Managing to lead in private enterprises in China: Work values, demography and the
development of trust

Yuan Wang (corresponding)

School of Management
University of Technology, Sydney
City campus, Haymarket
PO Box 123 Broadway
NSW 2007 Australia

Telephone: 61-2-95143577
Fax: 61-2-95143602
Email: karen.yuan.wang@uts.edu.au

Stewart Clegg

School of Management
University of Technology, Sydney
City campus, Haymarket
PO Box 123 Broadway
NSW 2007 Australia

Telephone: 61-2-951439344
Fax: 61-2-95143312
Email: s.clegg@uts.edu.au

1 Stewart Clegg is also a Professor at Aston Business School; Visiting Professor at the Faculty of
Business at Maastricht University and Visiting Professor and International Fellow in Discourse and
Management Theory, Centre of Comparative Social Studies, Vrije Universiteit of Amsterdam.
Managing to lead in private enterprises in China: Work values, demography and the development of trust

Abstract
Previous work on trust has focused on employee trust in management. However, issues of how leaders develop trust in their follower in leader-member exchange (LMX) are under-explored. Based on theories of leader-member exchange, attribution and industrial convergence, this study investigates how the work values of leaders influence the development of their trust in followers and how this is moderated by demographic factors. A survey of 219 leaders was conducted in privately owned enterprises in China. The findings suggest that the work value of centralization is negatively related to leader trust in follower predictability. Group orientation and formalization are positively related to the development of trust in follower good faith. Moreover, age and level of formal education are found to moderate significantly the relationships between leader work values and development of their trust in followers within the context of China.

Keywords: Trust in followers, work values, demography and Chinese leaders
Managing to lead in private enterprises in China: Work values, demography and the development of trust

INTRODUCTION

It has been argued that positive leader-member exchanges (LMX) involve trust, loyalty and affection in dyad relationships (Dienesch & Liden, 1986). However, in the literature of leadership the issue of how such positive LMX takes place is unsatisfactorily addressed, although research into LMX theory has been gaining momentum, with many studies investigating different aspects of LMX (Chen & Tjosvold, 2005). The theoretical development of research on trust in recent years provides a chance to explore these issues (Brower et al., 2000).

It is a truism of contemporary management theory that effective internal management coordination, teamwork, and LMX exchanges cannot occur without trust (McKnight & Cummings, 1998; McAllister, 1995; Nooteboom, 2002; Nooteboom & Six, 2003; Porras, Clegg and Crawford, 2004). The development of trust is believed to involve the truster’s calculations, cognitions, and affections (Smith et al., 1995; McAllister, 1995; McKnight and Cummings, 1998) as they respond to those who are the targets in whom trust is to be developed. Enquiry into work values provides some leverage into how people’s beliefs and behavioural models develop within a social context (Whitener, Brodt, Korsgaard & Werner, 1998; Jones & George, 1998). Who is to be trusted and the extent to which they should be trusted depend heavily on the work values of the person vesting that trust.

Hitherto, arguments about the relationship between cultural values and trust have tended, at the national level, to be theoretical (Chen et al., 1998; Doney et al., 1998; Whitener et al., 1998). The dominant traditional culture of Confucianism,
characterized by high power distance, high collectivism and high uncertainty avoidance, has been contrasted to countries with low values on these items such as the US, UK, and Australia (Hofstede, 1991). However, irrespective of the degrees of trust or suspicion that are said to characterise specific ‘national cultures’, within any specifically putative ‘national culture’ how trust is influenced by people’s work values in specific workplaces remains ambiguous, especially in terms of how leaders develop trust in those who are their followers. Prior research suggests that the work values of group orientation, formalization, and centralization have an impact on leadership style in general term (Sallee and Flaherty 2003; Huff & Kelley, 2003; Karabati & Say, 2005, Kirkman 2000). The focus of this empirical investigation, therefore, will be on the extent to which the work values of centralization, group orientation and formalization influence leaders’ intention to trust the dependability, predictability and good faith of followers at the individual level.

Our research takes place in the largest and, perhaps culturally most complex society on Earth, China. In a country whose provinces are bigger than most European countries it would be foolish to generalize from any sample to characteristics of the country as a whole. All one can do is reflect the findings of specific investigations and make theoretical connections with the flow of lived experience as it has reflected history. For this paper, we do so through an explicit demographic framing of the analysis as we go on to discuss. The investigation is of privately owned enterprises (POEs) in China. As a result of economic reform, privately owned enterprises (POEs) in China are increasingly playing an important role in the country’s economy. The leaders of these enterprises have to be successful in building work orientations that develop trustworthy relations rather than rely on the ideological cohesiveness and welfare ethic of the old collectivist ‘iron rice bowl’. Rather than rely on the state and
party for legitimacy they have to manage in terms of the centralization of the enterprise and its formal structures, rather than those of the state, instead of subsuming such questions to matters of political loyalty. How leaders in POEs in China manage and operate their businesses provides the focus for an emerging research area. Moreover, given the context of China’s current transitional economy, Chinese enterprise leaders face greater uncertainties and dramatic changes of business environment, compared with their Western counterparts. They are attempting to build enterprise using a population whose habits of thought and work, in the recent past, were formed in a very different environment, one dominated by the state, the party and its local manifestations.

From one perspective of traditional social science research which meshes well with the specificity of recent Chinese history, it will be demographic attributes that are associated with underlying task-related attributes in LMX exchange (Somech, 2003). The logic of industrialism argument familiar from debates about industrialization (Kerr et al., 1960) suggests that attitudinal convergence depends on age and formal education. The industrialism debate (Badham 1984) raises pertinent research questions in regard to how the two demographic attributes of age and formal education affect work values for Chinese POE leaders (Birnbaum-More et al. 1995; Ralston et al., 1999; Westerhof et al., 2000). Major private sector industrialization has only taken place in China during the past 20 years: those employees who are much older than this – the 'boomer' generation – will have had their values formed during the Cultural Revolution rather than in an enterprise economy created by rapid private sector industrialization. Do these variables have a moderating impact on the development of leaders’ trust through work values in their followers? Specifically, we investigate to what extent demographic variables of age and education have moderating effects on the relationships between leaders’ work
values in Chinese POE and their trust in subordinates. Thus, the current study contributes to understanding of trust by explaining the influence that work values have on leader-follower relationships while also increasing our understanding of how these relationships are patterned amongst Chinese POE managers, leaders in the transitional economy, when seen in terms of the moderating effect of their demographic characteristics.

