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# **Investigating the Fair Treatment of Suppliers and its Trust-Fostering Role and Performance Benefits**

## **Abstract**

An increasing number of companies have begun to make efforts to treat their suppliers fairly as a part of wider corporate social responsibility (CSR) initiatives. Few studies, however, have investigated the performance implications of such efforts for buying firms. This paper uses both organisational climate theory and social exchange theory to investigate (1) if buying firms' efforts in the form of a code of conduct for its procurement practitioners pay off, and (2) its mechanisms from the perspectives of procurement practitioners. We use a multi-method approach, combining analysis of survey data complemented by results from a behavioural experiment. First, survey data were gathered from 327 Korean manufacturing companies and analysed using structural equation modelling. Second, the findings were complemented by a behavioural experiment involving 120 subjects. The results support the positive performance implications of fair supplier treatment in the form of codes of conduct for procurement practitioners. The paper also offers insights into how such efforts benefit buying firms, which is due to the trust in the buyer-supplier relationship fostered by the resulting ethical behaviours of procurement practitioners.

**Keywords:** Procurement, Buyer–supplier relationship, Code of conduct, Organisational climate, Multi-method study, Social exchange theory

**Paper type:** Research paper

## **1. Introduction**

Buyers' unfair treatment of suppliers (e.g. retrospective changing of contracts) has long been an issue calling for action (Pickard and Felsted, 2012; Schleper et al., 2017). Recent examples involving several British supermarkets and Korean manufacturers suggest that such practices are widespread (Bolton, 2015; Kwak, 2013; Wu, 2017). Nevertheless, an increasing number of companies have been making efforts towards the fair treatment of their suppliers as part of their social sustainability initiatives (Liu et al., 2012; Alghababsheh et al., 2018). One way in which this is implemented is by embedding codes of conduct for fair supplier treatment (Chartered Institute of Purchasing and Supply [CIPS] 2013a and 2013b) into procurement policies.

To the best of our knowledge, however, only a few studies have investigated the performance implications of the fair treatment of suppliers (e.g. Brandon-Jones et al., 2010). Therefore, the present

study seeks to fill this gap by investigating whether such efforts in the form of a code of conduct would bring performance benefits to buying firms. A code of conduct is one of the most popular means of achieving fair supplier treatment (Preuss, 2009). For example, Samsung Electronics' procurement policy details a code of conduct for its procurement practitioners, prohibiting certain practices of unfair supplier treatment (Kim, 2013).

A code of conduct is a facet of the organisational climate, and reflects policies, practices, and procedures as well as members' shared perceptions attached to them (Greenhaus, 2007; Litzky and Schneider et al., 2013; Victor and Cullen, 1988). Organisational climate theory, therefore, was the primary theoretical lens of the present study's investigation of the impact of codes of conduct on procurement practitioners' ethical orientation. The secondary theoretical lens, social exchange theory, was then used to understand the link between procurement practitioners' ethical orientation and the level of trust in their relationships with suppliers. As the final step, the link between the level of trust and buyers' supply chain performance also was investigated.

In this study, the "interpretation" multi-method design (Tashakkori and Teddlie, 1998) was used. The primary method entailed the analysis, by structural equation modelling (SEM), of data obtained from a survey of procurement practitioners at 327 Korean manufacturing companies. Using the secondary method, the primary method's findings were confirmed and complemented based on an experiment involving 120 undergraduate students. The rationale for using a multi-method design is that the secondary, experimental component enabled the authors to study human behaviour directly (Bendoly *et al.*, 2006), which would not have been possible by the primary method (survey-data analysis) alone.

Our findings suggest that a buying firm's effort to treat its suppliers fairly (in the form of a code of conduct) is positively related to its supply chain performance. This is due to the trust in the buyer-supplier relationship, fostered by the resulting fair behaviours of the practitioners complying with such codes. However, the code will be effective only for regulating procurement practitioners' behaviours that demonstrate low-level ambiguity, which is an important condition for drafting an effective code and monitoring its compliance.

## **2. Theoretical Development**

### *2.1. Organisational climate and a code of conduct for procurement practitioners*

In this study, the organisational climate theory was used as the initial theoretical lens through which the impact on procurement professionals of a firm's efforts to treat its suppliers fairly (based on a code of conduct) was analysed. In the field of psychology, the influence of environmental variations on individual behaviours has been investigated using the organisational climate theory (Carr, 2007). Organisational climate refers to "the shared perceptions of and the meaning[s] attached to the policies, practices, and procedures employees experience" (Schneider *et al.*, 2013). Empirical evidence

suggests that the organisational climate is related to members' behaviours and attitudes, such as job satisfaction (Schnake, 1983), turnover (Steel *et al.*, 1990; Demirtas and Akdogan, 2015), and dysfunctional job behaviours (Cole *et al.*, 1997). The organisational climate concerning members' perceptions of an organisation's ethical practices and procedures (Martin and Cullen, 2006; Tseng and Fan, 2011) is called the "ethical climate". Scholars often extend the scope of ethical climate beyond the common perception among members to incorporate actual rules/procedures such as codes of conduct (Litzky and Greenhaus, 2007; Victor and Cullen, 1988; Nedkovski *et al.*, 2017).

A firm's ethical climate is closely related to its members' behaviours/assessments in/for ethically dilemmatic situations (Litzky and Greenhaus, 2007; Schwepker *et al.*, 1997; Tseng and Fan, 2011; Cheng and Wang, 2015). The reason is that companies' ethical climates, including codes of conduct, can provide members with guidance for acceptable behaviour when they are faced with ethical dilemmas; an example might be an opportunity for a procurement manager to gain unfairly from his or her company's supplier using ethically dubious practices (Galbreath, 2010; Schwepker *et al.*, 1997). Companies have various means of encouraging their employees to behave more ethically, for example in treating suppliers fairly (Hill *et al.*, 2009), and a code of conduct, therefore, is one of the most used means of achieving this (Preuss, 2009).

Generally, a code of conduct for procurement practitioners exists as a part of either their corporate code of conduct or their procurement policy (Jenkins, 2001; Preuss, 2010). There is a great deal of variance among companies in terms of the details (Kolk and Tulder, 2002; Preuss, 2010). A code of conduct takes the form of either comprehensive manuals containing detailed instructions or general guidelines covering principles only (Preuss, 2010). Ideally, a code should spell out rules and values (Badenhorst, 1994; Tucker *et al.*, 1999) in detailing guidelines for procurement-related activities, because unethical behaviour is more likely to be reduced thereby (Badenhorst, 1994). A code also needs to be accompanied by a firm's efforts to explicitly disseminate and emphasise it and to reward compliance to it and punish deviance from it (Litzky and Greenhaus, 2007).

Such codes tend to incorporate more than one ethical dimension such as integrity or fairness (Tucker *et al.*, 1999). The CIPS (2013a and 2013b) proposed that a code for procurement practitioners should set out acceptable personal behaviours related to various aspects of the buyer–supplier relationship, including transparency and fairness in dealing with suppliers, the use of buyer power, and payment terms. Regarding the fair treatment of suppliers, which is this paper's main theme, the Institute of Supply Chain Management and the CIPS have both published standards, covering issues such as courtesy, fairness, transparency, and confidentiality, for dealing with suppliers (Preuss, 2009; Theodorakopoulos *et al.*, 2015).

