The Relationship between Ethical Culture and Unethical Behavior in Work Groups: Testing the Corporate Ethical Virtues Model

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ABSTRACT AND KEYWORDS	
Abstract	The Corporate Ethical Virtues Model, which is a model for measuring the ethical culture of organizations, has not been tested on its predictive validity. This study tests the relationship between this model and observed unethical behavior in work groups. The sample consists of 301 triads comprising a manager and two direct reports. The results show that six of the eight virtues are negatively related to observed unethical behavior. An important implication of this finding is that multiple corporate virtues are required to reduce unethical behavior in work groups.
Free Keywords	ethical culture, unethical behavior, virtue theory, ethical climate, ethics program, work groups
Availability	
Classifications	

THE RELATIONSHIP BETWEEN

ETHICAL CULTURE AND UNETHICAL BEHAVIOR IN WORK GROUPS:

TESTING THE CORPORATE ETHICAL VIRTUES MODEL

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The Relationship between

Ethical Culture and Unethical Behavior in Work Groups:

Testing the Corporate Ethical Virtues Model[1]

The Corporate Ethical Virtues Model, which is a model for measuring the ethical culture of organizations, has not been tested on its predictive validity. This study tests the relationship between this model and observed unethical behavior in work groups. The sample consists of 301 triads comprising a manager and two direct reports. The results show that six of the eight virtues are negatively related to observed unethical behavior. An important implication of this finding is that multiple corporate virtues are required to reduce unethical behavior in work groups.

Keywords: ethical culture, unethical behavior, virtue theory, ethical climate, ethics program, work groups

Unethical behavior in work groups is frequently observed by its members. Research conducted by KPMG (2005) among 4,056 respondents from the American working population shows that 74% had witnessed unethical behavior in their work group during the preceding twelve months. Research conducted by the Compliance and Ethics Leadership Council (2008) among 1,752 employees of large companies in five countries shows that 16% had witnessed harassment, 15% discrimination, 11% theft, and 7% falsification of expense claims in their work group during the preceding twelve months. Given its financial, reputational and emotional costs (Karpoff, Lee, & Martin, 2008; Den Nieuwenboer, 2008), the challenge for organizations is to establish how to prevent, detect and respond to unethical behavior (Goodpaster, 2006; Kidwell & Martin, 2005; Vardi & Weitz, 2004).

In the past, the main focus for understanding unethical behavior was the personal characteristics of individual transgressors, referred to by Treviño and Youngblood (1990) as the 'bad apples approach'. In recent years, the focus has been shifted to the characteristics of the organizational context within which unethical behavior of managers and employees occurs, which Treviño and Youngblood (1990) refer to as the 'bad barrels approach'. The ethical culture of an organization has been advocated as an important (Ford & Richardson, 1994; Fritzsche, 1991; Key, 1999; Sims & Brinkmann, 2003; Sinclair, 1993) or even the most important (Casey, Davidson, & Schwartz, 2001; Lease, 2006; Treviño, Butterfield, & McCabe, 1998) component of the organizational context for explaining unethical behavior in work groups.

To date, the only quite extensively developed model for the ethical culture of an organization is the Corporate Ethical Virtues Model (Kaptein, 2008). In this model, the ethical culture comprises eight dimensions, defined as virtues that are relevant in the explanation and prediction of unethical behavior in work groups. These relationships, however, have not been empirically tested together. This study makes a comprehensive

examination of the relationships between each of the eight dimensions and observed unethical behavior in work groups. Whereas similar research often utilizes one data source for the assessment of dependent and independent variables (e.g. Peterson, 2002; Treviño, Butterfield, & McCabe, 1998; Treviño, Weaver, Gibson, & Toffler, 1999), this study employs different sources in order to eliminate the problem of common source bias (Podsakoff, MacKenzie, & Lee, 2003).

The remainder of the paper is structured as follows. First, the Corporate Ethical Virtues Model (abbreviated as CEV Model) is discussed, subsequent to which eight hypotheses are posited. This is followed by a discussion of the methodology employed and the findings of this study. The paper concludes with an overview of the implications for future research and management practice.

Theory and Hypotheses

The ethical culture of an organization can be defined as those aspects of the perceived organizational context that impede unethical behavior (Treviño & Weaver, 2003). The ethical culture represents the informal control system of an organization (Murphy, 1988), whereas, for example, an ethics program represents parts of the formal control system of an organization (Ferrell, Thorne LeClair, & Ferrell, 1998). The other most prominent component of the informal ethical control system of an organization is the ethical climate (Treviño, Butterfield, & McCabe, 1998), which is usually defined as those aspects that determine what constitutes (un)ethical behavior (Victor & Cullen, 1988). The CEV Model can be used to examine the virtuousness of the ethical culture of organizations.

Following Solomon's virtue-based theory of business organizations (1992, 1999), Kaptein (2008) posits that the virtuousness of an organization can be determined by the extent to which the organizational culture promotes ethical behavior and impedes unethical behavior of its members. To define the desirable ethical virtues or moral qualities of a culture, Kaptein conducted a qualitative analysis of 150 diverse cases of unethical behavior, defined as behavior that violates generally accepted moral norms of behavior (Jones, 1991; Treviño, Weaver, & Reynolds, 2006), caused by a failing organizational culture. The resulting list of cultural items was, through the use of different samples, subjected to exploratory and confirmatory factor analyses resulting in eight dimensions of the ethical culture of organizations. The overall fit of the model was good. Preliminary evidence of convergent and discriminant validity was also found.

