Leader Personality Characteristics And Upward Trust: A Study Of Employee-Supervisor Dyads In China

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ABSTRACT

Scholars have researched trust for many decades and almost the entire body of empirical research on how personality traits affect upward trust is based on studies conducted in countries other than China. Taking an inductive approach, we examined the relationship between the leader’s big five personality traits and upward trust with 274 respondents in Chinese culture. The empirical results confirm that Extraversion and Neuroticism have negative influence on upward trust, Agreeableness’ impact is insignificant, Conscientiousness has a positive influence and Openness to experience has a negative impact on affect-based trust. Results suggested that the degree to which the leader’s big five personality traits affect upward trust differs from that of the West.

Keywords: Trust; Personality Characteristics; Big Five; China

INTRODUCTION: THEORETICAL FRAMEWORK

Trust is an essential element for organizational and individual success (Argyris, 1973; Covey, 1990; Likert, 1967; McGregor 1961). Long identified as a foundational element for all effective organizations, leadership experts and researchers have professed the importance of building trust within the workforce. Trust is often seen as a miracle ingredient, a catalyst, a bonding agent, and “the glue of life” (Shea, 1984). Covey (1994) describes trust as the most essential ingredient in effective communication and a foundational principle that holds organizations of every kind together. Block (1993) describes trust as an allessential element for organizational success, given the continued shifts and changes in technology, roles, work designs, and responsibilities. Bennis and Nanus (1985) further state that trust is often seen as the emotional glue that binds followers and leaders together. Furthermore, the accumulation of trust, over time, can be seen as a measure of the legitimacy of leadership. Trust cannot be mandated or purchased from a person or group as trust must be earned. Overall, Bennis and Nanus state that trust is the basic ingredient of all effective organizations.

If we look at the other end of the continuum, from trust to distrust, Shaw (1997, P. xi) summarizes the importance of trust succinctly by noting that “Success in business requires two things - a winning competitive strategy and superb organizational execution. Distrust is the enemy of both.” It has been noted that trust is considered a foundational value that is so important that it would be futile to build a successful organization without it in place in the hearts, minds, and policies of all leaders and employees through the firm (Childress & Senn, 1995, P. 124). In fact, Bennis has described successful leadership as being built of two elements: vision and trust (Martin, 1996).

It is likely no surprise to leaders that trust is a good thing to have since it has gained, and continues to gain, importance in organizational life and entrepreneurship (Sungkhawan, Mujtaba, Swaidan and Kaweevisultrakul, 2012; Rogers, 1995). The importance of trust in social, economic, political, legal, and organizational relationships has been increasingly addressed in literature (Tyler & Kramer, 1997). In fact, Kipnas (1996) asserts there has been a four-fold increase in research in trust over the past 20 years. One might ask, “why the increased interest in trust?” Marshall (2000) contends that the answer is a global economy marked with constant and swift change. Specifically,
drives leveraging the need for a trust-based organization include the knowledge industry, the constancy of change and the need for speed, and the changing dynamics of the workforce.

Scholars have summarized common elements of the many different definitions of interpersonal trust (Hosmer, 1995; Mayer, Davis, & Schoorman, 1995; Deutsch, 1962; Gambetta, 1988; Zand, 1972). We use Whitener, Brodth, and Korsgaard’s (1998) definition which reflects three facets. First, trust in another party reflects an expectation or belief that the other party will act benevolently. Second, one cannot control or force the other party to fulfill this expectation - that is, trust involves a willingness to be vulnerable and risk that the other party may not fulfill that expectation. Third, trust involves some level of dependency on the other party so that the outcomes of one individual are influenced by the actions of another. With these components, trust can be viewed as an attitude held by one individual, the trustor, toward another, the trustee (Robinson, 1996). This attitude is derived from the trustor's perceptions, beliefs, and attributions about the trustee, based upon his or her observations of the trustee's behavior. Not surprisingly, most research on the antecedents of trust has focused on trustor perceptions and beliefs, such as trustors' perceptions of trustees' competence, benevolence, and integrity, which appear to be critical conditions for trust (Butler, 1991; Mayer et al., 1995). These insights into trustors' perceptions help identify how trust arises and suggest that managers can have considerable impact on building trust. Whitener et al. (1998) argue that managers’ actions and behaviors provide the foundation for trust, and that it is actually management’s responsibility to take the first step to initiate trusting relationships. They analyze the types of behavior managers may engage in that build trust and label them as “managerial trustworthy behavior”. They think managers who engage in trustworthy behavior - “behavioral consistency”, “behavioral integrity”, “sharing and delegation of control”, “communication”, and “demonstration of concern” - will increase the likelihood that employees will reciprocate and trust them. Without trust, leaders cannot be effective in getting the tasks done efficiently while building a good long-term relationship with their followers (Mujtaba, Marschke and Nguyen, 2012).