## *2.2. Procurement practitioners and the fair treatment of suppliers*

As discussed above, one of the main means of achieving fair supplier treatment is a code of conduct, which is intended to curb procurement practitioners' unethical behaviours towards suppliers. Procurement practitioners are the main channels through which relationships with suppliers are established, developed, and maintained (Charvet and Cooper, 2011; Chen *et al.*, 2009; Mentzer *et al.*, 2000). This means that some enablers of successful buyer–supplier relationships often reside at the interpersonal level (Mentzer *et al.*, 2000), including various traits of procurement practitioners, such as skills and attitudes (Charvet and Cooper, 2011, Ha *et al.*, 2011, Tangpong *et al.*, 2010). Considering this, a firm's efforts towards achieving fair supplier treatment require the significant involvement of its procurement practitioners (e.g. Carter and Jennings, 2002).

Traditionally, procurement practitioners are entrusted with spending a company's budget on resource acquisitions (Razzaque and Hwee, 2002). Their role has now evolved to encompass strategic activities such as relationship management (Badenhorst, 1994; Turner *et al.*, 1995). Such empowerment, extended responsibilities, and the pressure to perform may lead procurement practitioners to treat suppliers unfairly, which would have negative consequences, such as trust erosion, for a buyer–supplier relationship (Kumar *et al.*, 1995). For this reason, we considered a procurement practitioner's "ethical orientation"—which refers to an individual's predisposition or the preferred cognitive framework in which an individual views, assesses, and responds to ethical issues (Brady and Wheeler, 1996; Reynolds, 2006)—as a key factor in understanding the performance implications of buying firms' efforts to achieve fair supplier treatment in the form of codes of conduct.

The ethical orientation of an individual is a multidimensional concept encompassing utilitarianism and formalism (Brady and Wheeler, 1996; Pearsall and Ellis, 2011). Individuals with a utilitarian-leaning ethical orientation tend to assess ethically dilemmatic situations by examining their outcomes, such as possible benefits (Brady, 1985), whereas those with a strong formalistic orientation are likely to focus on consistent conformity to patterns or rules (Brady and Wheeler, 1996) and the morality of each situation (Pearsall and Ellis, 2011). There is empirical evidence that individuals' ethical orientations are related to their unethical behaviours (Brady and Wheeler, 1996; Treviño *et al.*, 2006).

### *2.3. The fair treatment of suppliers and supplier trust*

Social exchange theory argues that a basic motivation for interaction is to seek rewards and avoid punishment from an exchange (Bandura, 1986; Emerson, 1976; Griffith *et al.*, 2006; Narasimhan *et al.*, 2009). The behaviours/attitudes of an exchange partner are determined by the difference between the rewards and the cost/penalty of an interaction (Bandura, 1986; Emerson, 1976; Griffith *et al.*, 2006). In other words, the level of justice or fairness perceived by a supply chain partner greatly influences its relational attitude/behaviours towards its counter-part (Griffith *et al.*, 2006; Narasimhan *et al.*, 2009). Social exchange theory is comprised of a series of propositions that motivate the attitude/behaviours of an individual or company; those are: (1) success proposition, (2) reward

proposition, (3) value proposition, (4) rationality proposition, and (5) aggression proposition (Griffith et al., 2006; Narasimhan et al., 2009).

A firm formally embedding a code of conduct for fair supplier treatment in its procurement policy signals its commitment to refrain from unethical behaviours undermining supplier fairness (Griffith et al., 2006; Hemmert et al., 2016). One of the important relational outcomes of such behaviours in an exchange relationship is “trust” (Griffith et al., 2006; Hemmert et al., 2016; Narasimhan et al., 2009; Treviño et al., 2006). The trust-fostering role of fair supplier treatment can be explained from the success proposition and value position. Initially, such efforts by a buying firm would signal to its suppliers that they are valued and respected (Korsgaard and Roberson, 1995). Moreover, the resulting supplier behaviours would reflect a desire to continue to receive such benefits, thus signalling back to the buyer an intention to interact further (Heide and Miner, 1992; Griffith et al., 2006). Through further (positive) interactions, trust in the form of relational capital starts to accumulate in the relationship over time (Carey et al., 2011; Krause et al., 2007; Son et al., 2016). Trust is a form of relational governance mechanism that reduces fear of opportunism (Narayanan et al., 2015; Ojala and Hallikas, 2006). It is an important factor in a successful buyer-supplier relationship, specifically by (1) encouraging collaborative behaviours of exchange partners (Uzzi, 1997; Zaheer et al., 1998), and (2) reducing the needs for costly contractual mitigation mechanisms as well as the costs of monitoring/enforcing compliance (Dyer, 1997; Dyer and Chu, 2003).

### **3. Conceptual Models and Hypotheses**

We first investigated whether a buying firm’s code of conduct for fair supplier treatment is related to the ethical orientations of its procurement practitioners. This was followed by an investigation of the mediating role of the ethical orientation of the procurement practitioners in fostering mutual trust. As the second step, the experimental design allowed us to test the complementary hypothesis regarding the impact of such a code of conduct on “actual human behaviours,” which was not possible to test using the survey method alone (Figure I).

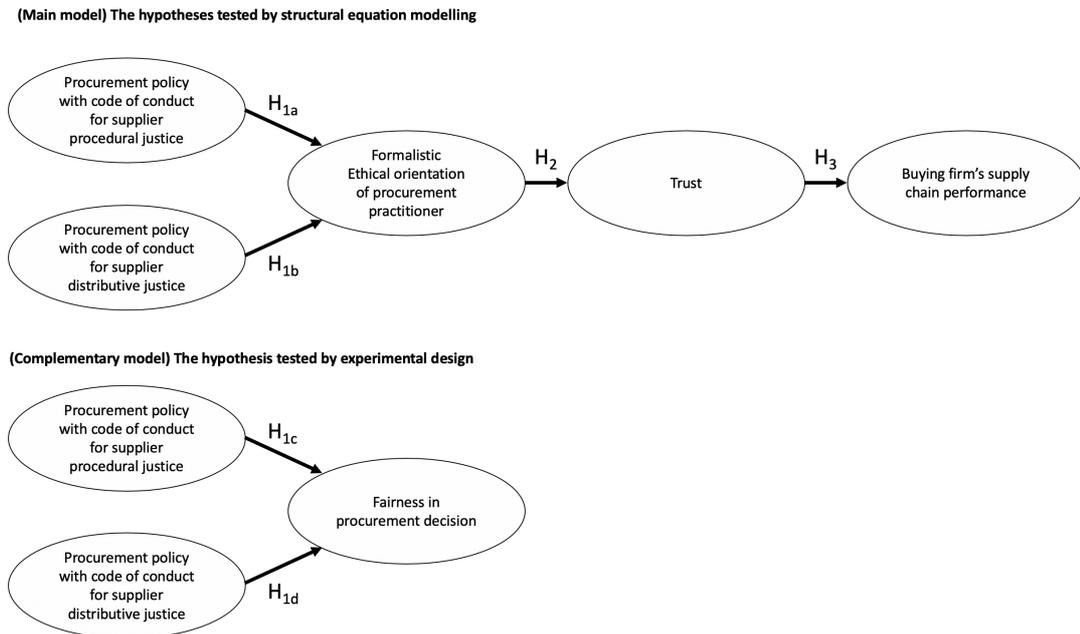


Figure 1. Research model

According to the organisational climate theory, a firm's ethical climate, as generated by, for example, its code of conduct, influences how its employees perceive and make decisions related to ethical dilemmas (Elango *et al.*, 2010; Goebel *et al.*, 2012; Schwepker *et al.*, 1997; Victor and Cullen, 1988). The lack of a clear ethical climate — for example, the absence of a code of conduct for fair supplier treatment — means that there are no clear guidelines for procurement practitioners concerning what is and is not acceptable behaviour towards their suppliers. When a procurement practitioner in such a company is faced with an opportunity to gain unfairly from its suppliers, the lack of a reference point makes it difficult for the formalistic dimension of the practitioner's ethical orientation to be used to assess the situation. Conversely, the presence of a clear code of conduct in a procurement policy informs procurement practitioners about unacceptable behaviour in terms of treatment of their suppliers as well as the consequences of such as breach.