To date, no study has been conducted to establish the criterion-related or predictive validity of the CEV Model, which is also an essential part of the construct validation process (Nunnally, 1978). The basic assumption of the CEV Model is that a virtue is a virtue because it is expected to reduce or impede unethical behavior. The legitimacy of the CEV Model lies in its criterion-related validity; the extent to which it actually explains and predicts unethical behavior in work groups. Although empirical research has been conducted to demonstrate statistical support for one or a few of the virtues (as will be shown below), no research has been conducted employing most or all virtues simultaneously in order to establish the relative explanatory and predictive value of each of them. Below, eight hypotheses will be developed based on each proposed virtue in the CEV Model. Whereas most empirical research has also been conducted into one specific type of unethical behavior, such as kickbacks (Hegarty & Sims, 1979) or white-collar crime (Schnatterly, 2003), our hypotheses will be developed with reference to the extensive family of unethical behaviors.

The Virtue of Clarity

The first virtue in the CEV Model is the virtue of clarity regarding the ethical standards managers and employees should uphold. Clarity is a virtue in the CEV Model as a lack of clarity is an antecedent of unethical behavior. The business setting confronts managers and employees with ethical issues different to those encountered in other social settings (Donaldson & Dunfee, 1999). Consequently, general moral intuitions may not be sufficient for managers and employees to distinguish between ethical and unethical behavior in their work. The empirical research conducted by Kaptein (2008) found that unethical behavior occurred due to the absence of a clear normative framework in the organization, which left managers and employees to rely on their moral intuition and good judgment. He also found examples of organizations having such a framework, like a code of ethics, but when that was never communicated within the organization it had no impact on the behavior of managers and employees. This corresponds with the views of Bird and Waters (1989), Jackson (2000), and Tyler and Blader (2005) that vagueness and ambiguity regarding moral expectations is an important source of unethical behavior within organizations. Hegarty and Sims (1979) found in their laboratory experiment with students that clear ethical standards reduced the frequency of paying kickbacks. And research of Schnatterly (2003) among 57 business organizations showed that by making policies and procedures clearer, white-collar crime was reduced by 26%. Regarding the virtue of clarity, we come to the first hypothesis:

Hypothesis 1: The cultural dimension of clarity is negatively related to the frequency of unethical behavior in work groups.

The Virtue of Consistency of Management and Supervisors

A second virtue in the CEV Model is role model behavior of management and supervisors in the organization, labeled as the virtue of consistency. Kaptein (2008) found many cases of unethical behavior by employees which were motivated by bad role modeling of their manager or supervisor. This corresponds with the empirical findings of Hegarty and Sims (1978), Brown, Treviño and Harrison (2005), Brown and Treviño (2006), and Schminke, Ambrose and Neubaum (2005) that employees often emulate the ethical and unethical behavior of their managers and supervisors. Managers and supervisors are important sources of normativity within organizations. When they contradict the ethical standards, they communicate inconsistent signals to subordinates. However, behavior that is consistent with the ethical standards of the organization reinforces the message to subordinates to comply with these standards. Recent research by Dineen, Lewicki and Tomlinson (2006) shows that behavioral integrity (a pattern of word-deed alignment) of managers is negatively related to the tendency among employees to engage in deviant behavior. Factor analysis by Kaptein showed that consistency fell into two categories: role modeling of supervisors (the direct manager of employees within the work group) and role modeling of management (the hierarchical line of command outside the work group). This leads to our second and third hypotheses:

Hypothesis 2: The cultural dimension of consistency of managers is negatively related to the frequency of unethical behavior in work groups.

Hypothesis 3: The cultural dimension of consistency of supervisors is negatively related to the frequency of unethical behavior in work groups.

The Virtue of Feasibility

A third virtue in the CEV Model is that of feasibility or achievability. Feasibility is the extent to which managers and employees have sufficient time, budgets, equipment, information, and authority to fulfill their responsibilities. The relevance of this virtue is discussed by Treviño (1986). She posits that people under great time pressure are less inclined to pay attention to ethical standards than those who have sufficient time at their disposal. Kaptein has found examples of unethical behavior prompted by managers and employees having insufficient means at their disposal. This also corresponds with the empirical findings of Cressey (1953), Robertson and Rymon (2001), and Schweitzer, Ordóñez and Douma (2004). The lower the feasibility of responsibilities, the higher the frequency of unethical behavior. To test this assumption, we come to the following hypothesis:

Hypothesis 4: The cultural dimension of achievability is negatively related to the frequency of unethical behavior in work groups.