Mishra (1996) agreed that trust is a construct grounded in an individual’s willingness to be vulnerable, but also noted that it is contingent on the individual believing the other person to be competent, open, concerned, and reliable. Based on this, Quinlan (2008) attempted to establish whether there is a relationship between the big five personality characteristics of leaders and the ability of leaders to create and sustain organizational trust. Multiple regression analysis revealed that the leader traits of Extraversion and Agreeableness significantly predicted the trust behavior of Meeting Expectations.

Martins (2002) investigated the relationship of the “Big five” personality dimensions and managerial practices to the dimension of trust relationships between managers and employees. He surveyed 6,528 employees in South Africa and the results indicate that a weaker relationship with the dimension of trust was obtained for the “Big five” personality. Similarly, Martin (2004) identified principal personality types related to parent, teacher, and student trust in the principal and the school.

HYPOTHESES

Quinlan (2008) examined whether there is a relationship between the personality characteristics of leaders and the ability of leaders to create and sustain organizational trust. He surveyed a sample of 22 professional staff members employed at an elementary school in New Jersey. The results revealed that the leader traits of Extraversion and Agreeableness significantly predicted the trust behavior of Meeting Expectations. The evidence supported that certain leader personality characteristics can predict the leader’s ability to meet expectations, integral to creating and sustaining trust in organizations. This study, within the Chinese culture’s employee-supervisor relationship, proposes the following hypotheses with regard to the independent variables of Extraversion and Agreeableness and its impact on upward trust:

Hypothesis 1a: Leaders scoring high on Extraversion report stronger Affect-based upward trust.
Hypothesis 1b: Leaders scoring high on Extraversion report stronger Cognition-based upward trust.
Hypothesis 2a: Leaders scoring high on Agreeableness report stronger Affect-based upward trust.
Hypothesis 2b: Leaders scoring high on Agreeableness report stronger Cognition-based upward trust.
We seldom see previous empirical research about the relationship between leaders’ personality and upward trust. The objective of this study is to more closely examine the relationship between a leader’s personality and the subordinate upward trust to the leader in the Chinese culture, and determine factors that mostly affect different types of trust.

Organizational Trust

A database search of the scholarly literature produced nearly 400 definitions of trust in cultural and systems studies, particularly as they related to institutions, groups of people, and individuals. Hosmer (1995) noted that little agreement exists on any one of the many trust definitions (pp. 379-380). According to McAllister (1995), there has been some general definitional agreement of trust within the concepts of “knowing right from wrong” and “consequences of behaviors” (pp. 24-59). Selnow and Gilbert (1997), for example, found that 90% of employees interviewed by leading researchers from the late 1980s to mid-1990s defined trust as simply being able to count on “truthfulness” from another person (p.85). This would indicate that moral knowledge, feelings, and actions have a direct relationship with trust. Bridges (1991), who successfully guided many large organizations through the early years of transition, added that trust is the outcome of experiences with self and others (pp. 77-78). Thus, the consequences of behavior appear to influence trust levels over time.

The dispositional theories of trust assume that factors exist within individuals that predispose them to trust or distrust others whom they do not know. The central issues for these types of models revolve around the questions of how individuals develop their propensities to trust and how these predilections affect their thoughts and actions (e.g., Hardin, 1993; Rotter, 1967, 1971, 1980). Rotter's (1967, 1971, 1980) research on trust is the most representative of this category and has been among the most widely recognized and acknowledged work in organizational studies literature on the topic. He posits that trust is a stable belief based on individuals' extrapolations from their early life experiences. Further, he suggests that the strength of trust's impact on behavior is a function of the situational novelty with which people are confronted. According to Rotter, as situations become increasingly unfamiliar to individuals, the influence that their trusting dispositions have over their behavior grows. Put another way, as people become more acquainted with specific others, their personal knowledge of those others becomes the primary driver of their thoughts and actions. Another example is provided by Hardin (1993) who argued that those who develop a distrusting predisposition tend to avoid cooperative activities (because they expect to be exploited in such ventures) so are apt to have fewer positive interactional experiences that can function to adjust initial distrust levels. By their own actions, these people contribute to perpetuating their distrustful predilections. In organizations, those who distrust may be expected to seek roles that have limited dependencies on others or to resist job changes that cause them to be more reliant on coworkers.