LEADER TRUST AND WORK VALUES

According to leader-member exchange theory (LMX), leaders do not develop working relationships equally with all their followers. Instead they will develop high quality exchange relationships with a few key followers, referred to as high LMX, but not with others (Gómez & Rosen, 2001). Trust is argued to be an antecedent of what leader’s constitute as empowerment of followers, thus creating higher quality LMX (Gómez & Rosen, 2001). Based on a higher degree of trust, superiors offer high LMX employees special benefits such as support, information exchanges, training and rewards not offered to low LMX employees (Duarte & Goodson, 1993). The level of trust displayed in managing shapes leadership style choice of various levels and means of control (Grimes, 1998). However, previous research gives limited attention to the conditions for the development of antecedents that supervisors use to offer high LMX to employees. In this study we examine how trust, an antecedent to high LMX, is influenced by leaders’ work values of centralization, group orientation and formalization.

Trust in Followers
A leader needs to develop trust in follower to maximize utilization of their talent and engage their mentality in positive ways (Whitener et al, 1998). In vertical dyadic relationships, however, the leaders may carry substantial costs by extending rewards to a follower whom they trust if the follower does not reciprocate by goal-attainment in LMX relationships (Gómez & Rosen, 2001). Delegation allows followers greater freedom to behave opportunistically. Consequently, leaders prefer to develop trust only in some followers and provide them with high LMX, by examining multiple dimensions of followers’ trustworthiness. In a dyadic leadership context, only the leader can assess the extent to which he or she trusts a particular subordinate (Brower et al., 2000).

The development of trust is a sophisticated, multiple social and psychological process made more complex by involvement in risky or uncertain circumstances. The dependability, predictability and good faith of the targets are indicated in the literature as the main dimensions that indicate that those who are being trusted have indeed developed trust (Butler, 1991; Johnson-Gorge & Swap, 1982; Rempel et al 1985; Smith et al 1995). The LMX relationship is built through interpersonal exchanges that require the related dimensions of trust, in which parties to the relationship evaluate the ability, benevolence, and integrity of the others (Brower et al 2000). Specifically, leaders may develop trust in follower dependability through assessment of their personalities and capabilities in interdependent work relationships. In general, trust is established when one party calculates that the benefits of cooperating in a relationship with another party outweigh the possible costs of interdependence (Lindskold, 1978; Shapiro et al., 1992). Trust in follower dependability is defined in terms of being confident that followers are capable of carrying out their jobs independently with their current attributes, ability or
Leaders develop trust in the predictability of followers through perceiving previous behaviours in work relationships (Whitener et al., 1998). Based on previous experience of the trusted target’s stability and consistency of behavioural patterns, investors in trust develop it on the basis of predictability (Rempel et al., 1985; Stack, 1988; Adler, 2001). Trust in follower predictability, therefore, is defined as leader’s confidence in the expectation that followers’ future behaviour will be predictable in terms of consistency in work.

Trust in good faith arises from interpersonal attribution processes based on interpretations of the other party’s intentions and motives (Kelley, 1979). The trust in good faith rests on the assumption that the trusted employees are faithful and altruistic. Leaders are willing to put themselves at risk in vertical dyadic relationships, through delegation and autonomy, despite the possible vicissitudes of uncertainty (Rempel et al. 1985; Whitener et al., 1998; McAllister, 1995). Leaders’ trust in follower good faith, therefore, is defined as confidence in employee benevolence, loyalty and commitment to leaders within and beyond interactive work relationships. Based on previous studies and the definitions of trust given, it is appropriate to argue that the development of trust in followers is a consequence of interaction between followers’ behaviour patterns and the subjective responses of the leaders, which is influenced by an attribution process.

**Influence of Work Values on Leader Trust**

Causal attributions play a vital role in providing the bases for decision concerning alternative beliefs and behaviours (Kelley, 1973). Propensity to trust is a stable within-party factor affecting the likelihood of trust formation (Mayer et al., 1995; Somech,
2003) and influencing how much trust one has in a trustee, prior to data on that particular party being available. With different developmental experiences and personality types, people differ in their inherent propensity to trust (Mayer et al. 1995; Gill et al., 2005). Although for leaders, followers’ behaviours serve as a cue for the extent of developing trust in them, the extent of individual trust in others can also be attributed to internal factors: individual values and value-related personal traits which are components of an individual propensity (Gill et al., 2005). Work values encompass preferences about the best way to manage followers for maximization of organizational performance. Although trust may form in a variety of ways, whether and how trust is established depends upon individual values that guide people’s beliefs (Williams et al., 1966; Whitener et al., 1998; Jones & George 1998).

**Trust and Work Values of Centralization**

Giddens (1990) argues that leadership concerns how power is exercised, control maintained and authority legitimated, especially in relation to trust issues. The degree of centralization of leadership addresses ideological orientations to authority because it refers to the locus of decision authority and control within an organizational entity (Lee & Choi, 2003), which is found to correlate negatively with trust in several studies (Williams et al., 1966; Shane, 1993). In other words, low trust relations are reflected in a high degree of centralization of decision-making authority. The relation between trust and power is frequently analogised as if they were two sides of a coin. From the perspective of structural-functional theory, a complex balancing relationship between managerial trust and control will exist as both will be functionally necessary for the maintenance of social order in relation to the authority structure (Gouldner, 1973). If distrust grows power will be exercised to try and tighten control, thus diminishing not
only trust but also the conditions in which it might grow (Reed, 2001). Leaders typically incline either to trusting in followers based on their expectations of reciprocal relations, or to control them based on expectations that relations will be asymmetrical.