The Virtue of Supportability

Another virtue in the CEV Model is that of supportability, defined as the extent to which an organization creates support among managers and employees to comply with the ethical standards of the organization. Following the views of Boye and Jones (1997), Deutsch Salomon and Robinson (2008), Greenberg (1997), and Skarlicki, Folger and Tesluk (1999), Kaptein found that demotivation, mistrust and dissatisfaction among staff were in some cases the antecedent of unethical behavior. Mistrust and a hostile work environment makes it difficult, if not impossible, to comply with the ethical stan-

dards of the organization. A lack of commitment to the ethical policies and standards of the organizations also increases the risks of unethical behavior. Tyler and Blader (2005) found that when employees are encouraged to identify with the values of their organization, they are intrinsically motivated to comply with the ethical standards of the organization. To prevent and reduce unethical behavior in work groups, it is therefore important to create commitment among management and employees to comply with the ethical standards of the organization. For the present study, it is relevant to test whether, given the other seven virtues, more supportability indeed leads to less unethical behavior. The fifth hypothesis therefore reads:

Hypothesis 5: The cultural dimension of supportability is negatively related to the frequency of unethical behavior in work groups.

The Virtue of Transparency

The next virtue in the CEV model is that of transparency or visibility. In the CEV model transparency is defined as the degree to which unethical behavior of management and employees and its consequences are observable. Many studies emphasize the importance of transparency for its potential to expose unethical behavior and for acting as a deterrent due to the perceived probability of getting caught (Brass, Butterfield, & Skaggs, 1998; Cressey, 1953; Detert, Treviño, Burris, & Andiappan, 2007; Hollinger & Clark, 1982, 1983). Kaptein also found cases in which the lack of transparency was an antecedent of unethical behavior. Managers and employees who were hardly aware of the nature or seriousness of the consequences of their behavior were deprived of the opportunity to account for, modify or alter their behavior. This led to situations where managers and employees were only focused on the action without regard for its conse-

quences. And also to situations where unethical behavior could be concealed easily and the frequency of unethical behavior could consequently increase without others within or outside the work group detecting it. The sixth hypothesis therefore reads as:

Hypothesis 6: The cultural dimension of transparency is negatively related to the frequency of unethical behavior in work groups.

The Virtue of Discussability

Another virtue in the CEV Model is that of discussability, defined as the degree to which managers and employees experience freedom to raise ethical dilemmas and alleged unethical behavior. Kaptein identified many examples of unethical behavior, which were partly caused by an organizational culture with a low level of discussability or debatability. In such a closed culture, criticism was neither encouraged nor accepted, ideas could not be exchanged and the willingness to discuss ethical issues was low or even absent. Bird and Waters (1989) also posit that the persistent avoidance of moral talk, what they call moral muteness, reinforces an amoral organizational culture. If moral issues are not openly spoken about, they go unnoticed and unacknowledged, which leads to higher moral stress and a decline of the moral authority of ethical standards. Empirical data gathered by four large companies by Treviño et al. (1999) showed that the degree to which managers and employees can openly talk about ethics is a good predictor of the absence of unethical behavior. Schnatterly (2003) found partial empirical support that greater intensity of communication reduces occurrences of fraud. According to the CEV Model, the higher the level of discussability, the lower the level of unethical behavior, which brings us to the following hypothesis:

Hypothesis 7: The cultural dimension of discussability is negatively related to the frequency of unethical behavior in work groups.

The Virtue of Sanctionability

The eighth and final virtue in the CEV Model is labeled as sanctionability. Sanctionability refers to the likelihood of managers and employees being punished for behaving unethically and rewarded for behaving ethically. Kaptein found a range of examples of unethical behavior that was preceded by similar forms of unethical behavior that were tolerated or even encouraged, in turn creating the perception among perpetrators that their behavior would go unpunished or that it would even be appreciated by management. The absence of the enforcement of sanctions undermines the effectiveness of ethical standards. Sanctions are important behavioral stimuli (Falkenberg & Herrenans, 1995). According to Cressey (1953) and Sutherland (1940; 1983), managers and employees will steer clear of unethical behavior if they expect it to be punished and if the severity of punishment outweighs the potential reward. When people are not punished for unethical behavior or even rewarded for such behavior, the message is clear: unethical behavior is acceptable or even desirable (Ball, Treviño, & Sims, 1994). Furthermore, Kaptein also collected examples in which the failure to reward ethical behavior led to unethical behavior. A lack of recognition for ethical behavior diminishes the willingness of employees to act ethically and increases the likelihood of resorting to unethical behavior. This finding corresponds with the research of Román and Munuera (2005) showing that the more ethical behavior is rewarded, the less people behave unethically. This results in the following, and final, hypothesis:

Hypothesis 8: The cultural dimension of sanctionability is negatively related to the frequency of unethical behavior in work groups.

Method

Sample and Procedure

Following the suggestions of Treviño and Weaver (2003) and Treviño, Weaver and Reynolds (2006) for conducting this type of research, data was collected from multiple work settings. To avoid the problem of common source bias (Podsakoff, MacKenzie, & Lee, 2003), multiple members per work group were involved to each assess different variables. 554 bachelor students of a western European university who were enrolled in a course 'management skills' were asked to find a manager who would like to participate in this study. Students would receive a credit point for their exam if they participated in this study and were able to use the results to give their selected manager concrete suggestions on improving the management of ethics in their work group. The students received detailed instructions on how to select and approach a manager and how to conduct this research. All managers received a set of three different surveys. They were requested to complete a brief questionnaire about the components of an ethics program that were in place in their work group (one of the control variables). They were also instructed to give the other questionnaires to two of their randomly selected direct reports. The first employee had to fill out a questionnaire about the ethical culture and ethical climate of the work group (the independent variable as well as another control variable respectively). The second employee had to fill out the question-

naire about the frequency of observed unethical behavior in the work group (the dependent variable).

