The Effects of Confucian Values on Interpersonal Trust, Justice, and Information Sharing of Korean Workers: A Multilevel Analysis

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This study examines the effect of supervisors' Confucian values on interpersonal trust, interpersonal justice, and information sharing in the context of South Korean workers, using multilevel analysis. We also investigate the moderating roles of blood, regional, and school ties (BRST) among their relationships. A survey was conducted with 46 supervisors and 210 subordinates from South Korean manufacturing companies. Our empirical findings indicated that supervisors' Confucian values were positively associated with the interpersonal trust, interpersonal justice, and information sharing of subordinates. Contrary to our expectation, the BRST had no significant moderating role in the relationship between supervisors' Confucian values and interpersonal trust, interpersonal justice, and information sharing of subordinates. Our study contributes to organisational behaviour and psychology by highlighting the significance of societal values such as Confucian values in understanding an organisational member's attitude and behaviour in the East Asian region.

Keywords: Confucian values, interpersonal trust, interpersonal justice, information sharing, multilevel analysis

What kind of influence would a predominant value like religion have on individual behaviour within an organisation? Would this value function effectively within an organisation? There may be controversy over the scope of religion, but it cannot be denied that Christianity in the West, Islam in the Middle East, and Buddhism and Confucianism in East Asia have greatly influenced the values that each society pursues. The research of Inglehart (1997) reveals empirically that the religious-cultural heritage of a society has a great influence on organisationally relevant topics such as interpersonal trust.

The 21st Century East Asia Symposium between Korea, China, and Japan was held in 1995 to enable scholars of the three countries to seek joint prosperity in preparation for the Pacific Age. Confucianism was the focus of this symposium because the assertion was raised by scholars in the latter part of the 20th century that Confucianism was behind the economic development of East Asian countries. Kahn (1979) asserted that the economic development of East Asia was clearly based on Confucian values. He labelled the Confucianism of East Asian countries 'Neo-Confucianism' and argued that Confucian values such as diligence and responsibility ultimately played a positive role in the economic development of the three East Asian countries of Korea, China, and Japan. Hofstede and Bond (1988) also reported that Confucian dynamism profoundly affected national culture and values that ultimately influenced corporate management and national economic growth in East Asian countries.

However, there has been intense discussion surrounding the potential ramifications of Confucian values. G. Kim (1999) argued that many of the problems that arise in Confucian societies are due to Confucian values. In response to this, Choi (1999) asserted that the societal problems in Korea are not due to Confucian values, but due to the influence of Western culture. He stated that the Confucian identity of Korean citizens must be further strengthened (Choi, 1999). In addition, there are arguments that the 20th-century economic development of East Asia, as well as financial insecurity toward the end

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of the 20th century, originated in the lack of separation between public and private matters and the absence of critical consciousness (E. Kim, Ham, & Yun, 1999). The potential contributions and limitations of Confucian values have begun to be discussed.

Previous research has focused on the impact of religious values in the workplace and found that the predominant religious values have an immense impact on people's emotional responses (Locke, 1976) and on the decision making and actions of members of an organisation (O'Reilly, Chatman, & Caldwell, 1991). For instance, O'Reilly et al. (1991) found that individual variations in preferences for different organisational cultures are profoundly related to individuals' personality characteristics, by analysing longitudinal data from accountants and MBA students, and cross-sectional data from employees of government agencies and public accounting firms. They also emphasised the importance of understanding the fit between individuals' preferences and organisational cultures for better organisational effectiveness.

Nonetheless, most studies on the antecedents of human relationships in the organisation have focused on individual or organisational characteristics. For this reason, few studies have been conducted to verify the influence of societal values such as Confucian values on organisational behaviour. With this in mind, the current work has focused on the collision between the traditional Confucian culture of East Asian countries and the values that are required in modern civil society. The focus of this research will be on how interpersonal trust, interpersonal justice, and information sharing between supervisors and subordinates are affected by these core Confucian values. Furthermore, in previous studies of the relationship between subordinates and supervisors, the supervisors' attitudes or values were measured by subordinates' perceptions about their supervisors. However, the study adopted a multilevel analysis to increase its reliability and validity.

The contention is often raised that Confucian values cause damage to organisational fairness and reduce the level of trust in strangers (Fukuyama, 1995). Fukuyama addressed the idea that the excessive emphasis on primary relationships, which is inherent in Confucianism, makes people rely more on in-group members than on out-group members. He pointed out that such influence resulted in a lack of awareness of fairness among members in the society. In response, I. Kim (2008) argued that the reason low trust and lack of fairness are found in Korea is not because of Confucianism, but rather can be attributed to the nation's special experience of having gone through colonial rule. Thus, there are constant debates surrounding the impact of Confucianism on trust and perceptions of fairness. This article aims to provide evidence to clear up this debate.