Another major approach to understanding trust among unfamiliar actors can be called "behavioral decision theory." Like dispositional models, many behavioral decision theories address questions associated with the interaction of unfamiliar others (although many also have implications for ongoing relationships; thus, we include them in the following problem category as well). In contrast to the dispositional approaches, however, these frameworks tend to focus on immediate situational factors in the context of game settings and posit that “trust” is a function of relatively rational decision-making processes (e.g., Axelrod, 1984; Deutsch, 1958, 1960; Deutsch & Krauss, 1962; Loomis, 1959; Matthews, Kordonski, & Shimoff, 1983) rather than personality characteristics. Typically, they define or operationalize trust and distrust in terms of cooperative and competitive behavior, respectively, and they usually attempt to ascertain how changes in the game affect these behaviors. Although behavioral decision theories have been used to investigate relationships of varying lengths, much of the research pertains to situations where partners are strangers. According to Good (1988), some of the situations that have been linked to trusting behaviors include those where the long-term interests of the participants were stressed initially (e.g., Pruitt & Kimmel, 1976), where only small initial rewards were at stake (Deutsch & Krauss, 1962), where there was no potential for threat (Deutsch & Krauss, 1962), and where there was great potential for successful communication (e.g., Wichman, 1970). Institutional frameworks represent a third prominent approach. Like behavioral decision theories, these models emphasize the causal role of situational factors in fostering trust among strangers. However, they are typically concerned with the effects of organizational and institutional structures and processes. Shapiro (1987), for instance, concentrates on the problem of how certain conditions necessary for economic exchange are maintained. Shapiro defines trust as "a social relationship in which principals, for whatever
reason or state of mind, invest resources, authority, or responsibility in another on their behalf for some uncertain future return" (1987: 626). These principal agent relationships allow individuals, groups, or organizations to bridge the extreme social and physical distances occurring in a complex industrialized society so that they may obtain the benefits of more extensive trade with strangers. Since principals regularly find themselves in situations where they cannot specify, scrutinize, evaluate, or constrain the performance of those on whom they depend, certain social mechanisms (e.g., procedural norms, selection criteria, risk-spreading devices - all of which Shapiro calls "guardians of trust") function to maintain trust.

In the aggregate, "the guardians of trust offer a mix of normative prescriptions, socialization practices, institutional arrangements, structural constraints, and networking strategies designed to maintain the integrity of agency relationships" (Shapiro, 1987: 635). Zucker (1986) also emphasizes economic exchange and attempts to explain the emergence of specific social structures and processes in the United States' economy.

Rotter's (1967, 1971, and 1980) work indicates that the trusting (or distrusting) personality characteristic is quite fixed once it has been established in one's relatively early life. Hardin (1993), however, argues that the predilection to (dis)trust is, at least partially, a function of an individual's own behavior. In particular, since distrustors tend to avoid cooperative situations, they do not provide themselves with enough opportunities to modify their basic inclinations to view others generally, as untrustworthy. So, for instance, if the specific research issue involves whether distrusting dispositions can be modified through organizational interventions (e.g., compelling individuals to work with unfamiliar others on a series of project teams), a test of these two theories seems warranted. Grouping approaches to trust according to their problem can help distinguish useful frameworks and identify areas where debate and testing are worthwhile. The possibilities that this approach suggests are not readily apparent through the use of disciplinary-based topological systems alone.

Interactions among familiar actors classification comprises the largest grouping of organization and organization-related trust and distrust work, and it includes studies of relationships at various levels of analysis. Some of these investigations focus on interpersonal relationships (e.g., Mayer et al., 1995; McAllister, 1995); others highlight relations among different groups, organizations, or classes (e.g., Dodgson, 1993; Fox 1974; Lorenz, 1992, 1993; Sabel, 1993). In addition, although most of this research has emphasized trust constructs, recent work increasingly has been accentuating distrust conceptualizations (e.g., Bies & Tripp, 1996; Fein & Hilton, 1994; Kramer, 1994; Sitkin & Roth, 1993; Sitkin & Stickel, 1996). Researchers whose works have been grouped here typically have conceptualized trust as a state of mind. Although there appears to be substantial consensus on this point, there is much less agreement when it comes to the more precise formulations of trust that have emerged over the last several years. One of the most contested issues along these lines relates to whether trust is exclusively the product of individuals' calculative decision-making processes or is emotion based. The conceptualizations set forth by Gambetta (1988) and Coleman (1990) are representative of the rational choice viewpoint. Other researchers, however, have argued that trust is a product of peoples' emotions, at least to some extent (e.g., Holmes, 1991; Johnson-George & Swap, 1982; Lewicki & Bunker, 1995a,b; Mayer et al., 1995; McAllister, 1995; Rempel, Holmes, & Zanna, 1985; Ring, 1996). Furthermore, empirical work seems to support the distinction between these rational and emotional bases of trust. For example (and as we mentioned above), research conducted by McAllister (1995), with a sample of managers and professionals, distinguishes between cognition- and affect-based trust. He also suggests that cognition-based trust is an antecedent of affect-based trust.

What is striking in the literature is that trustee-specific evidence is often assumed to be the sole source of evidence. This study also stands on the trustee's factors and analyzes the influence mechanism of the leader's characteristics on upward trust.

**Leader Personality and Trust**

The research on personality characteristic and trust can be divided into two kinds. First, the relationship of the trustor’s personality characteristic and whether the trustor trusts others or organizations. This kind of research stems from Farris, Senner and Butterfield (1973) who define trust as the personality characteristic of those individuals who interact with the periphery environment in the organization. Mayer and Conlon (1994) discovered that people's work behavior and achievements are obviously related with the propensity that people are willing to
believe others. Also, there is some research revealing trustor’s propensity is correlated with the benefits of the behavior (Moore, Schaffer, Pollak & Taylor-Lemcke, 1987; Sabatelli, Buck & Dreyer, 1983).