To reduce the likelihood of biased response (Dilman, 1978), each survey was put in a separate envelop with a cover letter explaining the purpose of the research and encouraging participation. Complete anonymity was also ensured: managers would not receive the individual results of their direct reports. A stamped envelop with the mailing address of the university was supplied to each respondent. As compensation for their participation, managers received a report about the general findings and the advice of the student. Based on the advice received, managers sent in a signed form plus their business card directly to the university in which they confirmed that they had participated in the study, that all procedures were completed correctly and that they had received advice from the student. The forms were checked on their correctness.

The usable response was the three completed surveys of 301 work groups. 46.8% of the work groups were located at the lowest level of the organization. Work groups consisted on average of 7.64 members. The size of the organization was in 30.4% less than 26 employees, in 49.7% between 26 and 1,000 employees and in 19.9% more than 1,000 employees. 59% of the employees had been working in the work group for one to five years.

Independent Variables

To measure the eight dimensions of the ethical culture of work groups, the questionnaire as developed by Kaptein (2008) was used. The response to the 58 questions was measured by using a 6-point Likert type scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). Given the relatively large number of questions and potential loss of

explanatory power, an exploratory factor analysis was conducted for every dimension. Only questions that were within a .20 range of the question with the highest factor loading in their dimension were retained (cf., Brown & Treviño, 2006). Furthermore, question '5.3: In my immediate working environment, everyone has the best interests of the organization at heart' was removed because focusing on the interests of the organization can also be a major antecedent of unethical behavior (Goodpaster, 2006). The dimension of sanctionability divided into two factors: two items regarding rewarding ethical behavior and two items regarding punishing unethical behavior. Another exploratory factor analysis on the remaining 29 questions[2] led to an identical factor structure as on all 58 questions. Whereas for the original model, the quality was good (GFI = .955, AGFI = .9515, PGFI = .920, RMSR = .066, RMSEA = .050, and CFI = .82), the quality of the new model was even better (GFI = .973, AGFI = .968, PGFI = .884, RMSR = .055, RMSEA = .047, and CFI = .91). The internal consistency coefficients (Cronbach's alphas) of the culture dimensions, as depicted on the diagonal of Table 1, were all above the minimum of .70 as suggested by Nunnally (1978), with the exception of the dimension of feasibility (.61).

Dependent Variables

The construct of unethical behavior was operationalized using the measure developed by Kaptein (2009). The measure is an improvement on the only other existing measure of unethical behavior developed by Newstrom and Ruch (1975). The measure was developed in eight steps using a variety of samples. The result was a list of 37 items of unethical behavior each primarily related to one of five categories of stakeholders: financiers (10 items), customers (8 items), employees (5 items), suppliers (7 items), and society (7 items). Following Treviño, Butterfield and McCabe (1998), observed behav-

ior was measured instead of self-reported behavior in order to reduce problems of social desirability bias. Moreover, as unethical behavior in work groups is a low-base-rate phenomenon, Brown and Treviño (2006) suggest using observed behavior instead of self-reported behavior so that the frequency of reports will be higher and more usable data is created. A time frame of 12 months was selected, reading "In the past 12 months, I have personally seen or have first-hand knowledge of employees or managers in my work group…" with a five point frequency scale with 1 (*never*), 2 (*rarely*), 3 (*sometimes*), 4 (*often*), and 5 (*(almost) always*). A general score for unethical behavior was calculated by averaging the scores for each category of stakeholder.

Control Variables

To account for variance in unethical behavior that might be explained by factors other than ethical culture, the following demographic control variables were first entered into the regression models: hierarchical level of the work group (with two categories: 1 (*managerial level*) and 2 (*lowest level of the organization*)), tenure of both employees (with three categories: 1 (*less than 1 year*), 2 (*between 1 and 5 years*), and 3 (*longer than 5 years*), size of the organization (with seven categories: 1 (*1-5 employees*), 2 (*6-10*), 3 (*11-25*), 4 (*26-100*), 5 (*100-250*), 6 (*251-1000*), and 7 (*more than 1000*)) and size of the work group. The latter was included given that larger work groups may result in more unethical behavior being observed (Brown & Treviño, 2006). Two more ethics-specific control variables were also included in the regression models: the formal ethical context, i.e. the existence of an ethics program, and the ethical climate - next to ethical culture the most other cited part of the informal ethical context of an organization.

15

Ethical climate. The Ethical Climate Questionnaire as developed by Victor and Cullen (1987, 1988) was used in this study to assess respondents' perception of the ethical climate in their work group. This measure, which was further validated by Cullen, Victor and Bronson (1993), is frequently used (e.g., Peterson, 2002; Schminke, Ambrose, & Neubaum, 2005; Treviño, Butterfield, & McCabe, 1998; Weber, 1995). The 26-item Ethical Climate Questionnaire consists of five subscales: climate of caring (7 items), climate of law and code (4 items), climate of rules (4 items), instrumental climate (7 items), and independence climate (4 items). The response scale was a 6-point Likert scale for how accurately each of the items describes the ethical climate of the work group, ranging from 1 (*completely false*) to 6 (*completely true*).