Interpersonal trust and justice and information sharing have a great influence on the operation of an organisation and are important outcomes to examine. Trust increases cooperative action for the achievement of goals

of the organisation (Burt & Knez, 1996) and facilitates acceptance and accommodation of authority as well as the roles of others (Tyler & Degoey, 1995). Marshall (2000) stated that if trust is established in a relation-based corporation, values that represent the corporation begin to appear, such as mutual respect and client-centredness.

Interpersonal justice causes the members of an organisation to expect to be rewarded in the future. There is evidence that slightly unsatisfactory rewards can be accepted if justice is guaranteed (Skarlicki & Folger, 1997). In the group values model, receiving fair treatment as a human being refers to having the respect of a large group and this means that there is little risk of being treated unfairly. This ultimately causes an elevation in the sense of belonging to an organisation (Tyler & Blader, 2000).

Information sharing is a core process through which team members collectively utilise their available information resources. Mesmer-Magnus and DeChurch (2009) argued the importance of information sharing to team performance, cohesion, decision satisfaction, and knowledge integration. This paper seeks to determine the effect of Confucian values on interpersonal trust and justice, and information sharing in relation to supervisor-subordinate relationships within an organisation. The current study also notes that Korean workers try to show respect to their managers and avoid conflicts even when they have different opinions (Lee, 2012), which means that a supervisor's values should have an impact on employees' reactions.

Furthermore, this research investigated the degree to which Confucian values are correlated to these variables when considering the societal tie between leader and subordinates, which comprises blood, regional, and school ties (BRST). The BRST is the special form of in-group perception existing in Korea, which can be seen as the personal relationship maintained by kinship, regionalism, and school relations. We assumed that this tie moderates the influence of Confucian values on organisational members' attitudes and behaviours profoundly in the Korean workplace because Koreans are used to tight and confined relationships of trust, and they have found it difficult to have an open attitude toward unfamiliar fellow citizens (Jang, 2008).

Literature Review and Hypothesis Development
Confucian Values

Devised by an ancient Chinese scholar named Confucius (551–479 BCE), Confucianism became the Chinese national official ideology after the Qin Dynasty (BC 221–206) as a system of human ethics and philosophy (Ryu & Lee, 2011). It is a philosophy that addresses questions such as how human beings should act to attain ethical ideals and what relationships they should build with others (Tamai & Lee, 2002).

Based on a loving heart for human beings, Ryu and Lee (2010) argued that a leader with high levels of Confucian

values should first treat his or her supervisors in the way that he or she hopes to be treated by subordinates, and should treat his or her subordinates in the way that he or she wishes to be treated by supervisors, thereby saddling the others with a debt of gratitude.

When a leader of a particular group exerts influence in a manner similar to a noble man's leadership, the group members are likely to respect and accept such leadership; they will identify with and feel attracted to the leader who has virtues they consider to be ideal according to their Confucian values (Ryu & Lee, 2010). This indicates that Confucian values that are deeply embedded in Korean society seriously affect the presentation and interpretation of effective leadership.

It is said that Weber (1991) started the criticism of Confucianism. From his severe criticism, it seemed as if he was insisting on the abolishment of Confucianism. Weber said that Confucian ethics are merely affections provided through social relationships between subordinates and supervisors. He believed Confucian ethics only provide people with duties for relationships bound by human affection (e.g., between a ruler and the ruled, or supervisors and subordinates, or father and son, or older brothers and younger brothers, or between friends and so on) while failing to let them know the need for the common good of all societies. Weber insisted that Confucian ethics functioned as an obstacle to capitalism in East Asian countries (Weber, 1951). Tu (1998) also mentioned the lack of focus on the common good in Confucian values and noted that important concepts such as liberty, human rights, privacy, legal procedures, social contracts, civil society, and communal areas were quite insufficient. Tu (1998) stated that Confucian systems had elements contrary to democratic social relations, gender equality, tolerance for others, and public interest-oriented values.

Confucian Values and Interpersonal Trust

Previous research has suggested that trust plays an important role in organisations (Cummings & Bromiley, 1996; Hosmer, 1995). Deutsch (1962) defined trust as a belief, attitude, expectation or the possibility that an agent will behave in a profitable direction.

The effects of cultural values on trust have been gaining attention in recent years. Doney, Cannon, and Mullen (1998) insisted that cultural norms and values play an important role in the formation of trust. In addition, it was found that national culture affects trust (Elo, 2003). According to a study by Ryu and Lee (2010), the extent of a subordinate's Confucian values had a significantly positive effect on his or her trust for the supervisor. Taking this into consideration, it is safe to say that the values that dominate a society affect interpersonal trust within an organisation.