Leaders with work values favouring high centralization express the view that central control is the most effective means for organizational operation. At the individual level, they are inclined to believe that their control of the whole firm’s knowledge, capacities, and decision-making can best assure positive results. Therefore, they tend to exercise coercion to establish and maintain work-related hierarchical relationships. They tend to have low tolerance of variability (Kirkman and Shapiro, 1997; Lee and Choi, 2001) and do not appreciate sharing power with followers (Bachmann, 2001). They impose conformity and compliance on followers so as to warrant unchallenging behaviours and attitudes from them, instead of developing mutual trust with them. Furthermore, they believe that the power and privilege of position grants them unconditional right to ask followers to do whatever they want, without justification. Where belief in managerial prerogative is high, the development of trust in the dependability of followers is not likely to be perceived as necessary. The stronger the preference for centralization, the less likely will be trust in subordinates.

We, thus, hypothesize that:

\[ H1a: \text{A leader's work value of high centralization will be negatively related to managerial trust in follower dependability.} \]

At the institutional level, such leaders will prefer organizational systems that are highly centralized, hierarchical, and focused on efficiency, which, in turn, leads to further low trust in leader-member exchange relationships, in particular, in the key
management aspects of delegation and independence (Whitener et al., 1998; Klenke, 2005). They concur with the predominance of norms oriented to conformity and prefer followers to do what the leaders believe is accepted and proper in terms of organizational centralization. Clearly, where subordinates are not provided with opportunities freely to exercise planning and action, leaders’ dispositions to trust in follower predictability will diminish (Doney et al., 1998). Conversely, leaders with low values on centralization may rely on greater trust in followers’ participating in operative processes, based on their willingness and capacity. Such trust is the basic prerequisite for sharing power (Klenke, 2005). They are likely to develop positive trust in follower predictability. Thus we hypothesize that

\[ H1b: \text{A leader’s work value of high centralization will be negatively related to managerial trust in employee predictability.} \]

Trust and Work Values of Group orientation

The work value of group orientation is defined as the degree to which people in a group should actively help one another in their work (Hurley and Hult, 1998). First, high group orientation facilitates the development of managerial trust in the good faith of subordinates, a work value that cultivates trust in good will amongst members (Whitener et al., 1998; Gunnarsson & Jonsson, 2003) and that is positively related to benevolence amongst members (Soh and Leong, 2002). Such a work value emphasizes group interests over individual interests and members’ loyalty to the whole group. Therefore, leaders with high work values for their group orientation tend, in good faith, to engender followers’ trustworthy behaviour by requiring them to place group over personal interests in exchanges, an effective way to cultivate subordinates’ commitment
to groups and managers (Whitener et al., 1998). On the other hand, leaders with these work values will strongly condemn opportunistic behaviour towards groups (Doney et al., 1998). These leaders are inclined to develop in-group bias in LMX relations, which minimizes the chances of trust developing beyond group boundaries but maximizes trust within group boundaries. They prefer both that they and followers belong to groups not because intrinsically they like to do so but because they see it as being in their own long-term interests (Huff & Kelley, 2003; Gunnarsson & Jonsson, 2003). Thus, they are likely to develop trust in the good faith of followers in certain dyadic relationships. In contrast, those whose work values are more individualistic in orientation and are focused on self-interest may find it difficult to initiate interpersonal trust in follower good faith (Chen et al., 1998; Whitener et al., 1998; Hewett & Bearden, 2001). Therefore, this study hypothesizes that:

\[ H2a: \text{A leader's work values of group orientation will be positively related to trust in the good faith of followers.} \]

Research suggests that people with a high group orientation opt to develop trust based on relational information. A group orientation stresses member conformity within the group (Soh and Leong, 2002) such that group harmony and consistency will be paramount. Leaders with a high group orientation score tend to believe in rigid group norms that curb deviant behaviours (Earley, 1993) and think that followers should accept these in a self-conscious way. Based on these beliefs they impose practices in workplaces premised on the assumption that follower behaviours towards the whole group, including group leaders, will be predictable. Their trust in subordinate predictability is fostered accordingly. Based on the above, this study hypothesizes that:
H2b: A leader’s work values of group orientation will be positively related to trust in the predictability of followers.

Leaders with a high group orientation may develop trust in subordinate dependability, as they emphasize the appraisal of performance based on common group, rather than individual, goals (Ueno & Sekaran, 1992; Doney et al., 1998). Leaders’ work values influence their trust in the dependability of their followers (Casimir et al., 2006). The coherence of beliefs and commitments among group members and a propensity for cooperation and networking are thus seen as key to group success. Emphasizing the importance of individual skills and achievements would not necessarily be beneficial, as it would undermine group strength, eventually leading to group failure, by encouraging members’ to pursue individual interests and focus. Common goals will be achieved through group collective capacity and effort (Kirkkman, 1997). With these preferences and expectations, leaders with a high group orientation are likely to develop trust in follower dependability in terms of the accomplishment of group tasks. Therefore, this study hypothesizes that:

H2c: A leader’s work values of group orientation will be positively related to leader trust in the dependability of followers.

Trust and Work Values of Formalization

Formalization refers to the degree to which decisions and working relationships are governed by formal rules, standard policies, and procedures (Caruana et al., 1998; Lee & Choi, 2003). Leaders with high formalization work values are sensitive to uncertainty in the workplace. They feel anxious about risks and are fearful of deviation.
Rules and standardized procedure are believed to be the best way to minimize opportunism (Haugen, 2006) rather than by sharing trust with followers. Consequently, they have difficulty developing trust in the good faith of those followers who are capable of acting and thinking differently, and prefer followers to remain consistent with what they, the leaders, define as their best interests and thus insist on all followers following similar ways of working, rather than exercising initiative. To mitigate deviation effectively they place a high value on continuing power-dependency relationships with followers. They use regulations and procedures as precursors for future good faith, which alleviate deviations, in order to temper potential opportunistic behaviour and develop a foundation for certainty (Davis, 1997; Haugen, 2006). In contrast, the work value of low formalization produces a high tolerance for variation of opinion, behaviour and changes in these. Leaders with this value view conflicts and changes as acceptable and have less regard for stability and consistency as their highest priority. They tend to develop organizational structures that focus on achieving effectiveness through decentralization and a less hierarchical orientation (Therkelsen and Fiebich, 2003; Haugen, 2006). Hence, it is hypothesized that:

\[ H3a: A \text{ leader's work values of high formalization will be negatively related to trust in follower good faith.} \]