Ethics programs. An ethics program can be defined as the formal (Berenbeim, 1992) or tangible (Treviño & Weaver, 2003) organizational control system to impede unethical behavior and promote ethical behavior (Brenner, 1992; Jackson, 1997). For the purposes of the current study, a distinction was made between nine different components of an ethics program (see also Weaver & Treviño, 2003). These components are: (1) a code of ethics, (2) an ethics officer or ethics office, also called compliance office(r), ombudsperson or ethics committee, (3) formal ethics training and other types of information and communications, (4) a dedicated telephone system, usually called ethics hotline or ethics helpline, (5) policies to hold management and employees accountable for unethical behavior, (6) policies on investigating allegations of unethical behavior, (7) policies that create incentives and rewards for ethical behavior, (8) internal monitoring systems and ethics audits, and (9) pre-employment screenings of the ethics and integrity of applicants. The participating managers were asked to indicate whether these components are present in their work group. The scope of an ethics program was determined by the number of different components that are present in a particular work group (cf., Treviño, 2005; Weaver, Treviño, & Cochran, 1999).

Results

Table 1 depicts the means, standard deviations, and intercorrelations for all study variables. For 15.8% of the work groups, no unethical behavior was reported. Consistent with our predictions, all dimensions of ethical culture were significantly negatively related to the frequency of observed unethical behavior in work groups. The bivariate correlations ranged from $r = -.20$ ($p < .01$) for sanctionability by rewards to $r = -.39$ ($p < .05$) for supportability. These correlations were cross-source and not inflated by common-source variance. There appeared to be no problems of multicollinearity, since the highest correlations were not very high (cf., Bollen & Lennox, 1991) and that the variance inflation factors (VIF) were all between 1.0 and 3.0, with tolerance values between .4 and .8. Three of the seven control variables were significantly correlated with unethical behavior: size of the work group, tenure of the employee who assessed the ethical culture and climate of the work group, as well as the ethical climate of the work group (i.e. the dimensions of caring, law and code, and rules). The ethical climate and ethical culture of work groups were statistically interrelated but the correlations within both constructs exceeded the correlations between both constructs, indicating the validity of making a distinction between both constructs (Bollen & Lennox, 1991).

Insert Table 1 about here

Table 2 depicts the results of the hierarchical regression analyses for successively entering the demographic control variables, the control variables ethics program and ethical climate, and the independent variable of this study, ethical culture. Of the demographic control variables, size of the work group and tenure of the employee who assessed the ethical culture and climate of the work group had in all four regression models a significant relationship. Ethics program had only a significant negative relationship ($\beta = -.12$, $p < .1$) when entered without ethical climate and ethical culture. Adding ethics program (Model 2) to the demographic control variables (Model 1) increased the explanatory power of the model (=R^2) from .021 to .027. Entering ethical climate as well (Model 3) increased the explanatory power of the model to .099. Three of the five dimensions of ethical climate were significant: negatively related were climate of caring ($\beta = -.14$, $p < .05$) and climate of rules ($\beta = -.18$, $p < .01$), and positively related was instrumental climate ($\beta = .14$, $p < .01$). When entering the dimensions of ethical culture, these three dimensions of ethical climate lost their significance. However, six dimensions of the ethical culture were significant, with the standardized partial regression coefficients (β) ranging from -.12 for consistency of supervisors, supportability and discussability to -.14 for feasibility. Clarity, transparency and sanctionability by rewarding were not significant. The complete model (Model 4 in Table 2) accounted for a variance in unethical behavior of 25.3% ($R^2 = .253$), implying an increase from Model 3 to Model 4 by 15.4%.

Insert Table 2 about here

Discussion

The results of this study show that the ethical culture of work groups has a significant negative relationship with the frequency of observed unethical behavior within work groups. The fully tested model explained 25.3% of observed unethical behavior, whereas ethical culture alone explained 15.4%. Six of the eight dimensions of ethical culture that were tested had a negative relationship with observed unethical behavior. Therefore, the majority of our hypotheses, that is hypotheses 2, 3, 4, 5 and 7 as well as hypothesis 8 partially, can be accepted. However, the dimensions of clarity, transparency and sanctionability by rewards were not significant.

A possible explanation for why clarity was not significant is that the types of unethical behavior that were questioned are unambiguously unethical. Communication to group members that these behaviors are unethical would not have increased clarity and as such would not affect the frequency of unethical behavior in work groups (cf., Lere & Gaumnitz, 2003). Another explanation is that the types of unethical behavior that were questioned require some interpretation in terms of what respondents classify as '*inappropriate* gifts', '*discrimination* against employees' and '*misappropriating* assets'. Clearly defined ethical standards may lead to respondents upholding stricter ethical standards, more readily classifying certain behaviors as unethical and consequently noticing unethical behavior more frequently (cf., Gino, Moore, & Bazerman, 2008). This definitional-effect could then neutralize the effect that more clarity leads in fact to less, objectively defined, unethical behavior.