This means that when faced with an ethically dilemmatic situation, they are more likely to use a formalistic ethical orientation, focusing on compliance with rules (Brady and Wheeler, 1996) and morality (Pearsall and Ellis, 2011), to assess the situation. During the initial stage of this research, publicly available procurement policies were searched and procurement practitioners were contacted to determine the prevalence of codes of conduct for fair supplier treatment, as well as the contents of such codes. We found that these codes fell under two broad categories: ensuring (1) fair supplier

involvement in decision-making (procedural justice) and (2) fair supplier returns (distributive justice). The following is, therefore, hypothesised:

**Hypothesis 1<sub>a</sub>:** There is a positive relationship between the existence of a code of conduct for “supplier procedural justice” in a buying firm’s procurement policy and the level of formalistic ethical orientation of the procurement practitioner.

**Hypothesis 1<sub>b</sub>:** There is a positive relationship between the existence of a code of conduct for “supplier distributive justice” in a buying firm’s procurement policy and the level of formalistic ethical orientation of the procurement practitioner.

As discussed earlier, the presence of a code of conduct would make the ethical orientation of a procurement practitioner lean towards “formalistic”, since it provides a reference point for acceptable behaviours, as well as punishment for breaches. Considering that the ethical orientation influences an individual’s view and responses to ethical issues (Brady and Wheeler, 1996; Reynolds, 2006), the resulting behaviour of a procurement manager with the formalistic ethical orientation would be fairer towards suppliers. This is because she or he would be more likely to choose fairer behaviour towards their supplier, since such actions comply with the code. Therefore, it is hypothesised that:

**Hypothesis 1<sub>c</sub>:** There is a positive relationship between the existence of a code of conduct for “supplier procedural justice” in a buying firm’s procurement policy and the level of fairness in a procurement decision.

**Hypothesis 1<sub>d</sub>:** There is a positive relationship between the existence of a code of conduct for “supplier distributive justice” in a buying firm’s procurement policy and the level of fairness in a procurement decision.

Hypotheses 1<sub>a</sub> and 1<sub>b</sub> postulate the positive link between the presence of a code and the level of formalistic orientation rather than actual behaviour. This is because the survey-based primary method did not enable direct observation of actual human behaviour. On the other hand, hypotheses 1<sub>c</sub> and 1<sub>d</sub> postulate, according to an experimental design, the link between the presence of a code and actual human behaviours. Adopting such a multi-method approach for this study compensates for the limitation of the primary method and enhances the robustness of the findings.

According to social exchange theory, if a procurement practitioner refrains from behaving unethically towards his or her company’s suppliers to ensure their “procedural justice” — which refers to the perceived fairness of that process of distribution and/or the allocation of goods/services (Konovsky, 2000; Lind and Tyler, 1988) — this results in the supplier’s trust, because such behaviour

(1) signals to suppliers that they are valued and respected (Korsgaard and Roberson, 1995) and (2) sets clear expectations for and explanations of the process (Kim and Mauborgne, 1991). Moreover, as the success and value propositions suggest, suppliers would signal back their intention for further interactions as well, thus increasing the possibility of more interactions in the future (Heide and Miner, 1992; Griffith et al., 2006). Similarly, a procurement practitioner's behaviour concerning suppliers' "distributive justice", which is related to perceived fairness in rewards (Adams, 1965), would tend to make suppliers' behaviours more collaborative (Griffith et al., 2006; Narasimhan et al., 2009) as well. Providing that such further collaborative interactions continue and are perceived positively by both parties, the quality of the relationship will be enhanced, for example, through the accumulation of trust between them (Carey et al., 2011; Krause et al., 2007; Son et al., 2016).

Conversely, unethical behaviours undermining supplier fairness, which are related to low-level formalistic ethical orientation, have a negative impact on the level of trust in a relationship (Hill et al., 2009; Kaynak et al., 2015; Leonidou et al., 2013). Such behaviours by procurement practitioners could be perceived by suppliers as a violation of the psychological contract, resulting in a sense of inequality and maltreatment (Hill et al., 2009). The end relational outcome of such a violation is the erosion of trust in a buyer–supplier relationship (Hill et al., 2009). In terms of supplier behaviours, unfair treatment by a buyer would encourage suppliers to reduce their collaborative behaviours (rationality proposition), or even to take hostile actions, resulting in trust erosion (Griffith et al., 2006; Narasimhan et al., 2009).

**Hypothesis 2:** A procurement practitioner's level of formalistic ethical orientation is positively related to the level of trust in a buyer–supplier relationship.

Trust has long been considered an important factor in the development of a successful buyer–supplier relationship. Trust acts as a relational governance mechanism in such a relationship, mitigating the risk of partner opportunism associated with investment and other financial decisions (Narayanan *et al.*, 2015; Ojala and Hallikas, 2006). Trust as relational governance decreases the transaction cost by reducing the need for costly formal contracts and repeated negotiations (Dyer and Chu, 2003). A sufficient level of trust also allows companies to invest less time and resources in monitoring each other's activities and more resources in achieving the objectives of the relationship (Dyer, 1997). Past studies have, therefore, suggested that the level of trust is related to various aspects of supply chain performance (Capaldo and Giannoccaro, 2015; Fynes *et al.*, 2005; Ha *et al.*, 2011; Handfield and Bechtel, 2002; Handfield *et al.*, 2009; Panayides and Lun, 2009; Wang et al., 2011). The following is, therefore, hypothesised:

**Hypothesis 3:** The level of trust in a relationship is positively related to the buying firm's supply chain performance.

## 4. Research Methods

Multi-method research refers to “a study in which the researcher collects, analyses and mixes multiple forms of either qualitative or quantitative data” (Creswell, 2007, p. 12). Davis et al. (2011) argued that the main benefit of the multi-method design is that it strengthens findings through triangulation and complements the limitations of the single research method. In this study, the “interpretation” multi-method design (Tashakkori and Teddlie, 1998) was followed. The primary method entailed the analysis, using structural equation modelling (SEM), of data from a survey of procurement practitioners at 327 Korean manufacturing companies. Then the findings were complemented by the experimental design, which enabled the testing of complementary hypotheses on the impact of a code of conduct on “actual human behaviours,” which was not possible using the survey method alone (Figure I). An experimental design has been widely used in other academic fields, such as marketing, wherein research phenomena are manifested via human behaviours (Davis et al., 2011), enabling researchers to study those behaviours (Bendoly et al., 2006; Brebels et al., 2011; Mantel et al., 2006; Sarkar and Kumar, 2015) in dynamic business settings (Thomas, 2011; Tokar, 2010; Ancarani et al., 2013).

### 4.1. Survey administration

This study’s setting consisted of companies in the Korean manufacturing sector. The names of 1,500 manufacturing companies were obtained from *the Korean Chamber of Commerce and Industry Directory*. These companies were randomly selected mainly from the automotive and electronic industries, because such companies rely heavily on relationships with suppliers (Krause *et al.*, 2007). A postal survey was conducted to collect the data.