Since supervisors have more authority in an organisation, they can play a leading role, unlike subordinates. Through a mutual relationship with a high degree of trust, supervisors can even contribute to the improvement of

organisational performance of their subordinates. After all, subordinates' trust in their supervisors can be created by supervisors. In a supervisor-subordinate relationship, trust makes organisational members voluntarily accept their supervisors' or group's decisions, giving legitimacy to supervisors' authority (Tyler & Degoey, 1995). As today's organisations are evolving from the existing control-centred management to an autonomy-oriented management, the importance of trust between supervisors and subordinates is receiving greater emphasis. Regarding the importance of trust in supervisors, Kouzes and Posner (2003) saw that the most important characteristic of leaders is gaining their subordinates' trust. Subordinates always want a reliable leader who lives up to what he or she says. When a person delivering a message is not trustworthy, the message is also not trustworthy. As a model explaining the importance of trust between leaders and followers, Zand's model of trust (Zand, 1972) explains how trust is built through the interaction of three variables: information, influence, and control.

In an organisation, the responsibility and authority given to supervisors and subordinates are different. There will be good outcomes when the both parties cooperate, yet the relationship between the two groups can be somewhat tense if there are mutual concerns for the violation of duty by either side (Kramer, 1999). Kramer (1999) believed that trust from the supervisor is an important issue for a subordinate because trust is the foundation upon which relational vulnerability between two people can be overcome. He also argued that trust serves the important function of alleviating relational uncertainty between supervisors and subordinates.

Dominant values in a society play an important role in the relationship between the supervisors and subordinates within an organisation (Ehrhart & Klein, 2001). For example, civility norms have many possible interpretations and meanings that vary across cultures. Orbach and Sjoberg (2011) defined civility norms as 'the costs individuals and organisations impose on others while they debate or dispute a matter' (p. 56). According to Pye (1999), all cultures possess their own civility norms in relation to both the in-group and out-group. For example, the attitude in dealing with people such as family or those with face-to-face interpersonal relationships cannot help but be different from that with strangers without face-to-face interpersonal relationships. Ordinarily, it is said that the gap between the norms applied to the in-group and out-group are reduced the more a civil society is developed, while in a society that is less developed there is a wide gap in norms. The in-group and out-group within Confucianism must not be seen as relationships based on common interests, but instead as relationships based on primary relationships or ties of destiny. Thus, in-groups are formed based on primary relationships such as family, locality, and education, or past connections of ties of destiny. In reality, in the East Asian societies where Confucian values have become the dominant value system, there is a wide difference in

the civility norms applied to the in-group and out-group. Fundamentally, there is great trust regarding the in-group and mistrust toward the out-group.

Confucianism has developed detailed teachings regarding close interpersonal relationships (Pye, 1999). However, it does not mention civility norms toward strangers or people with whom interpersonal relationships do not exist (I. Kim, 2008). The teachings on loyalty and filial piety of Confucianism teach people in detail how to act in relationships within the family and in relation to the king and his subjects, but there are not even a few lines discussing norms for the social community outside of the family (Hood, 1998). Confucius and his followers — those who founded Confucianism — developed the civility norms within the relationships of sovereign and subject, marriage, and siblings, and probably dreamed of a society in which these relational virtues would be expanded to all people (I. Kim, 2008). Nevertheless, since these civility norms cannot be realised by all members of a society, there is validity to the issues that Western scholars have identified. As a result of this Confucian teaching, there is a tendency to be hostile toward ordinary people with whom a particular relationship does not exist. Social virtues such as trust, loyalty, and love can be applied to family or friends, but they do not apply to strangers. In other words, for individuals with Confucian values, the level of trust is low for ordinary citizens (King, 1985). Fukuyama (1995) asserts that East Asian people do not trust ordinary people in society outside of family and friends. Confucianism teaches that people should rely on personal relational networks rather than on organised personal or public government systems. Confucianism requires that a distinction be made between people who should be trusted and those who should not.

In a study of Confucianism as a vital social value in East Asian countries, Ryu and Lee (2010) found that subordinates who placed greater emphasis on Confucian values compared to those who placed less emphasis had higher trust in their leaders. In sum, we hypothesised:

> **Hypothesis 1:** Confucian values are positively associated with interpersonal trust.