A conceivable reason for transparency being unrelated to the frequency of observed unethical behavior is that greater transparency implies that unethical behavior will be observed easier and better (Cressey, 1953; Hollinger & Clark, 1983), leading to,

ceteris paribus, unethical behavior being observed more frequently. As proposed in the CEV Model, due to higher levels of transparency, the actual frequency of unethical behavior may decrease, whereas the ratio of observed and actual unethical behavior may increase, leading to unchanged frequencies of observed unethical behavior.

Although sanctionability by punishing unethical behavior was significantly related to the frequency of observed unethical behavior in work groups, sanctionability by rewarding ethical behavior was not significant. Punishing *unethical* behavior apparently falls into a different category than rewarding *ethical* behavior (Podsakoff, Bommer, Podsakoff, & MacKenzie, 2006; Treviño, Weaver, & Reynolds, 2006). Rewarding ethical behavior does not imply that unethical behavior would decrease. They are, given the results of this study, not two sides of the same coin.

This study yields interesting results by entering the control variables into the regression models. The tenure of the employee who reported on the ethical culture was positively related with observed unethical behavior (β=.15, p < .05), whereas the tenure of the employee who had to report about the frequencies of observed unethical behavior, was not significant. The work group size was also positively related ($\beta = .14$, p < .05) indicating that the larger the work group, the more unethical behavior was observed. This may be explained by the fact that the larger the work group, the more difficult it is to create an ethical culture (Brown & Treviño, 2006). It is also possible that more unethical behavior occurs as the number of employees, i.e. potential transgressors, increases (Jones, 1991). The size of the organization was not directly related to the frequency of observed unethical behavior, although Table 1 shows an indirect effect, for example via the ethical culture of the work group: size was negatively related to the cultural dimensions of consistency of managers and transparency and positively related to consistency of supervisors and sanctionability by punishment.

The control variable the scope of an ethics program only had an effect when entered together with the demographic variables (Model 2) and not when climate and culture were also included. Adding ethics program as a variable increased the explanatory value of the model by less than 1%. These results suggest that the scope of an ethics program as such says very little about the frequency of observed unethical behavior in work groups. This can be explained by the fact that the mere existence of an ethics program does not imply that it is effective (Mitchell, Daniels, Hopper, George-Falvy, & Ferris, 1996). Effectiveness is determined by the manner in which it is developed, implemented and embedded, as well as by the content and quality of each component (cf., Kaptein & Schwartz, 2008). Ethics programs can easily be decoupled from daily routines and behaviors (Barnes, 2007; Den Nieuwenboer, 2009; Weaver, Treviño & Cochran, 1999b). The moment of choosing to adopt and extend an ethics program may also be during a period in which the frequency of unethical behavior is relatively high, thereby reversing the causal relationship from behavior to program and thereby potentially neutralizing the empirical findings: companies with ethics programs decrease the level of unethical behavior to the frequency of companies without a program, which may ultimately lead to no statistically significant differences between these two groups. The results of this study showed that ethical culture and ethical climate (the informal ethical organizational context) have a much stronger effect on the frequency of observed unethical behavior in work groups than the existence of ethics programs (the formal ethical organizational context). This is a finding that was already partly suggested by the results of a study of Treviño, Butterfield and McCabe (1998).

Regarding the control variable of ethical climate, three of its dimensions had a significant relationship with unethical behavior when entered without ethical culture (Model 3). An instrumental climate had a positive relationship with observed unethical behavior whereas a climate of rules and a climate of caring had a negative relationship

with observed unethical behavior. The significance, however, evaporated when ethical culture was entered. This coincides to some extent with the findings of Treviño, Butterfield, and McCabe (1998). They found that ethical culture had a stronger relationship with unethical behavior than ethical climate. By using a more specific measure for ethical culture, the influence of ethical climate, as measured by the questionnaire developed by Victor and Cullen (1988), further decreases. Although many studies include ethical climate as only measure for the informal organizational context (e.g., Peterson, 2002; Vardi, 2001; Wimbush, Shepard, & Markham, 1997), the current study indicates that to really assess the influence of ethical climate as well as that of the informal context in its entirety, ethical culture should be included.

Limitations and Future Research

This study is unique because it is the first to demonstrate a relationship between different dimensions of ethical culture and observed unethical behavior in work groups using also multi-source survey data. The dependent and independent variables were collected from different members of work groups, which support confidence in the validity of the findings. Nevertheless, this study is not without limitations. Three limitations will be discussed here.

First, although a statistically significant relationship could be discerned between six dimensions of ethical culture and observed unethical behavior, the regressions coefficients were not high nor were the relationships very significant. The regression coefficients varied between 0.12 and 0.14 and for only one dimension was the significance level p below .05. Similar research so far found better results (c.f., Treviño, Butterfield, & McCabe, 1998), although they used one source for assessing the culture and the frequency of behavior, which usually inflates the results (Campbell & Fiske, 1959; Podsa-

koff, MacKenzie, Lee, & Podsakoff, 2003). To assess whether stronger relationships exist, future research could, for example, collect a larger sample than the 301 work-groups in this study, collect more respondents per work group than the three respondents in this study (as, for example, Brown and Treviño (2006) did in their research of deviant behavior in work groups), collect data from a more homogenous sample (such as within one industry-sector) than the random sample in this study, and improve the quality of the measures, as will be discussed below.

