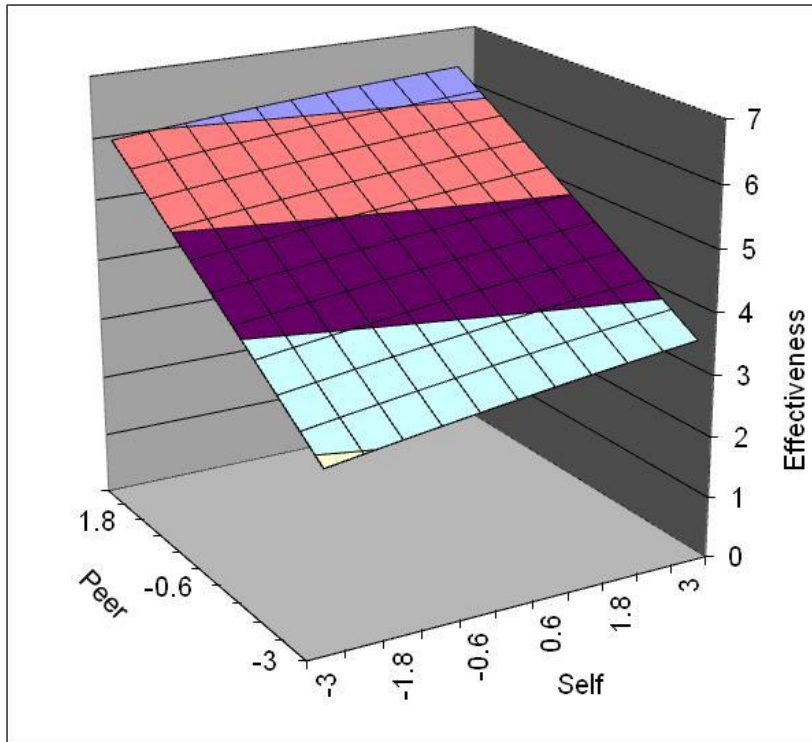
Figure 37. Hypothesis 13 (Self-Peer) Surface – Performance Orientation (Values) Low
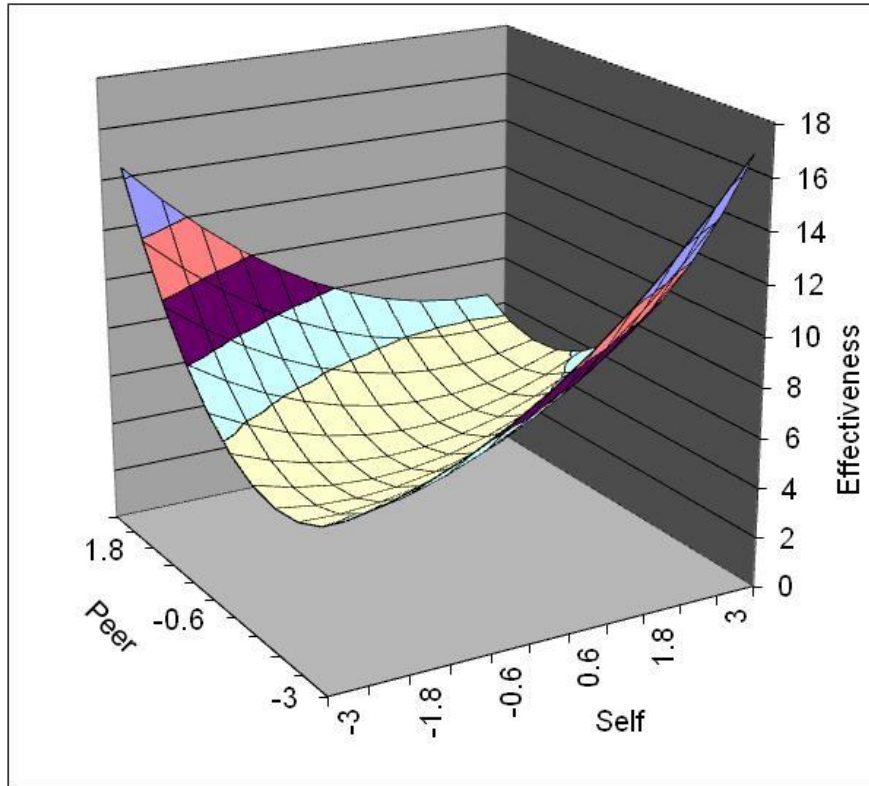