Confucian Values and Interpersonal Justice

Greenberg (1993) defined interpersonal justice as the extent of respect and dignity an individual perceives that he or she receives from other people. The reason interpersonal justice has recently gained attention in countries practising Confucianism is summarised below. First, as countries practising Confucianism, such as Korea, rapidly became outfitted with organisations from the late 20th century, they also had an increase in organisational laws and institutions (I. Kim, 2008). This led to a securing of procedural justice in the workplace. Interpersonal justice, however, continues to lag behind since it is not enforceable by law or system, but should rather be managed from the perspective of organisational culture. Hence, the justice-

related problems that are occurring in Korea are not so much problems of distribution and procedure but are more related to interpersonal justice (Jang, 2008). Second, because Confucianism places little emphasis on the common good (Zhang, Feick, & Price, 2006), many argue that it is unduly closed to out-group members. Consequently, in countries practising Confucianism, discrimination against out-group members is emerging as a problem of interpersonal justice.

Based on the general perspective of Confucianism with respect to fairness, it is meaningful to verify what effects Confucianism has on the relationships between members of an organisation. The perception of a subordinate about his or her supervisor's fairness has a great impact on the subordinate's work attitude and should be treated as a vital aspect of an organisation. However, such fairness is also strongly related to the dominant values of that society. In East Asian countries, it was found that Confucianism is deeply related to the perception of the subordinates regarding fairness in the relationship between supervisors and subordinates. Why is it, then, that interpersonal justice becomes an issue in the supervisor-subordinate relationship in Confucian-influenced countries? We assume that other types of justice, such as distributive justice and procedural justice, have been realised through the organisational systems these countries developed in modern civil society. However, problems with interpersonal justice can be solved by supervisors' attitudes and behaviours determined by Confucian values. Therefore, we hypothesised:

> **Hypothesis 2:** Confucian values are positively associated with interpersonal justice.

Confucian Values and Information Sharing

Shannon and Weaver (1949) defined information as a tangible or intangible substance that reduces the uncertainty of the receiver. When precedent studies regarding information sharing are examined, information sharing can be defined as improving policies or procedure, developing new ideas, cooperating with other people to solve problems, and providing know-how and work information (Cummings, 2004). Renzel (2008) suggested that information is the most important resource of a company and that information sharing sustains a company's competitive advantage and increases value as an essential feature of an organisation.

Information sharing between supervisors and subordinates within organisations shows somewhat different aspects according to their cultures (Ryu & Lee, 2011). Countries under Confucian influence have high power distance compared to Western countries, and supervisors only collect information from subordinates without sharing information with them. Specifically, unofficial information is often monopolised by supervisors, and only a few subordinates in special relationships are given access to this information.

The importance of social and cultural factors regarding information sharing has been mentioned, but there have been almost no positive studies regarding the difference among cultures. Li, Shin, and Sanders (2007) studied the relationship between cultural and social factors and information sharing in China and discovered that Confucian values had positive effects on information sharing. We can think about information sharing between supervisors and subordinates in an organisation based on the general characteristics of interpersonal information sharing in countries influenced by Confucianism. Within an organisation, information sharing is an important indicator that demonstrates interpersonal trust between a supervisor and a subordinate. On the other hand, socio-cultural values in that society can change the pattern of information exchange. Thus, we hypothesised:

> **Hypothesis 3:** Confucian values are positively associated with information sharing.

Moderating Role of Blood, Regional, and School Ties

BRST is defined as the personal relationship maintained by kinship, regionalism, and school relations. In general, BRST is considered as the special form of in-group and out-group perception existing in East Asia. Sumner (1906) divided people into in-group and out-group based on psychological attitudes and the sense of belonging that the members of a group felt. An in-group is a 'we-group' toward which an individual feels a sense of belonging and attachment, while an out-group is the group to which an individual cannot feel a sense of belonging or a sense of 'us'. However, the practical distinction of in-group and out-group in Confucian societies is a little different from Sumner's model. It must be understood that the in-group and out-group in Confucian societies are not formed out of common interests but instead by primary relationships or past 'ties of destiny'. Thus, the criteria for dividing individuals between in-group and out-group categories are primary relationships based on BRST and ties that occurred in the past. When an individual has a primary relationship based on BRST or a separate particular tie (e.g., having worked on the same team for a long time), even if there is not a shared common interest at the present time, if there is a sense that this person is 'our person' and unofficial information is exchanged, then this person can be classified as an in-group colleague; those who do not have these characteristics are seen as out-group colleagues.

The obsession with the BRST relationship often appears in the form of nepotism, which means that people who prefer a personal relationship based on BRST are likely to have homogeneous collectivism-oriented attitudes and ignore the opinion of the heterogeneous group (Pye, 1999). Strong BRST is inclined to exclude the values and assertions of those without the primary BRST connection. It turns out that the harmful effects of BRST, like nepotism, exist not only at the socio-cultural level but also at the organisational level. We assumed that BRST

profoundly influences the relationship between Confucian values and subordinates' attitudes and behaviours.