A second limitation concerns the quality of the measures that were used. Whilst only tested measures were used for ethical climate, ethical culture and observed unethical behavior, this study reveals some of their limitations. The measure of ethics programs had also its limitations. These limitations present directions for improvement in future research. We will discuss each of these four measures.

Regarding the measure of unethical behavior, more detailed information could be collected by not only asking about the frequency of observed unethical behavior in the work group, but also about the number of people involved, the extent to which an ethical norm has been violated as well as the damage of the violation to the organization and its stakeholders. Although we had good reason to not ask respondents to report about their own behavior (Dalton & Metzger, 1992; Wimbush & Dalton, 1997), a method to assess individual behavior could improve the accuracy of the frequency of unethical behavior in work groups. This type of data would also be less vulnerable to the dual effect of transparency as discussed above and as such could help us to establish whether transparency is indeed related to unethical behavior in work groups.

The measure of ethical culture could be improved by splitting every question that uses the general term 'ethics' into at least five questions for each specific stake-holder category. This would be consistent with the typology of the measure for unethical behavior as developed by Kaptein (2009), where the items of unethical behavior are

clustered around one of the five stakeholder categories: financiers, customers, employees, suppliers, and society. Such a specification would rely less on how respondents define ethics (to remedy this in the current study, respondents who had to assess the ethical culture received a detailed definition of ethics). The disadvantage of this breakdown is that the size of the survey would expand fivefold. However, using the trimmed-down questionnaire of the present study would decrease the survey burden load by about fifty percent. A further refinement would be to split every question into every item of unethical behavior. This would make the survey much longer. A compromise could be to split the questionnaire in all items of unethical behavior for only one or a few dimensions of ethical culture. The dimension of clarity would be the most likely candidate for this because for every specific item respondents may quite easily determine whether the organization makes it clear to them what the ethical norms are, whereas for the other dimensions it is less likely that respondents have concrete experiences of each of the items and also are less able to draw a distinction between each item for every dimension. A finer-tuned instrument for the ethical culture of work groups could be used to determine the relationship between every dimension of ethical culture and every category or every item of unethical behavior.

The measure for ethics programs could be improved by not only asking about the prevalence of different components, but also about its content, the motives for having it, its development and implementation. Components of an ethics program as such are ineffective; effectiveness is determined by their quality and embeddedness (Kaptein & Schwartz, 2008; Treviño & Weaver, 2003). A more specific measure may lead to more differences in the assessment of existing ethics programs and to a higher explanatory value for unethical behavior in work groups than the 1% found in this study.

The measure for ethical climate that was used in this study, the Ethical Leadership Questionnaire of Victor and Cullen (1988), could be expanded by asking respon-

dents regarding the strength of the climate like Zohar and Luria (2004) did regarding the safety climate. Ethical climate has an impact on the behavior of managers and employees not only through its content but also through the extent to which managers and employees experience the climate as important, guiding and obliging. The results of this study show that ethical climate does not have as strong a relationship with unethical behavior as expected. The development of a measure for ethical climate that measures the stakeholder orientation of the organization, as defined by Jones, Felps and Bigley (2007), may result in more significant findings because all ethical climate dimensions as defined by Victor and Cullen are very general, i.e. for the climate types it is not about whether there is, for example, an orientation of caring, law and codes, and rules, but much more about whether these climates differ regarding each stakeholder group.

A third limitation concerns this study's use of ethics program and ethical climate as control variables and ethical culture as independent variable and observed unethical behavior as dependent variable. In this study the focus was on the relationship between ethical culture and observed unethical behavior. From that perspective, ethical climate and ethics program were used as control variable. However, the relationship between these four variables may be more complex. Ethics program may influence the ethical culture of an organization and as such indirectly affect unethical behavior. The ethical culture may also influence the scope of an ethics program (Weaver, Treviño, & Cochran, 1999). Ethical climate and ethical culture may also have a mutual relationship, indicated by the correlations in Table 1 as well as by research conducted by Treviño, McCabe and Butterfield (1998), of which the outcome of this interaction determines the relationship with unethical behavior. Furthermore, the current study used ethical culture as independent variable and observed unethical behavior as dependent variable. Although there is widespread support for this direction of the relationship, unethical behavior may, however, in its turn also influence the ethical culture. Without unethical

behavior, it is more difficult for managers and employees to indicate the level of, for example, sanctionability of the culture. Sanctionability becomes especially visible in the way the organization deals with unethical behavior. And, for example, absence of supportability becomes visible especially in unethical behavior that occurs. Unethical behavior can even be essential for shaping the ethical culture and leadership of an organization (Badaracco, 1997). We must, therefore, be cautious to infer causal, linear relationships. More in-depth research is needed into these dynamical, multi-variable relationships.