**Table 1.**  
Sample characteristics

	n	Percentage (%)
Firm size (employee)		
Small (<250)	130	39.76%
Medium (between 250 and 500)	66	20.18%
Large (>500)	131	40.06%
Total	327	100.00%
Industry		
Automotive	93	28.44%
Electronics	78	23.85%
Chemicals/pharmaceuticals	29	8.87%
Metal	29	8.87%
Textile	21	6.42%
Heavy industry	17	5.10%
Food & beverage	11	3.36%
Others	49	14.99%
Total	327	100.00%
Respondent profile <sup>a</sup>		
CEO/other high-level executives	90	27.52%
Supply chain directors	115	35.17%
Operations/logistics/purchasing manager	122	37.31%
Total	327	100%

**Notes:** <sup>a</sup>Procurement function was carried by procurement practitioners with different job titles. In the cases of SMEs, senior level managers did this function.

A field pretest of the questionnaire was conducted with mid-level and senior procurement practitioners to identify any deficiencies in its design or wording of questions (Remenyi *et al.*, 1998). A key-respondent approach was used, and procurement practitioners with a minimum of three years of experience were targeted to ensure sufficient knowledge of the procurement policy and supplier-related issues. Two follow-up e-mails and reminder calls resulted in 341 questionnaires being returned (a response rate of 22.73%). Discarding of questionnaires with an excessive amount of missing data left 327 usable ones for hypothesis testing (Tables 1 and 2). Non-response bias was assessed by testing the mean differences between early and late respondents on all items (Armstrong and Overton, 1977). There was no significant mean difference ( $p \leq 0.05$ ) among the items, suggesting that non-response bias was not a problem for this study.

**Table 2.**

Correlations and descriptive statistics

Variables	1	2	3	4	5	6	7
1.Procurement policy with supplier PJ code (PJ)	1						
2.Procurement policy with supplier DJ code (DJ)	0.405***	1					
3.Formalistic ethical orientation procurement practitioner (EOP)	0.141**	0.232***	1				
4.Trust (TR)	0.512***	0.386***	0.123**	1			
5.Buying firm's supply chain performance (SCP)	0.280***	0.251***	0.144**	0.363***	1		
6.Sales (USD Million)	0.067	0.073	-0.001	0.014	0.070	1	
7.Number of employee	0.028	0.043	-0.014	-0.026	0.089	0.853***	1
Mean	4.720	5.800	4.500	5.210	4.928	233.892	2163.440
S.D.	0.659	0.935	1.151	1.094	0.753	1430.125	11587.590

Notes:  $p \leq 0.1^*$ ,  $p \leq 0.05^{**}$ ,  $p \leq 0.01^{***}$ 

#### 4.2. Measurement development

To ensure the quality of the measures for this research, we endeavoured, where possible, to use either established measures or those adapted from the extant literature. All of the items used were measured on a 7-point Likert scale (see Appendix A).

The “formalistic ethical orientation of the procurement practitioner” was measured using a scenario approach adopted from that of Brady and Wheeler (1996). The main advantage of this approach is that it enables researchers to “standardise the social stimulus across respondents and make the decision-making situation more real” (Alexander and Becker, 1978, p. 103).

First, the respondents were required to read three scenarios related to unfair procurement practices: (1) early termination of supplier contract, (2) non-compliance with co-operation agreement, and (3) delay of payment to supplier (Appendix B). As suggested by Cavanagh and Fritzsche (1985), the scenarios were carefully constructed using real-life cases compiled by the Korea Fair Trade Commission. The respondents were then presented with three statements, representing different ways of assessing these scenarios, and were asked to rate them on a scale of 1 to 7, indicating the extent of similarity with their own assessment of the scenarios (Brady and Wheeler, 1996). For example, if a respondent indicated a low level of similarity between his own assessment and the first statement on unfair procurement scenarios, that is, “this decision is necessary for the competitiveness of our company”, this suggested that the respondent perceived the scenarios as unfair and unethical, which in turn suggested a high level of formalistic orientation.

In terms of “the code of conduct for fair supplier treatment” construct, due to the lack of existing measures, a new seven-item scale was developed using the methods of Gerbing and Anderson (1988). An initial pool of eight items was collected based on field interviews with procurement practitioners and publicly available codes of conduct for the fair treatment of suppliers. These items were then reviewed by three academics for content validity, followed by an exploratory factor analysis to determine the number of dimensions underlying the construct (Appendix C). The results suggested two factors, which were named as (1) code for supplier procedural justice and (2) code for supplier distributive justice. Confirmatory factor analysis was then performed to assess the unidimensionality of the new scales; the results indicated the absence of any issue. In the final step,

the reliability of the new scales was assessed using Cronbach's  $\alpha$ ; again, the results suggested that there was no reliability issue.

In order to operationalise the trust construct, the two-dimensions approach (benevolence and competence) suggested by Singh and Sirdeshmukh (2000) was used. Trust, in the context of this study, would be mainly of benevolence, which refers to each member's holding of others' interests ahead of their self-interests (Singh and Sirdeshmukh, 2000), rather than of competence, which refers to each member's fulfilling promised tasks in a reliable and honest manner (Singh and Sirdeshmukh, 2000). For this reason, a four-item scale measuring the benevolence dimension of trust was adapted from existing studies. The four items were openness (Ha et al., 2011; Squire et al., 2009; Svensson, 2001), liking (Swan et al., 1988), honesty (Ambrose et al., 2010; Arranz, and Arroyabe, 2012; Hill et al., 2009; Swan et al., 1988), and respect (Ha et al., 2011; Svensson, 2001).

Regarding the measurement items for the buyer's supply chain performance, performance measures, which have been used to measure the performance implications of relationship variables such as trust (e.g. Fynes et al., 2005; Ha et al., 2011; Nyaga and Whipple, 2011), were adopted. The five-items measuring a buyer's supply chain performance were manufacturing cost (Ha et al., 2011; Peng et al., 2011), order-fulfilment lead time (Ha et al., 2011; Handfield et al., 2009; Schoenherr and Swink, 2012), order fill rate (Ha et al., 2011; Schoenherr and Swink, 2012), inventory turnover (Peng et al., 2011; Schoenherr and Swink, 2012), and operational flexibility (Ha et al., 2011; Schoenherr and Swink, 2012).

#### *4.3. Control variables*

To control for other possible effects, the following three variables were included in the model: job level, sales volume, and number of employees. Job level's effect on ethical orientation was controlled for because senior procurement practitioners would be more likely to comply with codes and policies (Callan, 1992). Firm size, in terms of sales volume and number of employees, was controlled for due to larger companies' better supply chain performance resulting from their extensive resource bases (Tsai, 2001) and their relatively greater power in the buyer-supplier relationship (Villena *et al.*, 2011).

#### *4.4. Measurement validity and reliability*

The convergent validity, discriminant validity, and reliability of the constructs were assessed using AMOS version 20 (Tables 3 and 4). First, the convergent validity was assessed by examining the factor loadings; all were greater than 0.5 (range: 0.534 ~ 0.927). The average variance extracted (AVE) values ranged from 0.535 to 0.712, all exceeding the cut-off value of 0.5, indicating the results' strong support for convergent validity. The measures' reliability was then assessed using composite reliabilities. All of the values exceeded 0.7, suggesting that there was no significant reliability issue in the measures. To assess discriminant validity, the square-rooted AVEs for each

factor were compared with the correlations between them. The results showed that all of the square-rooted AVEs were greater than the correlations (Table 4), thereby confirming the absence of significant discriminant validity issues in the measures used.