Leaders’ preferences in regard to work effectiveness, expressed as tolerance for unstructured, unclear, or unpredictable situations, are also likely to influence the development of their trust in followers. Trust is not related to loyalty alone but also to the communality of expectations and predictability of outcomes based on formal arrangements and shared guidelines (Gunnarsson, & Jonsson, 2003). Grey and
Garsten (2001) argue that trust, as it is constructed in everyday organizational life, can be an effective means with which to cope with uncertainty as it is based on shared values and judgments of similarity (Siegrist et al., 2003). Trust is based on a ‘specific belief’ about the perceived trustworthy behaviours and shared values of subordinates in reciprocal relations (Grey and Garsten, 2001). However, being disposed to trust is not the only means adopted by leaders to deal with uncertainty in organizational life. Alternatively, they can choose formalization as a means of reducing uncertainty (Bachmann, 2001), where the work values of formalization constitute a ‘general assumption’ that followers cannot completely be trusted and need to be guided, disciplined and ruled to maximize their performance. Hence, it is hypothesized that

\[ H3b: \text{A leader's work values of high formalization will be negatively related to managerial trust in predictability of followers.} \]

The Moderating Role of Demographic Characteristics on Trust Development in China

Based on an assumption of industrial convergence (Kerr, et al. 1960), social values can be seen to be related to demographic characteristics (Triandis, 1995; Birnbaum-More et al., 1995; Ralston et al., 1999; Westerhof et al., 2000). The theory of industrial convergence hypothesizes that the technological imperatives of industrialization will cause convergence in social institutions, so that the appropriate values and skills necessary for the management of industrial enterprises will emerge in consequence. The formation of individual values of acculturation (Hammond, 1964), enculturation (Bohannan, 1963) and socialization (Feldman, 1981) occur through individual demographic variables (Birnbaum-More et al., 1995). Growing up in a particular stage of industrialization, people are socialized into the social values and skills that
isomorphically fit its specific institutional needs. The education people receive reflects the values and knowledge demanded at the corresponding evolutionary stage of industrialization (Xiao, 1999). Consequently, individuals are likely to vary in social values due to individual attributes of age and levels of education in relation to the stages of industrialization they have lived through: a form of institutional imprinting occurs. Since there are high inter-correlations between time and standard measures of industrialization (Birnbaum-More et al., 1995), age and age-related education are likely to explain partially these correlations. The age at which a population enrolled in and left school is an important standard indicator of industrialization (World Bank Report, 2002). Earlier enrolment and later graduation are positively associated with industrialization. With increased industrialization, younger managers have more chances for longer education than did older managers. The level of education engenders an ability and willingness to take personal responsibility for the uncertain consequences of decisions in the younger managers (Westerhof et al., 2000).

Westerhof and his colleagues (2000) found that generally elderly people held more group-oriented values than individualistic descriptions of self and life, irrespective of the degree of individual or group-orientation of the societies in which they lived. (In the research sample, the countries were the Congo and the US.) The elderly grew up in more collectivistic times. Research on work values and industrialization has indicated that low individualistic oriented values and low centralization are associated with economic growth (Hofstede, 1991; Birnbaum-More et al 1995; Hughes & Bobowick 2001). More specifically in the context of the present study, Birnbaum-More et al (1995) and Ralston et al (1999) found that in the context of China the age and extent of education of managers is related to the acquisition of work values. Birnbaum-More et al (1995) found that the level of formal education is
negatively linked to the acquisition of formalization in both Mainland China and Hong Kong, and that increasing age relates positively to the acquisition of formalization in Mainland China. Ralston et al (1999) found that the values of the younger generation of Chinese managers and professionals in Mainland China are more individualistic and less group-oriented than the older generation. The results of these studies indicate that the relationship between work values and trust in China may be moderated by these two demographic characteristics. However, no such correlation between centralization and these variables has been found in Mainland China in previous studies (Birnbaum-More et al 1995; Ralston et al 1999).

In contemporary China, because of its tumultuous recent history, demography is especially important. Young managerial leaders in the generation between 20 and 30 years of age in China have seen the most radical development of industrialization since starting schooling, as a result of the country implementing the ‘open-door’ policy in the early 1980s. They are equipped with more contemporary knowledge and democratic ideologies than older generations. Furthermore, most of them are the only children of their family and have grown up in an environment in which they are the centre of attention of their family. We assume that, in light of these demographics, they will become more self-centred and less inclined to be obedient to authorities than older generations. Those between 31 and 40 years old are a group that did not experience industrialization until late secondary school. The major education they obtained still emphasised high group orientation and consistency with Communist Party doctrines. They were not encouraged to challenge the official ideology. The generation of managers between 41- 50 years old experienced the Cultural Revolution (1966-1976) during their adolescence and early work years. They were exposed to high values of group orientation, centralization, and formalization in both direct and indirect ways.
Having seen or experienced rustication, re-education and the Red Guards, they had many negative experiences of the results of strong cultural control being oriented to individualistic mentalities. The group aged over 51 obtained their junior secondary schooling before the Cultural Revolution and was the generation most involved in the Red Guard campaigns and most devoted to this ten-year political movement as adults. Dogmatic and disastrous policy initiatives such as ‘The Great Leap Forward’, which occurred when they were in elementary school, depressed their standard of living. Most of them had no chance of a college education and found it prudent to display a deep commitment to collectivist work values.