In terms of demographic features, it was found that supervisors have favourable feelings toward subordinates who have similar demographic characteristics and that these positive feelings lead to a more positive evaluation of their performance, regardless of their actual performance, ultimately affecting the quality of relational interchange between supervisors and subordinates (Duchon, Green, & Taber, 1986). In building relationships with members within an organisation, Confucian values have the tendency to bestow excessive favour on people connected by school, region, or blood (i.e., in-group members from the Confucian point of view), to the point of sometimes breaking the rules, while making the out-group members feel unfairly treated by strict rules (I. Kim, 2008). Importantly, considering that the BRST, which comprises demographic similarities, is a key element for determining who is classified as an in-group member, we assumed that the BRST positively moderates the relationship between Confucian values and interpersonal trust.

> **Hypothesis 4a:** BRST will positively moderate the relationship between Confucian values and interpersonal trust.

Within organisations in countries with Confucian influences, supervisors show psychological and practical considerations for the subordinates in the in-group at the expense of violating fairness; they sometimes apply very harsh rules against subordinates in the out-group or intentionally penalise them. An example of the problem of violating fairness is passing down know-how related to promotion in an organisation only to one's subordinate colleagues from the same college. In short, the emphasis on 'tie' (connection), which can be seen as a product of Confucian values, is beyond the reach of institutionalised control, and it carries the probability of affecting interpersonal justice between supervisors and subordinates. We assumed that the BRST positively moderates the relationship between Confucian values and interpersonal justice.

> **Hypothesis 4b:** BRST will positively moderate the relationship between Confucian values and interpersonal justice.

People in a society that has Confucian values are willing to share more information with in-group members (Zhang et al., 2006). The teachings of Confucianism provide a dichotomy, making a distinction between friends and others. Making a separation of an in-group and an out-group is sure to bring about disputes and conflict in social groups with different civility norms (Pye & Pye, 1985). The moment one becomes a member of a particular group, he or she can form special relationships that non-members cannot. It is speculated that this occurs because Koreans are used to tight and confined relationships of trust, and they have found it difficult to have an open attitude toward unfamiliar fellow citizens (Jang, 2008). Zhang et al. (2006) argued that in countries influenced by
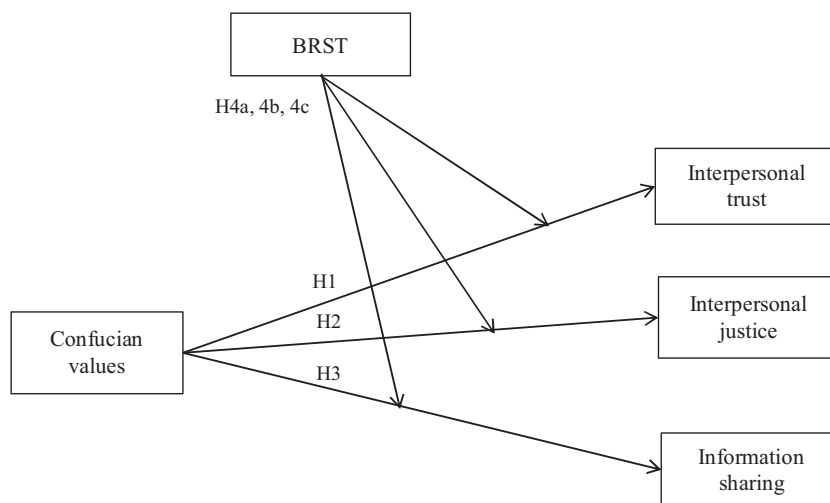
Figure 1

Hypothesised model.
Note: BRST = blood, regional, and school ties.

Confucianism, individuals use their personal information to reinforce their personal relationship with others in the organisation. In other words, a supervisor will only provide high-quality information to a subordinate who he or she favours, in order to form a special relationship with that subordinate. According to this study, Chinese people try to exchange more information with in-group members than out-group members. Therefore, in countries influenced by Confucianism, it is probable that supervisors will share important information only with subordinates who have social ties such as BRST. Accordingly, we assumed that the BRST positively moderates the relationship between Confucian values and information sharing.

> **Hypothesis 4c:** BRST will positively moderate the relationship between Confucian values and information sharing.

Figure 1 shows the hypothesised model of this study.