Figure 38. Hypothesis 13 (Self-Peer) Surface – Performance Orientation (Values) High
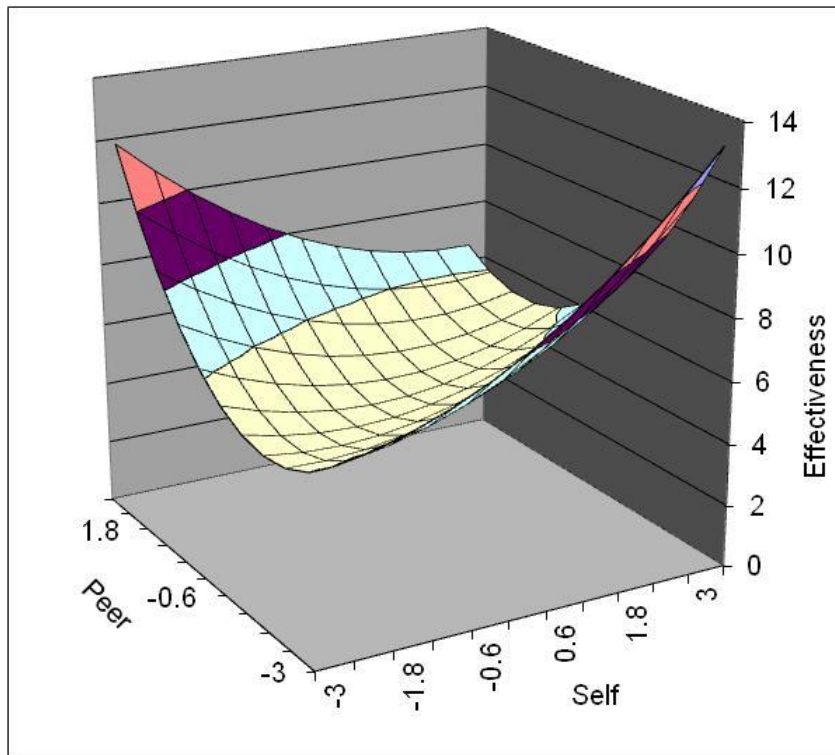
Figure 39. Hypothesis 13 (Self-Peer) Surface – Performance Orientation (Practices) Low
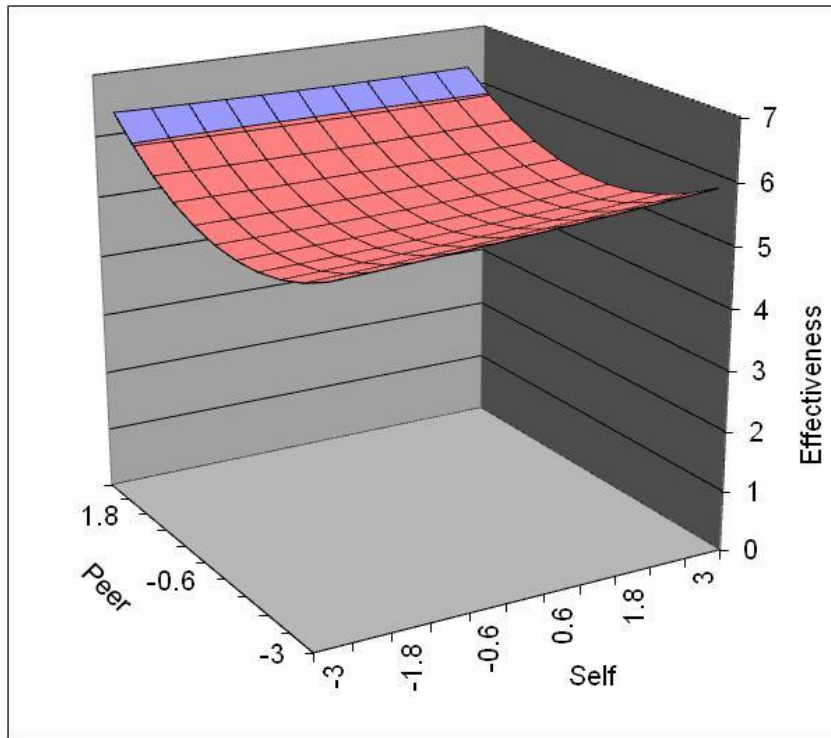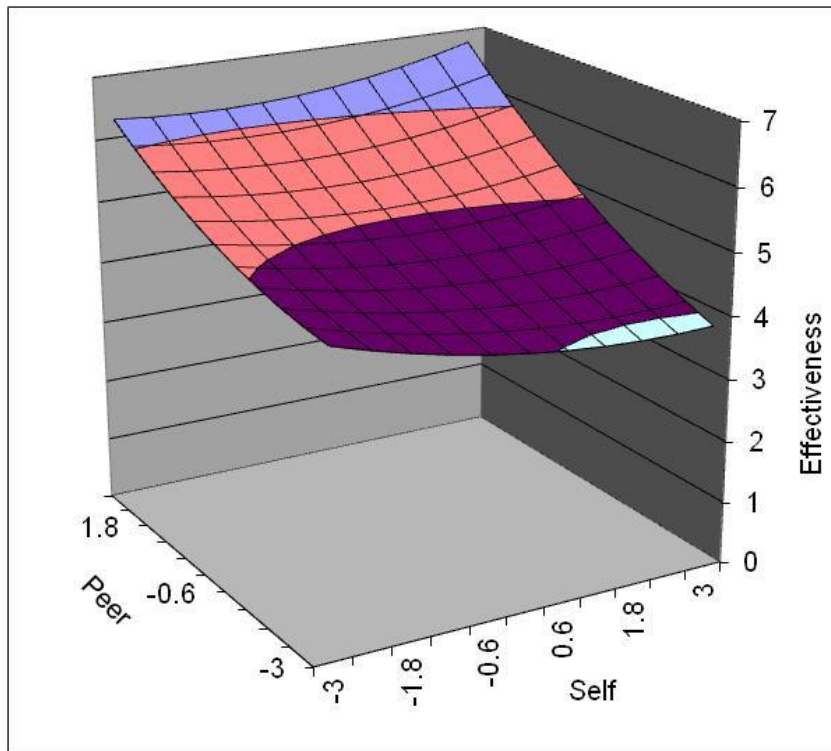