In sum, managers of diverse ages and levels of education are likely to acquire different work values to various extents, as we investigate in this study. Hence, the study tests the moderating effects of age and education on the relationships between work values of centralization, group orientation and formalization and managerial trust in China, as follows:

\( H4: \text{Age will moderate the relationship between centralization and leader trust in followers.} \)

\( H5: \text{Age will moderate the relationship between group orientation and leader trust in followers.} \)

\( H6: \text{Age will moderate the relationship between formalization and leader trust in followers.} \)

\( H7: \text{The level of education will moderate the relationship between centralization and leader trust in followers.} \)

\( H8: \text{The level of education will moderate the relationship between group orientation and leader trust in followers.} \)

\( H9: \text{The level of education will moderate the relationship between formalization and leader trust in followers.} \)
METHODS

Sample and Procedure

The sample for this study consisted of 219 leaders (136 males and 83 females) from POEs in China, with the sample comprising a hierarchical leadership range stretching from top and middle management to frontline management. Although these are not leaders in the sense of being the absolute elite – which is largely political and inaccessible to researchers – they are leaders in their societal context in that they are leading the way from the state-controlled to the market economy in China. These leaders were drawn from both northern and southern China. Given the difficulty of accessing a representative national sample of privately owned enterprises in China, a convenience sample was used. Six private enterprises in Beijing, five from Hebei province, and twenty from Guangdong province were chosen, with the top entrepreneurs of these enterprises supportive of access. Because Guangdong province, close by Hong Kong, has had the longest experience of being a Special Economic Development Zone, there are more and longer established private enterprises available in Southern rather than Northern China. As a result, the sample reflects the regional development of POEs in China. The survey was conducted between September 2000 and June 2002. Firms were selected among the following industry groups: textile, real estate, equipment manufacturing, electronic product manufacturing and selling, and information services to business and consumers.

The questionnaires were distributed and collected through designated senior contacts within the firms, who were either CEOs or general managers. Although completing the questionnaire was not compulsory, most managers were invited by their firm’s senior management to participate in the study, with the response rate being 80
percent. Consequently, 219 questionnaires were useable for analysis. The high response rate can be partly explained by the fact that the senior management requested that the questionnaire be completed and culturally, Chinese staff would normally obey such a request.

**Measures**

First, existing measurement scales were identified through a review of prior research. All of the items used in the structured-questionnaire of this survey were adopted and modified from the literature. Second, because the survey was of leaders’ trust, the scales shifted from peer-interpersonal relationships to leaders’ views. The subjects were asked to express their level of agreement with a given statement via a seven-point Likert-type scale, with the response ranging from strongly agree to strongly disagree. The items with a negative meaning were reversed in the analysis.

**Dependent variables**

Trust was measured using three scales that were modified from the Rempel et al (1985) trust survey questionnaire. Trust Scale 1 – trust in dependability – tested the extent to which a manager believed that subordinates were dependable and reliable, and able to act competently and responsibly, rather than intending to take advantage of a situation. Three items form the scale, an example being that “I have found that my subordinates are usually dependable”. Trust Scale 2 – trust in predictability – tested the manager’s belief that subordinates were consistent, stable and predictable in terms of past patterns of behaviour. For example, we asked if “My subordinates behave in a very consistent manner”. Trust Scale 3 – trust in good faith – tested the extent to which a manager believed that subordinates would be trustworthy in the future, beyond the available
evidence. One of the questions asked respondents to express their agreement with the following remark: “Though time may change and the future is uncertain, I know my subordinates will always be ready and willing to offer me strength and support”.

**Independent variables**

Centralization and formalization were measured using Robertson and Hoffman's (2000) scale. Although Roberson and Hoffman label their instrument as ‘Power Distance and Uncertainty Avoidance’, the measures they developed do not measure at the national cultural level (Hofestede 1980). Instead, the instrument measures managerial preferences for work values of formalization, e.g. “Managers expect employees to closely follow instructions and procedures” and centralization, e.g. “Managers should make most decision without consulting subordinates.”

Group orientation was measured using the ‘Vertical Collectivism’ scale, which tests relationship interests from an individualistic to whole group focus, using Chen et al's (1997) ‘Vertical and Horizontal Group Orientation Questionnaire’. For example, “People in a work group should realize that they sometimes are going to have to make sacrifices for the sake of the work group as a whole.” Age and the level of formal education were taken as independent variables for the test of interaction effects.

**Control variables**

Managers’ demographic background may have potential effects on their development of trust. Gender and managerial position were controlled because research suggests that these variables have effects on the acquisition of social values (e.g., Triandis, 1995). Within a hierarchical organizational structure, values, beliefs and their functions will vary across different position levels (e.g. Thomas et al., 2001).
Validity

First, the questionnaire was translated from an English version, as the original items were all derived from the English-language literature. The versions in Mandarin and English were made equivalent in meaning, refining the questions through backwards-forwards translation. Second, to minimize social desirability effects, the respondents were promised anonymity and confidentiality. Third, all items were tested for common method variance using the approach of Harman’s one-factor test (Podsakoff et al., 2003), since there are multiple items in an original measurement for each tested variables. All the variables used in the current study were entered into an unrotated factor analysis, in terms of their categories, to determine the number of factors. The trust inventory consisted of Rempel and colleagues’ (1985) validated 16 items of trust. On the basis of factor loading 0.40 as the criterion for inclusion, factor 1 (totalling 4 items) was constructed from faith, factor 2 (totalling 2 items) was created from predictability and factor 3 (totalling 3 items) was formed from dependability. The other 4 items were abandoned because of their low factor loading. The results of factor analysis provided confidence that common method variance was not an issue in the current study. Finally, the chosen items yielded a reliable Cronbach’s alpha.

Analyses and Reliability

The analysis involved regression on dimensions, with scales based on 219 Chinese leaders of POEs, trust in dependability (Cronbach’s alpha = 0.74), trust in predictability (Cronbach’s alpha = 0.70) and trust in good faith (Cronbach’s alpha = 0.78) as dependent variables, and the work values of centralization (Cronbach’s alpha =
0.70), formalization (Cronbach’s alpha = 0.84) and vertical group orientation (Cronbach’s alpha = 0.71), as independent variables.

Prior to statistical analysis, the codes of the responses to a number of items were reversed, so that all of the items measured with a higher score represented a higher level of preference on the scale. In the hierarchical regression analysis, trust in dependability, trust in predictability and trust in good faith were regressed on gender and management position variables (Step 1); work values of formalization, centralization, group orientation, age and education (Step 2); and interactions of the three centred work values with centred age and education on trust (Step 3).

RESULTS

The demographic characteristics for leaders in POEs in China are reported in Table 1. The sample largely features leaders of a young age and with short-term managerial experience. This, to an extent, reflects the short history of POEs in China, having only started in the early 1980s when their status was legitimised.