Second is the relationship between the trustee’s personality characteristic and trust. Ring and Van de Ven (1992) pointed out that the trustor must pay attention to the trustee’s credibility, because risk and uncertainty have always existed in the transaction. The early research on the trustee’s characteristic stems from the inspection of communication and the change of attitude by Hovland, Janis, and Kelley (1953). Next, scholars bring forward that trust is influenced by the trustor’s ability and credibility. Good (1998) pointed out that trust is based on the expectation of the action of the other side. Mayer (1995) gives an integrative model of organizational trust and proposed that ability, benevolence, and integrity can represent most of the perceived trustworthiness.

Among numerous theories about leadership, it is the transformational leadership theory that pays more attention to the study of trust. Podsakoff and colleagues (1990) thought that the credibility of transformational leaders’ behaviors would bring about a positive effect. Pillai and colleagues (1999) proposed that transformational leaders should establish social exchange relationships with their subordinates, and obtain trust by showing concern and respect to the subordinates (Jung & Avolio, 2000).

The staff’s cognition of the impartiality of the leader’s behaviors, is also a factor often involved in the trusted source of leaders. The subordinates’ trust toward the leader is influenced by the extent of the leader’s fairness and justice toward intra-organization behaviors. Based on researchers’ division of various kinds of “justice” formats (i.e. distributive justice, procedural justice, interactional justice), Broker and Siegel (1996), Konovsky and Pugh (1994) pointed out that procedural justice, which showed respect to the staff, was a sign of the extent of close relationships between the leader and the staff. Therefore, procedural justice was considered as the source of trust. As an institutional criterion, distributive justice cannot be regarded as the measurement criterion of the relationships between superiors and subordinates. However, interactional justice represents the extent of the respect showed to the staff by the leader, so it can serve as one of the criterions about the relationships between superiors and subordinates.

In the study of the effect of Leaders’ Big Five on the organizational trust atmosphere, Quinlan (2008) found that the leader’s (the trustee) agreeableness and extroversion characteristics had a prediction effect on meeting the trustor’s expectations that also explained trust.

In summary, there exists rare research that applies to the Leader’s Big Five dimension in the study of trust with leaders. Therefore, this paper constructs the interaction mechanism of the characteristics of leaders toward the trust of leaders, based on the Leader’s Big Five.

Leader Personality and Big Five

Pollard (1997) proposed that a leader acts in different roles, such as a role model, a risk bearer, a servant, an inspirator, an initiator, a giver or a listener, and so on. Bennis (1989) and Sonnenberg (1994) described a leader as a person who not only must clearly express the vision, devise the vision, make use of it to hold the staff together, and cultivate an atmosphere of trust, but should also deeply know himself/herself.

A leader has to act as many roles, of which the two most important ones are “innovating” (Tichy, 1997) and “cultivating subordinates” (Peters & Austin, 1985). In order to make for innovation and change, a leader should learn about the reality, mobilize necessary resources, make strategic decisions and plans, and put them into effect (Tichy, 1997). In the process of explaining leadership, Covey (1991) described “cultivating subordinate” as “Law of Nature in the Farm”: to plough the field, to sow, to fertilize, to water, to weed and to cultivate until maturity. Shaw (1997) described the process of a leader cultivating subordinates as setting up a vision, believing others’ ability, building a familiar atmosphere and a dialogue mode, and acknowledging contributions. For a leader to cultivate subordinates is an important factor to boost the level of trust.

The outward manifestation of a leader’s personality is leadership. According to modern management theories, the followers of a leader do not grow up spontaneously, but are won over by the leader’s endeavors and charisma.
Since Barrick and Mount (1991) studied the relationship between Big Five and job performance for the first time, such kinds of application researches have continued. Yufan Liu and Erping Wang (2000) reviewed native and foreign studies before the year 2000, and concluded that Big Five could predict job performance, and responsibility was the most effective predictive factor. The study by Gregory and John (2000) also discussed various jobs and multiple performance standards, which indicated that agreeableness could predict service jobs better, extraversion could predict management jobs better and responsibility could predict the performance in various jobs and different performance standards. The study by Jeffrey and colleagues (2001) found that agreeableness had a significantly positive correlation with cooperative behaviors, and a significantly negative correlation with giving advice.

The study by Jennifer and Zhou (2001) found that in a developing atmosphere, extraversion could stimulate creative behaviors, while responsibility could hinder creative behaviors. Costa and McCrae (1989) also pointed out that persons of openness to experience could exercise various adaptive strategies in coping with emergencies.

In short, the Big Five Model has received wide publicity in studying the relationship between a leader’s personality and leadership. Therefore, this paper uses the Big Five Model in probing into the relationship between a leader’s personality and trust of a leader.