**Table 3.**

Construct analysis

Construct	AVE*	C.R.**	Range of factor loadings
1.Procurement policy with supplier PJ code	0.535	0.746	0.618 ~ 0.798
2 Procurement policy with supplier DJ code	0.572	0.732	0.649 ~ 0.822
3.Formalistic ethical orientation procurement practitioner	0.562	0.700	0.534 ~ 0.859
4.Trust	0.712	0.854	0.720 ~ 0.927
5.Buying firm's supply chain performance	0.553	0.787	0.629 ~ 0.836

**Notes:** \* Average variance extracted, \*\* Composite reliability  
 $\chi^2 = 272$ ,  $d.f. = 133$ ,  $p = 0.000$  CFI = 0.952, and GFI = 0.921, AGFI = 0.888, TLI = 0.938 and RMSEA = 0.057

**Table 4.**

Construct level correlation analysis

	1	2	3	4	5
1.Procurement policy with supplier PJ code	1.000	-	-	-	-
2 Procurement policy with supplier DJ code	0.291	1.000	-	-	-
3.Formalistic ethical orientation procurement practitioner	0.022	0.098	1.000	-	-
4.Trust	0.475	0.162	0.001	1.000	-
5.Buying firm's supply chain performance	0.159	0.071	0.006	0.142	1.000

**Notes:** n = 327 observations

4.5. Common method bias

Given that self-reported data were used and that the same respondents answered the questions on both performance and its determinants, common method bias (CMB) was a possibility (Podsakoff *et al.*, 2003). Several steps were taken in the data collection process to avoid such bias. As an initial step, detailed information on the necessary qualifications of key informants was provided in the questionnaires to ensure that the informants were mid-level and senior procurement practitioners with a minimum of three years of experience. Second, the respondents were assured that their identities would remain anonymous (Podsakoff *et al.*, 2003).

Two statistical tests — (1) Harman's one-factor test and (2) the marker variable technique — were conducted to determine the existence of CMB. First, the un-rotated factor solution showed that the largest factor accounted for 32.47%, which suggested that CMB was an unlikely problem (Malhotra *et al.*, 2005). This was then followed by the marker variable technique (Lindell and Whitney, 2001), whereby the marker variable "information sharing," which had little theoretical relationship with the other constructs in the main model, was introduced. The results suggested that the marker variable was not significantly correlated with any other constructs ( $-0.050$  to  $-0.139$ ;  $p \leq 0.01$ ). Furthermore, the correlations between the constructs in the original model remained significant after controlling for the effect of the marker variable, which fact supported the findings of the first test.

#### *4.6. Experimental design and data collection for the secondary method*

In this study's context, our experimental design and data collection enabled us to directly investigate how a code of conduct could cause an individual to behave more fairly towards his or her exchange partner; this complements the findings from the primary method.

The experiment for this study was conducted with 120 undergraduate students (56 male and 64 female: average age: 22.9 years) from a Korean business school as subjects. Ideally, an experiment of this nature should be conducted with real practitioners for the best possible results. However, students have been frequently used for OM/SCM experiment-based studies (i.e., Bolton et al., 2004; Kremer et al., 2010; Loch and Wu, 2008), owing to practical reasons such as the greater resource requirement when using practitioners as subjects (Ribbink and Grimm, 2014). Despite this, there is some empirical evidence suggesting that using students as subjects does not harm the generalisability of findings provided that the experiments are well designed (Bendoly et al., 2006; Ribbink and Grimm, 2014). For example, researchers reported negligible differences between students and professional subject groups, for example, in terms of perception on managerial promotion issues (Heisler and Gemmill, 1978) and average net payoff as the reaction to the difficulty of the task (Montmarquette et al., 2004).

The students were randomly assigned to one of four groups: three treatment groups and one control group. The subjects in the treatment groups were then given a vignette on procurement decision-making, including a summary of the procurement policy of a fictitious company containing a code of conduct for the fair treatment of suppliers. The procurement policies for groups 1 (n=30) and 2 (n=30) contained codes for supplier procedural justice and distributive justice, respectively. The policy for group 3 (n=30) contained a code for both. In contrast, the participants in the control group (group 4, n=30) were given the same vignette with the same procurement policy but without the section containing a code. In order to investigate actual procurement behaviour, the participants were asked to make a decision on the vignette wherein the buyer could coerce an unfair discount from the supplier (Appendix B).

To ensure that the manipulation worked as intended (Hartmann and Moeller, 2014; Hora and Klassen, 2013), a pretest was conducted using a small number of students prior to the actual experiment. The students were randomly given one of two types of procurement policy: one containing a code for supplier procedural justice and the other containing a code for distributive justice. They were then asked to identify procedural and distributive justice-related codes from the policy they had read by answering the seven survey questions used to determine the presence of code of conduct for fair supplier treatment. The results of the manipulation check suggested that the participants who had read a specific code had a higher probability of detecting the presence of such a code in the procurement policy Table (5). Additionally, the independent variable for this experiment

— “the existence of a code” — was not a latent variable; therefore, its manipulation was direct and straightforward. For these reasons, it was concluded that there was no internal validity issue in the study design.

**Table 5.**

Manipulation check results

Treatment	Existence of justice code in procurement policy	f
The participants who read the procurement policy with the code of conduct for supplier <u>procedural justice</u>	4.075 (3.800 <sup>†</sup> )	8.667***
The participants who read the procurement policy with the code of conduct for supplier <u>distributional justice</u>	4.350 (3.777 <sup>†</sup> )	10.015***

<sup>†</sup>Without code of conduct

## 5. Analysis and Results

### 5.1. Structural model analysis

Before assessing the path coefficients, the model fit was evaluated. The indices indicated a good fit of the model with the data ( $\chi^2 = 353$ ,  $d.f. = 189$ ,  $p = 0.000$ , CFI = 0.952, RMSEA = 0.052, GFI = 0.913, AGFI = 0.884 and NFI = 0.903) (Table 6 and Figure 2). First, H<sub>1a</sub> and H<sub>1b</sub> postulated that a positive relationship existed between the existence of a code of conduct and the level of formalistic ethical orientation of a procurement practitioner. The path coefficient for H<sub>1b</sub> (0.384,  $p \leq 0.01$ ) was positive and significant. This finding suggested that the code of conduct for the distributive justice aspect of supplier fairness influenced the individual ethical orientation to become more formalistic. However, the path coefficient for H<sub>1a</sub> was insignificant, suggesting that there was no significant relationship between the existence of the code for procedural justice and the procurement practitioner’s level of formalistic ethical orientation. Next, H<sub>2</sub>, postulating a positive relationship between the level of formalistic ethical orientation and the level of trust in the buyer–supplier relationship, was examined. The path coefficient was significant (0.344,  $p \leq 0.05$ ), proving support for H<sub>2</sub>. This suggested that if a procurement practitioner’s ethical orientation leans more towards formalistic, his or her resulting fair behaviour towards suppliers fosters trust in the relationship. The final hypothesis from the primary method (H<sub>3</sub>) postulated a positive relationship between the level of trust in the relationship and the supply chain performance of a buying firm. The results provided support for this.

**Table 6.**

## Path analysis results

Hypothesis	Estimate	Standardized Estimate	S.E	Results
H <sub>1a</sub> PJ → EOP	0.085	0.104	0.097	Not support
H <sub>1b</sub> DJ → EOP	0.384***	0.494	0.097	Support
H <sub>2</sub> EOP → TR	0.344**	0.188	0.128	Support
H <sub>3</sub> TR → SCP	0.209***	0.375	0.036	Support

**Notes:**  $p \leq 0.1^*$ ,  $p \leq 0.05^{**}$ ,  $p \leq 0.01^{***}$   
 $\chi^2 = 353$ ,  $d.f. = 189$ ,  $CFI = 0.952$ ,  $GFI = 0.913$ ,  $AGFI = 0.884$ ,  $NFI = 0.903$ ,  $RMSEA = 0.052$   
 $\dagger$  Standardized estimate,  $\dagger\dagger$  Standard error  
1. Job position => “ethical orientation” was significant ( $B = .249^{***}$ )  
2. Sales ( $B = -0.042$ ) and size ( $B = 0.147$ ) => supply chain performance was not significant.