Figure 40. Hypothesis 13 (Self-Peer) Surface – Performance Orientation (Practices) High

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ABSTRACT

SELF-OTHER DIFFERENCES AND PERCEIVED EFFECTIVENESS: A LOOK ACROSS CULTURE DIMENSIONS

by

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The use of 360-degree feedback is prominent across the world. Several studies have investigated the impact of culture on different aspects of 360-degree feedback, such as self-other agreement, but very few have studied how ratings on these instruments predict perceptions of leadership effectiveness, and whether this relationship is the same across different societies. The present study seeks to narrow the gap between cross-cultural research and 360-degree feedback, by (a) investigating the role that culture plays on the self-other agreement and effectiveness relationship from a culture dimension perspective and (b) comparing how different cultural aspects help explain this relationship. As barriers across countries are lowered and more interaction across countries takes place, understanding differences between the leaders and others' perspectives becomes pivotal for leadership growth and development.

AUTOBIOGRAPHICAL STATEMENT

Nathalie Castaño was born and raised in Colombia and moved to the United States when she was 15 years old. She pursued her undergraduate studies at Florida International University, where she completed her Bachelor's of Business Administration (Major: Human Resource Management) and Bachelor's of Arts (Major: Psychology). After college graduation, Nathalie joined Wayne State University's (WSU) Industrial and Organizational Psychology Doctoral Program and received her Masters of Arts in Industrial and Organizational Psychology in 2010. Since then, Nathalie has conducted research in the area of cross-cultural leadership and gender issues in leadership and has presented in major academic conferences (e.g., SIOP and Academy of Management) and published in the *Journal of World Business*, *Group Dynamics, Advances in Global Leadership,* and the *Handbook of Culture, Organizations, and Work.* Additionally, Nathalie has worked with companies including Ford Motor Company, Judson Center, and Detroit Public Schools on developing and validating selection systems. She also held summer internships with The City of Miami in the Department of Testing and Validation and at Right Management in Michigan; She held a part-time internship in the department of Research and Development for Denison Consulting and in the Organizational Development office at Blue Cross Blue Shield of Michigan. In 2011, Nathalie accepted a full-time position at NASA, Kennedy Space Center (KSC) as an Organizational Development Specialist. In this role she supports different directorates throughout KSC in matters relating to leadership development, team dynamics, succession management, and change management, among others. In her role she relies heavily on facilitation and consulting skills and most of her expertise falls in the areas of survey design and development, organizational assessment, and individual assessments such as the Hermann Brain Dominance Instrument, 360-degree feedback, and Myers-Briggs Type Indicator (MBTI).