National Culture, Personality and Trust

Khairul A Mastor, Putai Jin, and Martin Cooper (2000) tested whether the Big Five model of personality is applicable to the Malay culture. They have two studies which were conducted among Malaysian students in Australia, and a further study conducted in Malaysia used the refined items from the Australian work. Scree and parallel tests indicated that only five factors should be extracted. Exploratory factor analyses indicated that the Big Five factors of Costa and McCrae exist in the Malay personality structure. The Openness to Actions and Values facets, however, were not replicated well. Overall results and congruence coefficients for 28 facets strongly supported the Big Five model as being cross-culturally applicable. Compared to Americans, Malay students appeared to have high scores in Agreeableness and low scores in Extraversion and Openness.

Jean Patrick Ade, Vivian Costas, and Jose Iglesias (2010) studied how the customer interaction is affected by the Big Five Personality Factors namely extraversion, openness to experience, agreeableness, neuroticism, and conscientiousness. They surveyed a sample of 442 people in 4 different countries including Russia, United States, Albania and China. The results showed that USA and Albania share Conscientious and Openness to Experience as predictors for Behavioral Measure of Customer service. In addition to the two aforementioned traits, USA is the only country of the four that has a third predictor with the Extraversion personality trait. Besides the commonality in the personality traits as predictors for Behavioral Measure of Customer service, Albania and USA also share similarities in the variances of the sub samples: 27.0% for the Albanian and 24.8% for the American.

Moody, Margot Charlene (2007) studied the relationship between cultural intelligence factors and Big Five personality traits in his doctoral paper “Adaptive behavior in intercultural environments: The relationship between cultural intelligence factors and Big Five personality traits.” It examined the interaction between components of a four-factor model of cultural intelligence and Big Five personality traits based on the tenets of evolutionary personality psychology. It was predicted that personality would be related to factors of cultural intelligence. Results of the study confirmed linear relationships between personality traits and factors of cultural intelligence. In addition, the personality traits Openness to Experience and Conscientiousness were the best predictors of overall cultural intelligence. The practical implications of these findings are discussed in relation to enhancing competencies needed for effective intercultural interaction and performance by using the prototypical characteristics of the primary Big Five predictors as a guide for training and development. Theoretically, implications are presented regarding the need for organizations to consider intercultural competencies as a significant measure of effective performance in organizations that may be influenced by personality, given that previous organizational behavior research has had mixed reviews about the adequacy of personality's predictive validity for job performance. Regarding the traits of Conscientiousness, this study proposes the following hypotheses:

**Hypothesis 3a:** Leaders scoring high on Conscientiousness report stronger Affect-based upward trust.

**Hypothesis 3b:** Leaders scoring high on Conscientiousness report stronger Cognition-based upward trust.
Social exchange suggests that people engage in exchanges of rewards based, in part, on their expectation of reciprocation and the perceived cost of nonreciprocation. Although the quality of the interpersonal relationship should factor strongly into whether managers exchange rewards, characteristics of the manager may also influence these expectations.

Zand (1997) asserted that certain characteristics of leaders are crucial to their creating a trusting environment. Harvey (1995) and Martins (1997) proposed that personality is an important antecedent of the trust relationship between superior and subordinate. Researchers such as Fairholm (1994); Kramer et al. (1996); Sonnenberg (1994); and Tyler and Degoe (1996) have used terms like openness, sharing, fulfilling promises, and showing concern for others described when discussing the causes and effects of trust.

However, the research about the source of trust in leadership mostly focuses on the perceived credibility of characteristics such as ability, integrity, and benevolence. Mishra (1996) noted that it is contingent on the individual believing the other person to be competent, open, concerned, and reliable. Researchers like Jung and McCrae have argued that type and trait characteristics are constant across both situations and time (Liebert & Liebert, 1998). The important element, Adizes (1997) maintained, is that the individual’s personality characteristics respond appropriately to the situation, regardless of whether stability is derived from the situation or the personality trait. Quinlan (2008) found the leader (trustee) traits of Extraversion and Agreeableness significantly predicted the trustor’s behavior of Meeting Expectations.

As shown thus far, there is little empirical research on how leader personality influences upward trust, especially in Chinese culture. As such, this study researched the impact of leader personality traits on upward trust in China using the five-factor model that organizations and educational institutions have used for many years to assess and educate leaders. Regarding the traits of Neuroticism and Openness to experience, the following hypotheses are proposed:

**Hypothesis 4a:** Leaders scoring high on Neuroticism report weaker Affect-based upward trust.

**Hypothesis 4b:** Leaders scoring high on Neuroticism report weaker Cognition-based upward trust.

**Hypothesis 5a:** Leaders scoring high on Openness to experience report stronger Affect-based upward trust.

**Hypothesis 5b:** Leaders scoring high on Openness to experience report stronger Cognition-based upward trust.

The relationship of personality traits, as independent variables, and upward trust, as the dependent variable, is presented in Figure 1.
RESEARCH METHODOLOGY

Several steps were taken to assure a sound design for this study. First, from the literature, it was apparent that personality and trust had been successfully measured using different scales. Building upon this precedent, the scales were adapted to test leader’s personality and identify the resulting dimensions of trust. Second, a variety of statistical procedures were employed to determine if there are relationships among the variables discussed. Third, as a matter of convenience, the survey questionnaire was sent out through acquaintances.