(Main model) The hypotheses tested by structural equation modelling

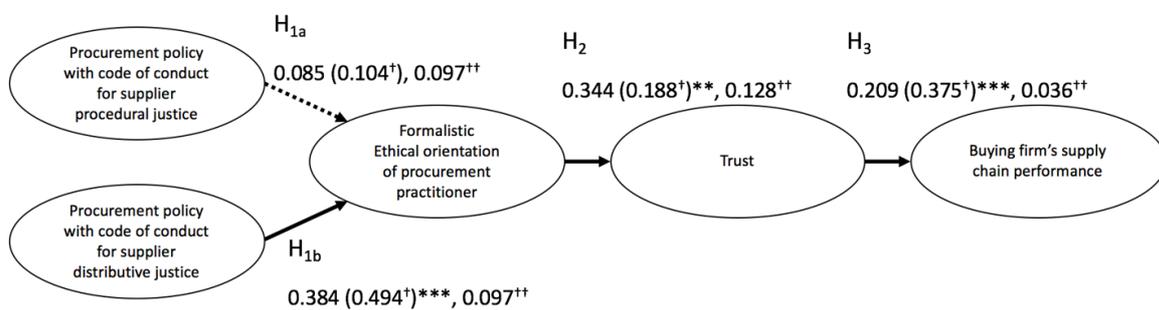
**Notes:**  $p \leq 0.1^{**}$ ,  $p \leq 0.05^{**}$ ,  $p \leq 0.01^{***}$ ,  $\dagger$  Standardized estimate,  $\dagger\dagger$  Standard error

Figure 2. Path analysis results

**5.2. Mediation analysis**

In this study, we hypothesised that the “procurement practitioner’s formalistic ethical orientation” fully mediates the relationship between a “code of conduct for fair supplier treatment” and “trust.” In order to test this, we used the bootstrapping method recommended by Preacher and Hayes (2004, 2008) with 2,000 sampling iterations. As evident from Table 7, the direct effect between “code for supplier procedural justice” and “trust” was significant; however, the indirect effect was found to be insignificant at  $p < 0.05$ , suggesting no mediation. Conversely, the direct effect of “code for supplier procedural justice” on “trust” was not significant, but the indirect effect was found to be significant. This supports our hypotheses regarding the full-mediation role of the practitioner’s formalistic ethical orientation.

**Table 7.**

## Mediation effect results

	Total effect	Direct effect	Indirect effect	Result
PJ→EOP→TR	0.696	0.692***	0.004	No mediation
DJ→EOP→TR	0.106	0.071	0.035**	Full mediation

**Notes:**  $p \leq 0.1^*$ ,  $p \leq 0.05^{**}$ ,  $p \leq 0.01^{***}$

To assess the robustness of the proposed model, it was compared with competing models, which were the (1) direct model (Model 2) and the (2) partial mediation model (Model 3), using the criteria suggested by Paulraj *et al.* (2008) (Table 8). The direct model (Model 2) had an acceptable fit; however, only one of four paths was significant. Model 3 had an acceptable fit; however, its fit indices (CFI, NNFI, and RMSEA) were lower than those of the proposed model. Furthermore, two of four paths were non-significant, indicating that the original model is better. Although the explained variance in the outcome variable (buyer's supply chain performance) was marginally higher, the results collectively provided strong evidence for the superiority of the proposed model. Furthermore, because the main model was nested within the competing model, their  $\chi^2$  values were compared (Rust *et al.*, 1995). The  $\chi^2$  difference was not statistically significant (differences of  $\chi^2 = 4.4$ ,  $df = 3$ ,  $p > 0.1$ ), suggesting that the main model fit the data at least as well as the less restricted, partial mediation model. In sum, these results support the notion that the procurement practitioner's ethical orientation is a full mediator.

**Table 8.**

Results of structural equation modelling of competing models

	Proposed model (Model 1)	Direct model (Model 2)	Partial mediation model (Model 3)
Structural path			
PJ → EOP	0.104		0.070
DJ → EOP	0.494***		0.431***
EOP → TR	0.188**	-0.061	-0.037
TR → SCP	0.375***	0.383***	0.393***
PJ → TR		0.084	0.177
DJ → TR		0.502	0.568
Model fit indices			
$\chi^2$	353	360.8	357.4
<i>df.</i>	189	191	186
CFI	0.952	0.950	0.949
GFI	0.913	0.910	0.909
AGFI	0.884	0.880	0.877
NFI	0.903	0.900	0.901
RMSEA	0.052	0.052	0.053
PNFI	0.738	0.744	0.726
AIC	481.046	484.808	491.443
CAIC	787.604	781.786	812.370
Variance explained ( $R^2$ )			
Supply chain performance	0.154	0.160	0.169
Notes: $p \leq 0.1^*$ , $p \leq 0.05^{**}$ , $p \leq 0.01^{***}$			

### 5.3. Behavioural experiment (secondary analysis)

To test  $H_{1c}$  and  $H_{1d}$ , which postulated a direct link between the presence of two different types of code and an individual's actual behaviour (procurement decision-making), ANOVA tests were conducted using SPSS 20. As discussed earlier, the amount of the discount requested from the supplier was used as a measure of the fairness in a procurement decision. The results suggested that there was a significant difference in the amount of discount requested by the subjects among the different groups ( $F(3, 116) = 9.967, p < 0.05$ ) (Table 9). In order to establish the between-group difference, a post-hoc analysis followed. The results of the post-hoc analysis supported  $H_{1d}$ . This means that the subjects in Group 2, who had read the procurement policy with the code for supplier distributive justice, made a significantly fairer decision by asking for significantly less discount from the supplier than did those from Group 4 (the control group), who had read the policy without any code (1.167 lower than control group,  $p < 0.05$ ). On the other hand, the subjects from Group 1, who had read the policy with the code for supplier procedural justice, did not exhibit any significantly fairer behaviour in comparison to those from Group 4 (the control group). This means that  $H_{1c}$  was not supported (Table 9).

**Table 9.**

Results of ANOVA and post hoc

ANOVA <sup>†</sup>		Post-Hoc <sup>†††</sup>		
Treatment	Amount of discount to coerce <sup>††</sup> (SD)	(I) Group	(J) Group	Mean (I – J)
Group 1 The participants who read the procurement policy with the code of conduct for supplier <b>procedural justice</b>	3.733 (1.760)		Group 1	-0.666
Group 2 The participants who read the procurement policy with the code of conduct for supplier <b>distributive justice</b>	3.067 (1.530)		Group 2	
Group 3 The participants who read the procurement policy with the code of conduct for supplier <b>procedural &amp; distributive justice</b>	3.033 (1.790)	Group 2	Group 3	0.033
Group 4 The participants who read the procurement policy <b>without the code of conduct</b>	4.233 (1.942)		Group 4	-1.167**

<sup>†</sup> $F(3, 116) = 9.967, p < 0.05$

<sup>††</sup>Amount of discount to coerce lower = fairer; (1: no discount – 4: 15% discount – 7: 30% discount)

<sup>†††</sup> From LSD; SD = 0.455

## 6. Conclusion and Implications

### 6.1. Theoretical contributions

An increasing number of companies have started to make efforts to treat their suppliers fairly as part of wider CSR initiatives (Liu et al., 2012; Kim, 2013). To the best of our knowledge, however, only a few studies have investigated the performance implications of the fair treatment of suppliers (e.g.,

Brandon-Jones et al., 2010). Therefore, the present study sought to fill this gap by investigating whether such efforts in the form of a code of conduct would bring performance benefits to buying firms. The reason for choosing a code of conduct is that it is one of the most often employed means of achieving fair supplier treatment (Preuss, 2009). In addition to this, this study also aimed, by focusing on the trust-fostering role of the behaviours resulting from a code, to answer the question of why fair supplier treatment in the form of a code of conduct would pay off for the buying companies.