Insert Table 1 about here

The means, standard deviations and Pearson correlations for demographic variables, trust variables (good faith, dependability and predictability), formalization, centralization and group orientation are presented in Table 2. The correlations indicate that there are relations between the values of formalization and the three trust variables (trust in dependability, r = 0.40, p < .001; trust in predictability, r = 0.20, p < .01; and trust in good faith, r = 0.42, p < .001) and a positively correlated relationship between group orientation and the trust in predictability (r = 0.22, p < .01). There is a weakly negative relationship between centralization and trust in employee predictability.
The results of hierarchical regression in Table 4 indicate that centralization has a negative direct relationship with leader trust in follower predictability (p < .001). There is no significant relationship between the work value of centralization and the development of trust in follower dependability. Hence, H1a is rejected and H1b is supported.

Group orientation was significantly related to the trust variables of good faith (p < .001) and dependability (p < .001). Therefore, H2a, which states that high group orientation is positively related to trust in good faith of followers, and H2c, are supported. However, H2b, which states that a leader’s work values of group orientation will be positively related to trust in predictability of followers, is rejected.

The results of hierarchical regression indicate that formalization has significantly positive main effects on the dependent variables of trust in good faith (p < .001) It has a significantly negative effect on predictability (p<. 05). Therefore, hypothesis 3a, which states that formalization will be negatively related to leader trust in follower good faith is rejected. Hypothesis 3b is supported. The relationship between formalization and trust in predictability is significantly moderated by age at the 0.05 level. Hypothesis 6, which states that age will moderate the relationship between the work value of formalization and trust in followers, is also supported. However, hypothesis 9, which
states that formal education level will moderate the relationship between formalization and trust in subordinates, is rejected.

Moreover, the coefficients for the negative interactions of age with group orientation on trust in predictability are significant at the 0.05 level. Therefore, hypothesis 5, expecting that age will moderate the relationship between group orientation and leader trust in followers, is also supported. The relationship between group orientation and trust in good faith is significantly and negatively moderated by the level of formal education at the 0.05 level. In sum, hypothesis 8 is supported. There is no moderating effect of age and the formal education on the relationships between the work value of centralization and trust in followers. Hypotheses 4 and 7 are rejected.

DISCUSSION

The study provides an insight into whether the development of specific dimensions of trust in LMX relate to the key work values of centralization, group orientation and formalization at the individual level. The findings of the study also contribute to an explanation of trust issues of leadership in the current transition of China’s economy, which have been little known, by incorporating the demographic factors of age and level of formal education in the context of Chinese privately-owned enterprises.

Theoretical Implications

First, the findings of this study indicate that leaders with high centralization values tend not to value the role of trust in follower prediction processes. In leader-member exchange relationship, leaders displaying high centralization values view the necessity of the development of trust in the predictability of followers as low, compared with conformity and obedience to authority in order to get the job done. Trust in
predictability is usually initiated through rational perceptions rather than through emotions (Lewicki and Bunker, 1996) with the possibility of cooperation and delegation with, rather than control of, followers. Leaders’ work values of high centralization lead to an irrational emphasis on obedience in the leader-follower relationships instead of the development of trust with a rational justification. Our study expands previous studies of a correlation between the cultural value of power distance and trust to the individual level in workplace (Shane, 1993; Doney et al 1998).

Second, the findings suggest that leader trust in followers' good faith and dependability are positively related to group orientation. Leaders with a strong sense of group orientation prepare the psychological ground for the development of their trust in the good faith of followers. It is most likely that group orientation sustains the loyalty and conformity of group members, with the condition that the group takes care of the individual’s interest in return (Hofstede, 1984). Consequently, leaders with a high magnitude of group orientation are inclined to perceive the behaviour and working goals of followers as relatively faithful and reliable, encouraging managerial trust.

Third, the findings of the research support the original assumption that the leader’s high work values of formalization are negatively related to managerial trust in predictability of followers. In the workplace, leaders do not readily develop their trust in follower predictability, if they believe that the desirable way to avoid uncertainty from followers is to constrain them with rules and regulations. Interestingly, the findings also suggest that the work value of formalization has a positive effect on managerial trust in follower good faith, which is opposite to our original assumption about this relationship. Leaders with a high sense of formalization have a propensity to reduce anxiety about risk, seeking to emphasise similarity between the two sides of leader-member relations. Past research suggests that the values of uncertainty-avoidance tendencies influence
affective reactions in social contexts (Gudykunst and Ting-Toomey, 1988) and cause people to deliberately steer clear of ambiguous situations (Hofstede, 1991). Our study contributes to the literature with further explanation along this line by indicating that leaders feel it necessary to develop trust in followers who are faithful and loyal, so as to reduce ambiguity.

Importantly, the findings of this study indicate that demographic variables moderate the relationship between work values and the development of managerial trust within organizations in the context of China. We thus expand the study of Birnbaum-More et al (1995) with the finding that age is not only positively correlated with acquisition of uncertainty avoidance and collectivism at a national level but that it also moderates their effect on the development of trust and work values at the individual level within the context of China.

**Practical Implications**

One might assume that leaders in private enterprises in China must be weak in the work value of group orientation, as these are people who have chosen to pursue individual interests. However, the present findings do not support this assumption. Leaders in private enterprises in China hold a significant concern for the firm as the whole and, accordingly, develop trust in their followers. In reality, there are strong grounds for them to do so. The most common situation of Chinese POEs is that such businesses are run with close friends and relatives. Chinese leaders feel that their personal interests are closely related to enterprise growth. In other words, in Chinese network-based contexts, private enterprise interests are more meaningful to leaders than those of the government-owned enterprises for which they might previously have worked even though they had been taught to have a strong sense of group orientation towards
government-owned organizations. However, experience of employment in state-owned enterprises makes many subordinates feel that the collective interest was essentially inimical to individual interests. The relation between personal interests and private enterprise is now visibly perceived as being critical. These leaders’ benefits, even their jobs, will be at stake if enterprise growth is jeopardized. Adhering to this work value, Chinese leaders and subordinates usually expect each member to take a similar view about their personal relationship within the enterprise and demonstrate rigorous allegiance and contributions to leaders and the enterprises. Hence, leaders in POEs believe that their followers are worthy of trust due to their good faith and dependability. Thus, it is relatively easy to build leadership based on a paternalistic strategy and dependency.