Method

Participants

Participants in this study were comprised of employees who work in manufacturing companies located in South Korea. All respondents were employed full-time. Respondents were divided into two groups: supervisors and subordinates. There was a total of 46 supervisors and 210 subordinates in this study. This sample of supervisors included 44 males and 2 females with a mean age of 45.07 (SD = 4.00) who had been working for 17.85 years (SD = 4.23). Most supervisors had earned advanced degrees, including a bachelor's degree (n = 73.90%), master's or doctoral degree (n = 15.20%), high school degree (n = 8.70%), or associate degree (n = 2.20%). The age of subordinates ranged from 20–50 years old with an average age of 34.63 (SD = 5.29); 82.40% of respondents were male and 17.65% were female. The average tenure was 7.78 years.

Measures

Confucian values. To assess Confucian values, the questionnaire for assessing Korean Confucian values that was developed by Ryu (2007) was used. Supervisors were asked to respond to a 29-item Confucian values measure that assesses the extent to which individuals have the following values: virtuous completion (α = .93) and social order (α = .85). The instrument was measured on a Likert-type scale from 1 (*strongly disagree*) to 7 (*strongly agree*). A sample item reads: 'Responsibility is important.' Alphas for each dimension of the scale were above the recommended .70 cut-off (Nunnally, 1978).

Blood, regional, and school ties. One item measure was used to assess subordinates' perceptions regarding the extent to which they have BRST with their supervisor. Responses ranged from 1 (*strongly disagree*) to 7 (*strongly agree*). The item was: 'I believe I have a primary relationship based on blood, regional, and school ties with my supervisor.'

Interpersonal trust. Subordinate trust data were collected using McAllister's (1995) 11-item measure. He developed items under two dimensions: cognition-based trust (six items, α = .91) and affect-based trust (five items, α = .89). Subordinates were asked to respond on a Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Knowledge and evidence based on rational decisions are emphasised in the cognition-based trust scale. An example question from the cognition-based trust items includes: 'Your supervisor thinks that you approach your job with professionalism and dedication.' The item 'Do you think if your supervisor knew more about you as individual and your background, he would be more concerned and monitor your performance closely' is a reverse-coded item. Affect-based trust is the emotional bond between individuals and it shows expressions of care and concern for the

welfare of others (McAllister, 1995). An example item is: 'Do you think your supervisor can talk freely to you about difficulties (s)he is having at work and know that you will want to listen?'

Interpersonal justice. A four-item measure developed by Colquitt (2001) was used to assess interpersonal justice. Responses ranged from 1 (*strongly disagree*) to 7 (*strongly agree*). A sample item reads: 'Has your supervisor treated you in a polite manner?' Subordinates were asked to rate the extent to which they perceive that their supervisor had treated them with interpersonal justice. The reliability of this scale was found to be .79 by Colquitt (2001).

Information sharing. A 10-item measure developed by Wang and Satow (1994) was used to assess the extent to which subordinates perceived that their supervisor shares information with them. Wang and Satow found the reliability of this scale to be .94. One item that was used reads: 'My supervisor informs me of work plans.' The items were formatted on a 7-point Likert scale from 1 (*strongly disagree*) to 7 (*strongly disagree*).

Sample and Procedure

Cases consisting of pairs of a supervisor and a subordinate were formed based on the information reported (e.g., name of company and team) after the supervisors and subordinates responded to the survey. Hence, if there were five subordinates assigned to a supervisor, five cases were formed. The supervisor first responded to the level of Confucian values he or she held. In addition, the subordinate of that supervisor answered how much he or she thinks that the supervisor trusted, treated with interpersonal justice, and had the intent of sharing information with him or her. The subordinates also answered whether they felt they were included in the supervisor's in-group or out-group in terms of BRST. An electronic survey was used; a pen/paper survey was also used for people who did not like the electronic survey.

For variable measurement, the current study used a cross-sectional survey method. Accordingly, the occurrence of common method bias, which happens when only one measurement method is used for all variables, was of concern. To lessen this problem, the independent and dependent variables were collected using different sources. Specifically, the supervisors completed the measure for Confucian values, whereas the subordinates completed measures for interpersonal trust, interpersonal justice, information sharing, and BRST perceptions. Additionally, to reduce the priming effects mentioned by Converse (1986), the 29 questions asked of subordinates were randomly mixed. In addition to mixing the questions, the response scale for some of the questions was *not at all* to *very much so*, whereas in other questions it ranged from *strongly disagree* to *strongly agree.*

Analysis

The data from this study were analysed using two statistical software packages: SPSS and HLM. First, the validity of the data was examined through validity and reliability verifications. Next, relationships among variables, including demographic items, were investigated through correlation analyses. To test hypotheses, the effect of Confucian values on the dependent variables of interpersonal trust, interpersonal justice, and information sharing, was identified through three regression analyses. Accordingly, Confucian values were entered as a predictor while the three variables were set as the criteria. The BRST was then entered as a moderator. If the predictor-moderator relationship was found to be significant, this supports the conclusion that a regulatory role exists within the relationship (Baron & Kenny, 1986). The data used in the present study were from groups of one supervisor with multiple subordinates. Hence, the study used hierarchical linear modelling (HLM) that simultaneously considered individual and group-level influences. Through HLM, variable effects of the individual and group level were isolated (Raudenbush & Bryk, 2002).