As the primary method, the organisational climate theory was used as a first theoretical lens through which to investigate the relationship between the existence of a code and the level of formalistic ethical orientation. As mentioned earlier, if a firm has such a code of conduct embedded in its procurement policy, a procurement practitioner's ethical orientation would be expected to become more formalistic and that therefore, ethical behaviours would be both greater in number and more purely ethical in their nature. The results from the primary method suggest that the relationship for a code for supplier distributive justice ( $H_{1b}$ ) was significant; however, the relationship for a code for supplier procedural justice ( $H_{1a}$ ) was not supported.

Likewise, the results from the secondary method, wherein the link between the existence of a code and the level of fairness in procurement was investigated, also support  $H_{1d}$  (distributive justice) only. This means that the subjects who were exposed to a code for supplier distributive justice exhibited significantly fairer procurement behaviours than did the others who had not been thus exposed.

A possible explanation for this can be found in the nature of the behaviours that a code of conduct is intended to influence. In order for a code to become effective, it should cover a sufficient range of behaviours and contain related detailed guidelines (Badenhorst, 1994; Tucker et al., 1999). This is because members tend to seek a reference point from the firm's code when faced with ethically ambiguous situations. A code for supplier procedural justice ( $H_{1a}$  and  $H_{1c}$ ) is intended to regulate procurement practitioners' behaviours, which are "process oriented", with regard to the ways in which they would engage with suppliers in various aspects of the procurement process. For example, one of the most frequently mentioned behaviours during our fieldwork was that of a "buyer not listening to suppliers' concerns and feedback". It would be difficult for a buying firm to draft an effective code detailing, with explicit guidelines, all eventualities of such abstract interactions.

The main consequence of this would be a code with high-level ambiguity, containing, for example, general statements covering principles only. Such codes would be less likely to provide a procurement practitioner with an explicit reference point when needed, which explains the insignificant relationship with the level of formalistic ethical orientation. Similarly, this may explain why the group that had the code for procedural justice did not exhibit fairer behaviour than those from the control group. Moreover, monitoring compliance with a code having high-level ambiguity would be costly and impractical. If practitioners were aware that detecting and punishing breaches of such codes is difficult, some members would be less likely to abide by the code; in other words, it would

undermine its own effectiveness. These findings are similar to those of Goebel et al. (2012), who found that a code of conduct lacking tangible and specific actions had only limited impact on procurement behaviours. Conversely, a code for supplier distributive justice ensures fair returns to suppliers, and its breaches would normally result in imminent and tangible losses for suppliers (such as monetary losses). Such behaviours, in comparison with the code for procedural justice, are much more explicit and have clearer consequences. Therefore, drafting an effective code and monitoring its compliance with such behaviours would be relatively straightforward, which fact explains the positive link between the code for supplier distributive justice and (1) the level of formalistic ethical orientation and (2) the level of fairness in procurement decisions. This leads to the first theoretical contribution of this paper, that the efficacy of a code of conduct (a form of the ethical climate of an organisation) is contingent on the nature of the behaviours it is meant to regulate.

As a second step, the relationship between the level of formalistic ethical orientation and trust in the buyer–supplier relationship ( $H_2$ ) was investigated, followed by the investigation of the third hypothesis, which postulated a positive relationship between trust and a buying firm’s supply chain performance. The results supported both  $H_2$  and  $H_3$ . These findings are similar to those of Brandon-Jones et al. (2010), providing further empirical support for buyers’ performance benefits from fair supplier treatment. These findings constitute the second contribution of this paper, which is a theoretical explanation for why fair supplier treatment can also be beneficial for buyers. According to social exchange theory, fair behaviours by a buyer would encourage its suppliers to engage in further interactions, the resulting relational outcome being trust accumulation (Heide and Miner, 1992; Griffith et al., 2006). Furthermore, trust is an important factor for the competitiveness of a buyer, since it is one of the enablers of a successful buyer-supplier relationship (Dyer and Chu, 2000; Wathne and Heide, 2004). In summary, the findings in this paper empirically support the idea that the fair treatment of suppliers would “pay-off” a buying firm, which is in line with the findings of Brandon-Jones et al (2010).

## *6.2. Managerial implications*

The findings herein constitute useful managerial insights for buying firms. There is growing evidence, including the findings in this paper, that the fair treatment of suppliers can be beneficial for buying firms. A fair supplier treatment agenda, however, is still being nudged to buying firms by external stakeholders, such as governments and professional organisations (e.g. Lee, 2012). Based on this study’s findings, therefore, which suggest that fair supplier treatment does pay off for buying firms, senior managers should start to consider making “fair supplier treatment” a part of their existing social sustainability initiatives. One way of doing this is by developing a related code of conduct and incorporating it into a procurement policy. Doing this provides a company not only with a means of monitoring the behaviours of its procurement people but also with useful guidelines related to their supplier-facing behaviours. Moreover, it also manifests and communicates the firm’s

commitment to fair supplier treatment to stakeholders, both internally and externally. However, whereas such a code can influence the behaviours of procurement practitioners, it is effective, as discussed, only for behaviours related to supplier distributive justice.

If a buyer wishes to address the issue of supplier procedural justice (such as broadening of supplier participation in decision-making), approaches other than those entailing codes need to be considered. In a buyer–supplier relationship, procedural justice is manifested through clarity of expectations and the extent of involvement in, and explanation of, decision-making procedures (Kim and Mauborgne, 1998; Narasimhan et al., 2013). This requires, therefore, more substantial approaches for improvement of the processes and routines of interaction with suppliers. One method a buying firm could consider is increasing the level of formal socialisation with its suppliers. This would require creating specific structural formats for engagement, such as regular meetings and conferences, or perhaps cross-functional teams (Cousins et al., 2006).

### *6.3. Limitations and future research*

This study has the following limitations, which could open up several avenues for future research. First, the experimental design included the utilisation of undergraduate students. A similar experiment-based study using real procurement practitioners would provide additional insights on the findings of this study. Second, this study used a cross-sectional survey; considering that the ethical orientation it presents take considerable time in their development, a longitudinal research design would add new insights to the findings. Third, the effect of firm size in the mediation of a formalistic ethical orientation was found to be significant but rather small (0.035\*\*). This might suggest that some other mediator(s) can explain the relationships between the presence of a code and mutual trust. For example, Litzky and Greenhaus (2007) argued that a code of conduct's effectiveness depends on an organisation's willingness to explicitly communicate the code's terms, as well as to reward and punish accordingly. A study incorporating additional interaction effects of such factors would provide a better understanding of the role of an ethical climate in the form of a code of conduct in mutual trust accumulation.