The purpose of a survey is to generalize about a population by surveying a random sample of adequate size so that inferences can be made about that population, such as attitude, behavior, or characteristic (Babbie, 1990). A survey is the preferred type of data collection for this study, given its economy of design and ability to infer attributes of a large population from a smaller group of individuals (Babbie, 1990). As supported by Fink and Kosecoff (1998), surveys can be used to provide descriptions of people’s attitudes and perceptions. The survey used in this study was a synthesis composed by several cross-sectional surveys assessing leader’s personality and upward trust. The survey instrument used in this study was made up of two blocks that separately measure leader’s personality and upward trust (see Appendices A and B).

NEO-PI

The NEO-PI is used to measure personality (Costa & McCrae, 1992). The NEO-PI is a 25-item measure of personality characteristics and consists of 5 five-item scales. Responses are based on a 5-point rating scale ranging from 1=agree to 5=disagree. A more thorough description of the item content, development methods, and construct validity of the inventory is reported by Psychological Assessment Resources. The alpha coefficient was .762.

Trust

The instrument used to rate trust in this study was an affect-based trust questionnaire and a cognition-based trust questionnaire from McAllister (1995). There are 6 items for cognition-based trust (Cronbach α=0.926), and 5 items for affect-based trust (Cronbach α=0.902). Responses are also based on a 5-point rating scale ranging from 1 = agree to 5 = disagree. Before the data was obtained, there was a validation test with 26 superior and subordinates dyads, which demonstrated that the instrument is valid and reliable.

Survey respondents for this study were 137 Chinese superior and subordinate dyads from state-owned (33.57%) companies, private enterprises (41.6%), and overseas-funded enterprises (24.8%). The superior and subordinate receive the questionnaire separately. There were 105 men (76.6%) and 32 women (23.3%) superiors. In the employee category, there were 83 men (60.6%) and 54 women (39.4%) subordinates.

A series of assumptions were tested before any statistical procedures were conducted. For example, it is important when analyzing data to test for multicollinearity, normality, linearity, homoscedasticity, and independence of residuals (Pedhazur, 1997; Tabachnick & Fidell, 1989). After these assumptions were tested, three statistical methods were used to analyze the data. These methods included principal components analysis and Structural Equation Modeling.

Factor analysis is a statistical technique applied to a single set of variables when the researcher is interested in determining which variables in the set form coherent subsets that are relatively independent of one another (Tabachnick & Fidell, 1989). Variables that are correlated with each other but mainly independent of other subsets of variables are combined into factors. Factors typically reflect underlying processes that have created the correlations among the variables (Tabachnick & Fidell, 1989). As stated in the section above a principal components analysis was conducted to construct a valid survey instrument.

Structural equation modeling (SEM) is a statistical technique for testing and estimating causal relationships using a combination of statistical data and qualitative causal assumptions (Sewall Wright, 1921; Trygve Haavelmo, 1943; Herbert Simon, 1953; and Judea Pearl, 2000). Structural Equation Models (SEM) encourage confirmatory rather than exploratory modeling; thus, it is suited to theory testing rather than theory development. It usually starts...
with a hypothesis, represents it as a model, operationalizes the constructs of interest with a measurement instrument, and tests the model. The causal assumptions embedded in the model often have falsifiable implications that can be tested against the data. With an accepted theory or otherwise confirmed model, SEM can also be used inductively by specifying the model and using data to estimate the values of free parameters. Often the initial hypothesis requires adjustment in light of model evidence, but SEM is rarely used purely for exploration. Hypotheses were tested using this statistical method.

RESULTS

Table 1 presents correlation coefficients and other descriptive statistics for all variables assessed in this study. Relationships between personality constructs and trust variables are generally as predicted. The largest correlation for Agreeableness is with affect-based trust (r = .252). Extraversion is with affect-based trust (r = - .307), Neuroticism is with cognition-based trust (r = -.209), and Openness to experience is with cognition-based trust (r = -.202). Taken together, the correlational results support many of the hypotheses postulated in this study.