The findings show that the development of managerial trust in follower good faith is strongly affected by the high formalization of POE leaders. The anxiety expressed by POE leaders is based on the high uncertainty of China’s business environment. In business operations, Chinese leaders may feel pressured to reduce an extremely ambiguous situation by laying down some restrictive rules and regulations. However, they know that within the Chinese cultural context any regulations will not be seriously implemented unless subordinates faithfully commit to the interpersonal relationships of guanxi, as a typical feature of high uncertainty avoidance cultures such as China (Hofstede, 1991). Therefore, Chinese leaders not only practice a style of leadership that requires followers who are trustworthy in dependability but they also need to develop followers who are trustworthy in good faith: acting in the leaders’ best interest. Consequently, leaders prefer to choose and work with subordinates who are loyal and faithful to them. It is a highly personalistic, paternal and situationally contingent form of leadership. Autonomy in hiring and firing in POEs people allows these leaders to
practise such leadership while developing the possible foundation of trust in employee good faith.

Typically, Chinese subordinates express personal commitment to their immediate leader when working in firms, instead of commitment to the whole firm or work principle, and tend to develop close interpersonal relationships with, and show loyalty to, their immediate leader (Therkelsen & Fiebich, 2003), explaining why this study detected a negative effect of formalization on managerial trust in predictability. Chinese leaders are clearly aware why followers are loyal, and closely follow them: their relation is largely patriarchal. The immediate leader-member relationship is one in which leaders are usually able, should they choose, to look after followers’ interests. However, this personal-based good faith is not predictable: as long as there is a possibility that either their subordinates or they may change position or job, it can lead to a situation where a specific immediate leader-member exchange relationship no longer exists.

The findings indicate that with increasing age, formalization has a stronger effect on reducing trust in employee predictability but that group orientation has a stronger effect in reducing the development of trust in follower dependability and predictability. Both moderating effects of increasing age mean that older leaders are inclined to trust followers less than do younger ones, leading to more autocratic leadership styles. This sends a clear message to Chinese POEs that in the selection of leaders age should be considered as a key criterion.

Other interesting findings of this study are that work values of group orientation have less influence on the development of trust in employee good faith with higher levels of leaders’ formal education. The findings indicate that with the growth of knowledge based on formal education, leaders gradually find diminishing value in
group orientations, such as loyalty and conformity to the group, as critical benchmarks for developing personal trust in followers. Thus, management in Chinese POEs should be aware that future leaders, drawn from younger cohorts, are more likely to be similar to leaders in liberal economies elsewhere than they are to their immediate predecessors. Some of the cultural specificity of Chinese society thus appears to be age-cohort dependent.

Consistent with the previous studies of Birnbaum-More et al (1995) and Ralston et al (1999), there is no moderating effect of age and the level of education on the relationship between managerial trust and centralization. These findings indicate that currently in China obedience to authority is accepted as a basic value, across all the age ranges and levels of education in the workplace. Chinese management of POEs should develop mechanisms to cultivate trust in followers in order to encourage innovation and high performance in China’s transitional economy.

Limitations and Future Research
The research sheds light on the relationship between work values and trust in privately owned enterprises in China. Certain limitations need to be identified. First, the study measures the relationship between work values and trust, and did not tap more specific variables in relation to the two domains. The degree of managerial risk and the effect of networking within organizations and selective recruitment criteria, for instance, may be related to trust development through these values. Second, the dyad LMX exchange relationships of trust are more complex than we are able to show here. We could not, for example, give attention to the followers’ role, as the trustee. Future research should be more dialectical in its relation to both leaders and followers. Another potential limitation may be the instrument used in the survey, which is based on Western cultural
assumptions about trust and work-value dimensions of relevance. Although the results of the study are encouraging, the interpretation of these dimensions could be different in China and may require a modified instrument more suitable to the Chinese context. However, using the current instrument does allow comparable cross-cultural studies. Finally, this study only tests the relationships amongst Chinese leaders in POEs in China, and does not address leaders of other types of enterprise, such as state-owned enterprises, joint ventures, and the public sector. Hence, any generalizations about Chinese leaders should be made with caution.

The results of the study suggest avenues for future research on work values and trust. One important avenue is to expand research into international comparative studies of beliefs about trust. The study focused on the relationship between work values and leader trust in private enterprises within China. It is important to know whether there are differences between Chinese and Western leaders in private enterprises in terms of their beliefs about trust in followers. In light of this, we can explore issues such as whether and how national culture influences individual work values in the formation of norms and expectations regarding managerial trust. International comparative studies along these lines could enrich understanding of the influence of cultural and other trust determinants on LMX relationships. In addition, a comparative study of Chinese executives in POEs and other types of enterprises, such as state-owned enterprises, joint ventures and the public sector, may also give a clearer picture of how work values are related to trust. Further, analysis of Western leaders compared with Chinese leaders in inward-investment joint ventures would enable one to see the extent to which the situation or the leadership style is more determinate.

There is also a need for research into the relationships between work values, managerial trust and some other important moderating variables, beyond demographic
components, in order to obtain a comprehensive picture of how beliefs about trust are
developed within a particular social context or between different subcultures in China.
The degree of managerial risk sentiment and networking within organizations, for
example, may be crucial components that influence the development of strategies of
trust. Organizational culture may also prepare the ground for leaders as individuals to
develop certain types of trust.

The research sought a better understanding of managerial trust in LMX in
relation to the nature of work values, to demographic factors, and to the context of
private enterprises in China. Although much research remains to be done, the study
makes a contribution to the relevant issues by providing insight into the relationships
between work values and the development of managerial trust in the leadership
literature. In so doing, it supports previous trust-culture theories and lays the
groundwork for future research to determine whether these relationships hold in other
cultural contexts.

References
Adler, P. S. (2001) Market Hierarchy, and trust: The knowledge economy and the
Sociology 32(1).
Organizational Studies 22(2), 337-365.
values in the People’s Republic of China and Hong Kong. Journal of Cross-
relational leadership: the integration of trust and leader-member
Butler Jr. J. K., (1991) Toward understanding and measuring conditions of trust:
formalization on entrepreneurship in export firms. Journal of Small Business
Management 36(1), 16–29.


Hofstede, G.


Kelley, H.H.