Results

Preliminary Analyses

Two hundred and twenty-five cases were collected in total for this study in South Korea in June 2013. Fifteen cases that had missing values (over 5% of the total items) were deleted. Next, descriptive statistics and frequencies were examined for all variables to check whether there were outliers or problematic distributions. None were found. The reliabilities of all scales were examined. Nunnally (1978) suggested that $\alpha > .70$ is an acceptable level of internal consistency. All scales demonstrated acceptable Cronbach's alphas (i.e., Confucian values = .94, interpersonal trust = .95, interpersonal justice = .88, and information sharing = .82).

A confirmatory factor analysis (CFA) was conducted to see whether measures of a construct were identical to the researcher's understanding of the nature of that construct. Within factors include interpersonal trust (IT), interpersonal justice (IJ), and information sharing (IS), and they are established to give effect to each item (four items of IT, 11 items of IJ, and 10 items of IS). The Confucian values scale (CV) was set as a between factor. The factor was set to give effect to each item (29 items of CV). Item parcelling was used to increase the degree of model fit of SEM for Confucian values. This model displayed acceptable fit, $\chi^2/df = 2.50$, $p = .01$; the comparative fit index (CFI) = .90, root mean square error of approximation (RMSEA) = .08, standardised root mean residual (SRMR) for within factor = .06, and SRMR for between factor = .11. Means, standard deviations, and zero-order correlations are displayed in Table 1. Since all the variables were measured using the same source in the current study, we examined potential problem of common method bias (Podsakoff et al., 2003)

Table 1

Descriptive Statistics and Correlations

	N	M	SD	1	2.	3.	4.	5.
1. CV	46	5.66	.56	(.94)				
2. BRST	210	2.15	1.71	.24**	—[1]			
3. IT	210	5.49	1.10	.28**	.38*	(.95)		
4. IJ	210	5.14	.99	.29**	.64*	.68**	(.88)	
5. IS	210	5.09	1.27	.26**	.52*	.59**	.78**	(.82)

Note: Values in parentheses are reliability coefficients. CV = Confucian values, BRST = blood, regional, and school ties, IT = interpersonal trust, IJ = interpersonal justice, IS = information sharing. [1] Reliability was not assessed for single-item scale.
$^*p < .05$, $^{**}p < .01$.

Table 2

Results of Hypothesis Testing

		Dependent variables								
Parameter		IT			IJ			IS		
Fixed effect		Coef.	SE	t ratio	Coef.	SE	t ratio	Coef.	SE	t ratio
Level 1	Intercept (γ 00)	5.08	.10	49.53**	5.14	.11	47.15**	5.08	.11	47.53**
	BRST	.39	.09	4.27**	.25	.17	1.44	.26	.17	1.87
Level 2	CV	.26	.14	2.11*	.32	.06	5.43**	.39	.10	4.27**
Cross-level interaction	BRST × CV	−.07	.11	−.65	−.03	.10	−.28	−.07	.16	−.65
Random effect		SD	σ^2	χ^2	SD	σ^2	χ^2	SD	σ^2	χ^2
Level 2, μ0		.48	.23	72.38**	.62	.39	147.90**	.48	.23	72.39**
Level 1, γ		1.03	1.06		.70	.49		.32	.10	
BRST		.32	.10	50.38	.18	.03	47.72	.32	.10	50.38
ICC			.18			.44			.70	
Deviance			657.03			527.15			657.03	

Note: BRST = blood, regional, and school ties, CV = Confucian values, IT = interpersonal trust, IJ = interpersonal justice; IS = information sharing. Coef = coefficient.
$^*p < .05$, $^{**}p < .01$.

based on Harman's single-factor test. The result reported that the principal factor explained 29.8% of the variance. Because no single factor explained more than 50% of the variance, common method bias is likely not an issue in this data set (Podsakoff & Organ, 1986).

HLM was conducted to examine all study hypotheses. Following the method suggested by Hofmann, Griffin, and Gavin (2000), the level-1 predictor, which is BRST, was group-mean centred, and the level-2 predictor, which is CV, was grand-mean centred, and robust standard errors were suggested.