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## Appendix A. Measurement items

Scales	Sources
<p><b>Code of conduct for supplier procedural justice in procurement policy</b></p> <p>(1: Strongly disagree – 7: Strongly agree)</p> <p>(1) My company’s procurement policy has a code encouraging us to take the supplier’s concerns and feedback into consideration for decision making</p> <p>(2) My company’s procurement policy has a code requiring us to increase supplier involvement in the process of drawing up a contract</p> <p>(3) My company’s procurement policy has a code requiring us to increase supplier involvement in decision making, which is related to sharing rewards from a relationship</p> <p>(4) My company’s procurement policy has a code requiring us to increase greater supplier involvement in decision making, which is related to sharing risks/loss from a relationship</p>	<p>Interviews; publically available procurement policy (e.g. Samsung Electronics, SK)</p>
<p><b>Code of conduct for supplier distributive justice in the procurement policy</b></p> <p>(1: Strongly disagree – 7: Strongly agree)</p> <p>(1) My company’s procurement policy has a code discouraging unnecessary delay of payment to the supplier</p> <p>(2) My company’s procurement policy has a code discouraging unnecessary return of materials/components to the supplier</p> <p>(3) My company’s procurement policy has a code for fair pricing with the supplier</p>	<p>Interviews; publically available procurement policy (e.g. Samsung Electronics, SK)</p>
<p><b>Ethical orientation of procurement practitioner (see Appendix II for the scenarios)</b></p> <p>(1: Very similar to my way of thinking – 7: Not at all similar to my way of thinking)</p> <p>(1) This decision is necessary for the competitiveness of our company</p> <p>(2) This decision is necessary for the financial performance of our company</p> <p>(3) This decision is not acceptable, since it is a breach of the contract and trust (reverse coded)</p>	<p>Brady and Wheeler, 1996; Reynolds, 2006</p>
<p><b>Trust</b></p> <p>(1: Strongly disagree – 7: Strongly agree)</p> <p>(1) We feel that our firm and the supplier are open and do not conceal business objectives</p> <p>(2) We feel that our firm and the supplier have a positive attitude in the relationship</p> <p>(3) We feel that our firm and the supplier are honest each other</p> <p>(4) We feel that our firm and the supplier are concerned with mutual respect</p>	<p>Ambrose, Marshall, and Lynch, 2010; Ha, Park, and Cho, 2011; Hill et al., 2009; Svensson, 2001; Swan et al., 1988</p>

<p><b>Buying firm's supply chain performance</b></p> <p>(1: Far below competitors – 7: Far above competitors)</p> <p>(1) Manufacturing cost of our company is</p> <p>(2) Order fulfilment lead time of our company is</p> <p>(3) Order fulfilment rate of our company is</p> <p>(4) Inventory turnover ratio of our company is</p> <p>(5) Operations flexibility of our company is</p>	<p>Frohlich and Westbrook, 2001; Ha, Park, and Cho, 2011; Handfield et al., 2009; Peng, Schroeder, and Shah, 2011; Schoenherr and Swink, 2012</p>
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## **Appendix B. Scenarios**

### **(1) Early supplier contract termination (Ethical orientation)**

Your company is one of the largest companies in the industry. Your company has recently re-signed a supply contract with its previous supplier, B, via a competitive bid process. Supplier B has been supplying components to your company for more than 10 years and is regarded as a close business partner. A few weeks ago, however, you were approached by Supplier C proposing that it could supply similar components currently supplied by B, but 15% cheaper. Indeed, this is a very interesting proposal potentially resulting in a big cost saving. Additionally, you have heard from various sources that Supplier C is a rising star in the field providing high-quality components with very aggressive pricing. Early termination of the contract with Supplier B would result in a breach of contract, but considering the buyer power of your company (one of the largest in the industry), it is very unlikely that Supplier B would actually take legal action against you and jeopardise a potential business opportunity. For this reason, your company has decided to switch to Supplier C.

### **(2) Non-compliance with a cooperation agreement (Ethical orientation)**

Your company is one of the largest companies in the industry. Your company has recently signed a supply contract with Supplier B. As part of the deal, your company and Supplier B have agreed to share information about each other's products. Since then, upon your company's requests, Supplier B has been sharing various information with your company, such as technical details about its products and its new product development line-up. Your company, however, has been rather reluctant to respond to similar requests from Supplier B. This is because the company has recently become aware that Supplier B has been doing business with your competitors, C and D. Indeed, your company is very concerned about the possibility of shared information leaking to its competitors through Supplier B. In the end, your company has decided to honour the agreement but at very superficial level, leaving out core information. The management of your company believes that there is not much Supplier B can do about it, since your company is one of the most influential buyers in the field. For Supplier B, information about your company's current and new products line-up is crucial, since it can be used for long-range planning. For this reason, Supplier B has been repeatedly asking your company to honour the agreement by sharing information about its products.

### **(3) Supplier payment delay (Ethical orientation)**

Supplier B has been supplying components to your company for more than 10 years and is regarded as a close business partner. Recently, your company has been going through a challenging time due to the economic downturn and ever-increasing competition. It has now become apparent that meeting the

profit target for this quarter is highly unlikely. As a result, share price fall looks inevitable and the top management looks increasingly nervous about the prospect of facing its angry shareholders. As one of the measures to make up the shortfall in profit, the management of the company has decided to delay payments to some of its suppliers and Supplier B is one of them. It is almost certain that this decision by your company will put Supplier B in a very difficult situation, since the current recession seems to have hurt everyone in the industry.

#### (4) Procurement decision making

Company B manufactures car headlight systems and supplied 10,000 units (KRW 300,000 each) to your company last year. You are a procurement manager for your company. At present, many companies in the automotive industry are going through a tough period due to the economic downturn and ever-increasing competition from overseas. In response to this, there is a huge internal drive in your company for further cost-cutting, including purchase cost review. Ahead of a contract renewal with Company B, you and your team have been instructed to be aggressive on price negotiation.

- Your company procures headlight units from multiple suppliers.
- You are aware that the majority of Company B's sales comes from the business with your company.
- Recently, you have heard a rumour that Company B is going through financial hardship.
- During your last appraisal, you discussed your promotion with your line manager.

How much of a discount would you request?

- (1) No discount is requested.
- (2) Request 5% discount. (Your company can save KRW 150,000,000, B loses KRW 150,000,000)
- (3) Request 10% discount. (Your company can save KRW 300,000,000, B loses KRW 300,000,000)
- (4) Request 15% discount. (Your company can save KRW 450,000,000, B loses KRW 450,000,000)
- (5) Request 20% discount. (Your company can save KRW 600,000,000, B loses KRW 600,000,000)
- (6) Request 25% discount. (Your company can save KRW 750,000,000, B loses KRW 750,000,000)
- (7) Request 30% discount. (Your company can save KRW 900,000,000, B loses KRW 900,000,000)

Note: Your savings and B's loss is based on 10,000 units. \$1 US = KRW 1,085 as of 01/Dec/2017)

## Appendix C. The results of the exploratory factor analysis for the scale development

Construct*	N umber of items	Cro nbach's Alpha**	Rang e of factor loadings
1.Procurement policy with supplier PJ code	4	0.783	0.657
2.Procurement policy with supplier DJ code	3	0.646	0.474

**Note:**

\* Confirmatory factor analysis (CFA) was followed to assess the unidimensionality of the new scales; the results indicated the absence of any issue ( $\chi^2 = 46.6$ ,  $df = 13$ ,  $p = 0.000$ , CFI = 0.945, GFI = 0.959, AFGI = 0.913, TLI = 0.911 and RMSEA = 0.089).

\* The cut-off point of 0.6 was used for this study (Aron et al., 2013; Hair et al., 2014).