Table 1. Demographic Characteristics for Leaders in POEs in China.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Male</th>
<th>Female</th>
<th>136 (61.8%)</th>
<th>83 (37.7%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>Female</td>
<td>136 (61.8%)</td>
<td>83 (37.7%)</td>
</tr>
<tr>
<td></td>
<td>20-30</td>
<td>31-39</td>
<td>89 (40.5%)</td>
<td>92 (41.8%)</td>
</tr>
<tr>
<td></td>
<td>40-49</td>
<td>50 or Over</td>
<td>31 (14.1%)</td>
<td>7 (3.2%)</td>
</tr>
<tr>
<td>Education</td>
<td>Elementary</td>
<td>Jh. high or high school</td>
<td>29 (13.2%)</td>
<td>165 (75%)</td>
</tr>
<tr>
<td></td>
<td>school</td>
<td>Jr. high or high school</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 (4.8%)</td>
<td>29 (13.2%)</td>
<td>165 (75%)</td>
<td>25 (11.4%)</td>
</tr>
<tr>
<td>Mgt. year</td>
<td>Under 2 years</td>
<td>2-5 years</td>
<td>89 (40.5%)</td>
<td>21 (9.5%)</td>
</tr>
<tr>
<td></td>
<td>2-5 years</td>
<td>5-10 years</td>
<td>72 (32.7%)</td>
<td>11 (5.0%)</td>
</tr>
<tr>
<td></td>
<td>61 (27.7%)</td>
<td>61 (27.7%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mgt. position</td>
<td>Top management</td>
<td>Senior managers</td>
<td>36 (16.4%)</td>
<td>89 (40.5%)</td>
</tr>
<tr>
<td></td>
<td>19 (8.6%)</td>
<td>Top management</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Means, Standard Deviations, and Pearson Correlations for Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age b</td>
<td>1.80</td>
<td>.80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Gender</td>
<td>1.38</td>
<td>.49</td>
<td>-.21**</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Education c</td>
<td>2.98</td>
<td>.50</td>
<td>.00</td>
<td>.05</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Managerial position</td>
<td>3.01</td>
<td>.94</td>
<td>-.31***</td>
<td>.18**</td>
<td>-.21***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Centralization</td>
<td>3.37</td>
<td>1.26</td>
<td>.13†</td>
<td>.08</td>
<td>.07</td>
<td>.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Formalization</td>
<td>5.57</td>
<td>1.18</td>
<td>.01</td>
<td>-.01</td>
<td>.03</td>
<td>.03</td>
<td>-.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Collectivism</td>
<td>4.29</td>
<td>1.74</td>
<td>.02</td>
<td>-.04</td>
<td>.06</td>
<td>.07</td>
<td>.05</td>
<td>.13</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Trust - dependability</td>
<td>4.8</td>
<td>1.13</td>
<td>.09</td>
<td>-.02</td>
<td>-.01</td>
<td>.08</td>
<td>.02</td>
<td>.40***</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Trust - predictability</td>
<td>3.25</td>
<td>1.04</td>
<td>.03</td>
<td>.08</td>
<td>.09</td>
<td>-.04</td>
<td>-.19**</td>
<td>.20**</td>
<td>.22*</td>
<td>.16*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Trust - faith</td>
<td>4.97</td>
<td>1.27</td>
<td>.15*</td>
<td>-.07</td>
<td>-.00</td>
<td>.07</td>
<td>-.08</td>
<td>.42***</td>
<td>.01</td>
<td>.65***</td>
<td>.17**</td>
<td></td>
</tr>
</tbody>
</table>

a †p < .10, * p < .05, ** p < .01, *** p < .001 (2-tailed).
b Age was coded as 1 = 20-29, 2 = 30-39, 3 = 40-49, 4 = 50 or over.
c Education level was coded as 1 = primary school, 2 = secondary school, 3 = bachelor’ degree, and 4 = postgraduate degree.
d Management Position was coded as 1 = top management, 2 = senior management, 3 = middle management, and 4 = frontline management.
e Years in management was coded as 1 = less than 2 years, 2 = 2-5 years, 3 = 6-10 years, 4 = 11-20 years, and 5 = over 20 years.
Table 3. Hierarchical Regression Analysis of Trust on Work Values for POEs in China

<table>
<thead>
<tr>
<th>Variable</th>
<th>Trust in Dependability</th>
<th>Trust in Predictability</th>
<th>Trust in Good Faith</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 3</td>
</tr>
<tr>
<td><strong>Controls</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>.01</td>
<td>.01</td>
<td>.00</td>
</tr>
<tr>
<td>Mgt. position</td>
<td>.1</td>
<td>.07</td>
<td>.09</td>
</tr>
<tr>
<td><strong>Main effects</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.8</td>
<td>.55</td>
<td>-.04</td>
</tr>
<tr>
<td>Education</td>
<td>-0.1</td>
<td>-0.01</td>
<td>-.09</td>
</tr>
<tr>
<td>Centralization</td>
<td>-.03</td>
<td>-.01</td>
<td>-.23***</td>
</tr>
<tr>
<td>Group orientation</td>
<td>.24***</td>
<td>.27***</td>
<td>-.05</td>
</tr>
<tr>
<td>Formalization</td>
<td>.27***</td>
<td>.26***</td>
<td>-.18*</td>
</tr>
<tr>
<td><strong>Interactions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CENTRA × Age</td>
<td>-.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRPOR × Age</td>
<td>-.58*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOMAL × Age</td>
<td>.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CENTRA × Education</td>
<td>.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRPOR × Education</td>
<td>-.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FORMA × Education</td>
<td>.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>R²</strong></td>
<td>.11</td>
<td>.19</td>
<td>22</td>
</tr>
<tr>
<td>Adjust R²</td>
<td>-.01</td>
<td>.15</td>
<td>.16</td>
</tr>
<tr>
<td><strong>F</strong></td>
<td>.49</td>
<td>3.24***</td>
<td>5.87***</td>
</tr>
</tbody>
</table>

Observation number: 219

*a Standardised coefficients are reported.

*b FOMAL: formalization; CENTRA: centralization; and GRPOR: group orientation.

• * p < .05; ** p < .01; *** p < .001