Table 1: Descriptive Statistics and Inter correlation Among All Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>Variance</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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</thead>
<tbody>
<tr>
<td>1. Extraversion</td>
<td>2.7299</td>
<td>0.74327</td>
<td></td>
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<tr>
<td>2. Agreeableness</td>
<td>2.3102</td>
<td>0.54531</td>
<td>0.210*</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3. Conscientiousness</td>
<td>1.9945</td>
<td>0.59135</td>
<td>0.423**</td>
<td>0.280**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Neuroticism</td>
<td>2.4398</td>
<td>0.76967</td>
<td>0.190*</td>
<td>-0.217*</td>
<td>0.172</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>5. Openness to experience</td>
<td>2.7591</td>
<td>0.71833</td>
<td>0.227*</td>
<td>-0.173</td>
<td>-0.289**</td>
<td>-0.178</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Affect-based trust</td>
<td>4.2847</td>
<td>1.44989</td>
<td>-0.307**</td>
<td>0.252**</td>
<td>0.704**</td>
<td>-0.192*</td>
<td>-0.184*</td>
<td></td>
</tr>
<tr>
<td>7. Cognition-based trust</td>
<td>4.0158</td>
<td>1.36914</td>
<td>-0.240*</td>
<td>0.225*</td>
<td>0.704**</td>
<td>-0.209*</td>
<td>-0.202**</td>
<td>0.648**</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Path</th>
<th>Standardized Path Coef.</th>
<th>T-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion→cognition-based upward trust</td>
<td>-2.09</td>
<td>-2.76</td>
</tr>
<tr>
<td>Extraversion→affect-based upward trust</td>
<td>-2.05</td>
<td>-2.83</td>
</tr>
<tr>
<td>Agreeableness→cognition-based upward trust</td>
<td>0.79</td>
<td>1.64</td>
</tr>
<tr>
<td>Agreeableness→affect-based upward trust</td>
<td>1.06</td>
<td>1.96</td>
</tr>
<tr>
<td>Conscientiousness→cognition-based upward trust</td>
<td>2.94</td>
<td>2.57</td>
</tr>
<tr>
<td>Conscientiousness→affect-based upward trust</td>
<td>2.95</td>
<td>2.65</td>
</tr>
<tr>
<td>Neuroticism→cognition-based upward trust</td>
<td>-2</td>
<td>-2.45</td>
</tr>
<tr>
<td>Neuroticism→affect-based upward trust</td>
<td>-1.85</td>
<td>-2.41</td>
</tr>
<tr>
<td>Openness to experience→cognition-based upward trust</td>
<td>-0.25</td>
<td>-0.81</td>
</tr>
<tr>
<td>Openness to experience→affect-based upward trust</td>
<td>-0.32</td>
<td>-2.03</td>
</tr>
</tbody>
</table>

χ²/df=1.639; RMR=0.069; GFI=0.76; IFI=0.93; CFI=0.93; RMSEA=0.069

Note: N =137 dyads for all chi-square analyses. CFI=comparative fit index; IFI= incremental fit index (any goodness of fit >.90 is an indication of acceptable overall model fit); RMSEA =root-mean-square error of approximation (any RMSEA < .10 is an indication of acceptable fit).

* p < .05, two-tailed.

There is a significant relationship between Extraversion, Agreeableness, Conscientiousness, Neuroticism, Openness to experience, and affect-based upward trust (path coefficient = -2.05, T = -2.83; path coefficient = 2.95, T = 2.65); path coefficient = -1.85, T = -2.41; path coefficient = -0.32, T = -2.03; respectively), and also significant relationship between Extraversion, Conscientiousness, Neuroticism, and cognition-based upward trust (path coefficient = -2.09, T = -2.76; path coefficient = 2.94, T = 2.57; path coefficient = -2, T = -2.45, respectively). Agreeableness is not found to correlate with either affect-based trust or cognition-based trust.

The outcome of path analysis is presented in Table 2 and the relationship among the variables is visually demonstrated in Figure 2.
Hypotheses are partly sustained by the data which reveals that Extraversion and Neuroticism have a strong negative effect on both cognition-based upward trust and affect-based upward trust, while Agreeableness has little effect on cognition-based upward trust and affect-based upward trust, and there is hardly any relationship between Openness to experience and cognition-based upward trust.

DISCUSSION

The empirical result on Extraversion’s negative effect and Agreeableness’ none-markedness is very different from Quinlan’s (2008) research, which suggests that the leader traits of Extraversion and Agreeableness significantly predicted the trust behavior of Meeting Expectations. This proves that the Chinese culture plays an important role in the relationship between the leader’s personality and upward trust.

The leaders whose Extraversion scores are high always show great enthusiasm for both attitude and language and are very confident with their own decisions and work. From the perspective of the subordinates, however, they are often perceived as self-centered. Due to their high self-confidence, they may ignore the viewpoints and recommendations of people around them and are less likely to take measures to avoid conflict with others or take the initiative to help others. These leaders are more likely to ignore communication and exchanging of ideas with subordinates, so their emotional ties are limited, and there would not be much affective trust or emotional investment with employees. However cognitive-based trust has not been recognized either, which reveals the importance of “Qing” (reciprocity or doing favor for the other party) in the context of Chinese culture.

Agreeableness in “Big Five” is involved with the relationship between people, but it is more “passive”, which means that we can judge whether a person has good or bad relationships with others from the traits he/she possess such as dedication, friendship, and altruism. Nevertheless, in the context of Chinese culture, a leader whose Agreeableness score is high may be more amiable in attitude and language. This will result in an “active” relationship, which requires doing favors, knowing how to create a relationship, and being flexible to balance different interpersonal relationships. Thus, both cognitive-based trust and affect-based trust have little relationship with Agreeableness.