Hypothesis 1 posits a cross-level effect, arguing that Confucian values are positively related to interpersonal trust. To test this hypothesis, we added Confucian values as a level 2 predictor. As seen in Table 2, the results indicated a significant impact of Confucian values on interpersonal trust (coeff. = . 26, $p < .05$), supporting hypothesis 1. Again, adopting the formula suggested by Hofmann et al. (2000), the results reveal that Confucian values account for 18% of the variance between subordinates.

Hypothesis 2 was verified with the same methods. Hypothesis 2 posits a positive relationship between Confucian values and interpersonal justice, and it is supported (coeff. =.32, $p < .01$). The variance explained in interpersonal justice by Confucian values is 44%.

We further investigated whether Confucian values are related to information sharing (hypothesis 3). The result revealed that there is a positive relationship between Confucian values and information sharing (co-

eff. =.39, $p < .01$), which means that hypothesis 3 was supported.

Hypotheses 4a, 4b, and 4c state that subordinates' BRST will moderate the relationship between supervisors' Confucian values and interpersonal trust, interpersonal justice, and knowledge sharing. To test this cross-level interaction, a significant random variance for the slope should occur in the intercept-as-outcome model estimated in the previous step (Hofmann 1997). Since we did not find any residual variance for the slope, we concluded that hypotheses 4a, 4b, and 4c were not supported.

Discussion

The aim of this study was to investigate the effect of Confucian values on interpersonal trust, interpersonal justice, and information sharing, and the moderating role of BRST on the relationships between them. Our study contributes to the importance of Confucian values in organisational behaviour. The positive effect of Confucian values on interpersonal trust, interpersonal justice, and information sharing has much to do with social order and morality, which are considered to be the core Confucian values. The finding implies that emphasis on the social order and morality can be the basis for the perceived trust and justice of subordinates toward supervisors. To be specific, *xin*, the core value of Confucianism, drives supervisors to treat their subordinates with trustworthiness (Rarick, 2007). People with high generosity and virtuousness are likely to

deal with others with kindness and justice. The reasonable inference that Confucian values positively influence the relationship between supervisors and subordinates has been proven through the current study.

Confucian values have been perceived as a hurdle that must be overcome in East Asian countries (Weber, 1991) and have been treated as an unwelcome philosophy in the practice area. It is true that Confucian values have been considered as a root cause preventing free communication between supervisors and subordinates. In that sense, the findings of the current study showed a meaningful implication in that the negative thoughts regarding Confucian values are a little too pat to be convincing. Rather, Confucian values may complement the gaps in the existing institutional and extrinsic framework to facilitate trust, justice, information sharing, and collaboration among subordinates.

Contrary to our expectations, we found that Confucian values did not moderate the relationship between BRST and the three variables of interpersonal trust, interpersonal justice, and information sharing. This is also somewhat contrary to the results of previous studies, which found that Confucian values have a favouritism tendency toward the in-group. Several studies showed that employees with high Confucian values express more positive attitudes (Li et al., 2007; Oh, 2012; Won, 2000; Yum, 1988) toward in-groups and more negative attitudes toward out-groups. This drives employees to endeavour to find BRST in the organisation. However, we found that favouritism of Confucian values toward in-groups is becoming weaker through the experience of industrialisation and modernisation of society, which has brought them into co-existence with diverse values. This refers to the social direction of Korean society, in which human relations governed by BRST should lessen over time.

In addition, our study leads to a contribution in research methods for using hierarchical linear modelling. Unlike studies that measure the perception of subordinates for their supervisors, the current study made supervisors respond to the survey questions directly. Then, two sets of data — Confucian values of supervisors and attitudes of subordinates — were matched. Thus, we increased the reliability of the findings.

Limitations and Future Research

There were several limitations in this study. First, the analytical results were based on a survey of Korean workers and thus may not apply in other national contexts. Since South Korea generally is a unique socio-cultural environment influenced by Confucian culture, it is essential to examine in future studies whether the findings hold in other Confucian countries such as China and other East Asian countries.

Second, since the data were collected from a self-reported survey, there is a potential for inflated relationships between variables and thus exaggerated significance in the statistical tests. In addition, this is a cross-sectional study and thus cannot provide solid evidence for the causal relationship between Confucian values and organisation members' behaviour. To describe causality, future studies must use a time-lagged and longitudinal survey.

Finally, while the study focused on individual and supervisor level variables, factors at higher levels may affect the level of Confucian values and their outcomes, such as organisational culture or social context. More specifically, future studies should find the potential moderators that change the relationships between Confucian values and the outcome variables and the mediators that connect the relationships between them.

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