The leaders whose Conscientiousness scores are high always perform according to the plan and persevere. At the same time, Conscientiousness reflects the degree of individual self-control to meet demand. From the subordinate’s view, these kinds of leaders can be strong executives and they will be active in exploring their work. These behavioral traits are linked to politeness, sportsmanship, civic and moral dimensions. The leaders whose Conscientiousness scores are high would easily win higher-level approval by subordinates through their behavior, and the manner and detail can provide more credible evidence for cognition-based trust.
In the Chinese culture, when a person has a strong emotional reaction, people tend to explain it from the emotion’s social and ethical sense, not from single emotional tendencies. The occasion will be interpreted in a different connotation, namely, the Chinese characteristics about Neuroticism actually involves much of the personality dimension, rather than a single dimension. In Chinese traditional culture, it is very important that people restrict or suppress their emotions, for there are many limits, both from the health and moral dimensions on emotional responses. Keeping emotions calm and in control is the highest state of morality in the Chinese culture. Therefore, the leaders showing stability in emotion will be more successful in positively affecting upward trust.

The leader whose trait on Openness to experience score is high shows active imagination, and curiosity about new ideas and exploration on the experience and unfamiliar situations. In the Chinese culture which emphasizes being steady, these behaviors of leaders will make subordinates consider him/her drunk, and when they communicate with subordinates, they usually appear self-centered, which may not build trust with their subordinates.

SUMMARY

Trust is an important factor for interpersonal communication and cooperation in organizations. In a typical Chinese organization, Guanxi (organizational networks) takes an important status, which means interpersonal trust has more effect on work than in Western countries. In a different culture, the relationship between personality characteristics of leaders and the ability of leaders to create and sustain organizational trust may be dissimilar. In this study, we have presented empirical research on how Chinese leaders’ personality traits have an impact on subordinate's upward trust.

Although there are limitations of generalizability for such a small sample as we have in this study, there are many beneficial results, as well in terms of how personality traits effect upward trust. This study took an inductive approach to examine the relationship of a leader’s big five personality traits and upward trust with respondents in Chinese culture. The results confirmed that Extraversion and Neuroticism have a negative influence on upward trust, while Conscientiousness has a positive influence. Furthermore, Openness to experience appears to have a negative impact on affect-based trust. A comprehensive review of the literature, a discussion of the results, and implications were provided.

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### APPENDIX

**Leader Personality Survey:**

Please draw “○” in the number that meets your own situation. 1 – 5 represents:

- 1 Strongly Disagree
- 2 Disagree
- 3 Uncertain
- 4 Agree
- 5 Strongly Agree

<table>
<thead>
<tr>
<th>Viewpoint</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I like to have many friends around me.</td>
<td></td>
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<tr>
<td>2. I prefer to work with others rather than compete with others.</td>
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<tr>
<td>3. If I made a promise, I will make it</td>
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<tr>
<td>4. I often feel helpless and want others to help me solve problems.</td>
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<td>5. I do not like to waste time imagining things that cannot be achieved.</td>
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<td>6. I think I’m not particularly of “high spirits”</td>
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<td>7. I know many people like me.</td>
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<td>8. Sometimes I did not make credible and reliable what I should be.</td>
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<td>9. I am rarely sadness and frustration.</td>
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<td>10. I am very interested in art and nature.</td>
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<tr>
<td>11. I am a very lively person.</td>
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<tr>
<td>12. If I do not like someone I will let him know.</td>
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<td>13. I feel I am lack of orderliness when doing work.</td>
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<td>15. I rarely pay attention to the changes in mood and feelings in different environment.</td>
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<td>16. I always like to work alone.</td>
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<td>17. I often argue with my family or partner.</td>
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<td>18. I always complete work positively and effectively.</td>
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<tr>
<td>19. I am not a person who is self-troubled.</td>
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<tr>
<td>20. I often get pleasure though exploring the theory and concepts that is abstract.</td>
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</tbody>
</table>

**Upward Trust Survey:**

Please draw “○” in the number that meets your own situation. 1 – 5 represents:

- 1 Strongly Disagree
- 2 Disagree
- 3 Uncertain
- 4 Agree
- 5 Strongly Agree

<table>
<thead>
<tr>
<th>My superior and I…</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. We are happy to share with each other, and we are free to share our thoughts, feelings and ideals.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2. I can tell him the problems I meet with in work, and I am sure that he is willing to listen.</td>
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<tr>
<td>3. If any of us is to leave for any reason, which leads us not work together, we will feel we missed something important.</td>
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<tr>
<td>4. If I tell the problems I face to him. I know he will give me constructive advice.</td>
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<tr>
<td>5. I have to admit that I invest many personal feelings in our working relationship.</td>
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<tr>
<td>6. He is very professional and dedicated.</td>
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<td>7. Because of his work experience, I have no reason to doubt his ability and experience.</td>
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<tr>
<td>8. He will not make my work more challenging due to neglect.</td>
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<tr>
<td>9. Most colleagues trust him and respect him, even if they are not his friends.</td>
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</tr>
<tr>
<td>10. Some of my working partners consider that he is very trustworthy when communicating with him.</td>
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</tr>
<tr>
<td>11. If people know more about him and his background, they are willing to pay more attention to his job performance.</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>