Managerial Implications

Given the costs of unethical behavior for organizations and its stakeholders, it is important to prevent or, when it occurs, to adequately detect and respond to it. This paper demonstrates that the ethical culture of work groups is an important factor in explaining unethical behavior in work groups. To reduce unethical behavior, it is necessary that management first understands the existing ethical culture (Treviño & Brown, 2004). Management could assess the quality of the existing ethical culture by using the virtues model and questionnaire used in this study. Based on the results, management can decide which dimensions of the ethical culture should be improved. This study showed that, in general, six dimensions of ethical culture are related to the frequency of observed unethical behavior in work groups. Managing the ethical culture of work groups is, therefore, a multi-dimensional challenge.

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TABLE 1

Means, Standard Deviations, Correlations (Pearson) and Scale Reliabilities

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1. Observed unethical behavior	1.21	.21																					
2. Size of organization	4.35	1.91	.01																				
3. Hierarchical position of work group	1.53	0.50	.01	.20**																			
4. Size of work group	7.64	2.79	.12*	.39**	-.24**																		
5. Tenure of Employee 1	2.25	0.69	.13*	.04	-.09	.12*																	
6. Tenure of Employee 2	2.28	0.69	.06	.09	-.17**	.17**	.55**																
7. Scope of ethics program	0.39	0.29	-.05	.53**	.09	.34**	.07	.10															
8. Caring climate	4.00	0.57	-.19**	-.17**	.05	-.04	.02	-.01	-.10														
9. Law and code climate	4.13	0.82	-.11*	.10	.08	.12*	.09	-.02	.09	.33**													
10. Rules climate	4.34	0.62	-.21**	.03	.05	.03	.07	.04	.11*	.43**	.54**												
11. Instrumental climate	3.43	0.55	.07	.05	.16**	-.04	-.09	-.02	-.05	.17**	.16**	.14**											
12. Independence climate	3.54	0.58	-.07	-.12*	.07	-.11*	-.07	-.08	-.15**	.45**	.09	.09	.20**										
13. Clarity	4.42	0.91	-.28**	.06	.05	.02	.06	.02	.14*	.32**	.26**	.33**	-.07	.17**	(.73)								
14. Consistency of management	4.31	1.19	-.36**	-.11*	-.021	.015	-.041	-.055	.08	.45**	.23**	.35**	-.096	.18**	.49**	(.84)							
15. Consistency of supervisors	4.67	1.00	-.35**	.11*	.07	.01	-.06	-.01	.15**	.20**	.25**	.25**	-.10	.10	.44**	.45**	(.80)						
16. Feasibility	4.48	1.00	-.35**	-.03	-.06	.01	.02	.01	.08	.17**	.07	.16**	-.31**	.09	.34**	.40*	.35**	(.61)					
17. Supportability	4.34	1.00	-.39**	-.10	.01	-.17**	.01	-.03	-.02	.34**	.10	.23**	-.25**	.20**	.43**	.44**	.44**	.56**	(.75)				
18. Transparency	3.83	1.11	-.28**	-.17**	-.016	-.05	.05	-.01	-.02	.37**	.30**	.37**	.02	.10	.35**	.42**	.27**	.25**	.38**	(.77)			
19. Discussability	4.89	0.82	-.35**	-.06	.037	-.11*	-.02	-.05	.07	.29**	.15**	.22**	-.19**	.17**	.43**	.37**	.40**	.43**	.52**	.31**	(.79)		
20. Sanctionability by punishments	4.17	0.92	-.28**	.14**	.028	.13*	.03	-.00	.29**	.26**	.36**	.42**	-.06	.08	.41**	.41**	.30**	.24**	.25**	.34**	.28**	(.72)	
21. Sanctionability by rewards	4.80	0.87	-.20**	.02	-.026	.05	.00	.00	.15**	.32**	.32**	.40**	-.10	.07	.41**	.43**	.34**	.34**	.31**	.24**	.39**	.48**	(.75)

Note. Reliability coefficients for the dimensions of ethical culture (13-21) are presented on the diagonal.

N=301 work groups.

* p < .05   ** p < .01

TABLE 2

Results of Hierarchical Regression on Observed Unethical Behavior

Variable	Observed Unethical Behavior			
	Model 1	Model 2	Model 3	Model 4
Constant	1.05*	1.04**	1.36*	1.75*
Control variable				
Demographics				
Size of organization	-.07	-.02	-.08	-.08
Hierarchical position of work group	.07	.08	.09	.08
Size of work group	.15*	.17**	.19**	.14*
Tenure of employee 1	.14*	.14*	.18*	.15*
Tenure of employee 2	-.01	-.01	-.02	-.03
Scope of ethics program		-.12*	-.08	.01
Ethical climate				
Caring			-.14*	.01
Law and code			-.03	.02
Rules			-.18**	-.06
Instrumental			.14**	-.04
Independence			-.02	.04
Independent variable				
Ethical culture				
Clarity				.01
Consistency of management				-.13*
Consistency of supervisors				-.12†
Feasibility				-.14*
Supportability				-.12†
Transparency				-.06
Discussability				-.12*
Sanctionability by punishments				-.13*
Sanctionability by rewards				.10
R^2	.037	.046	.131	.302
Adjusted R^2	.021	.027	.099	.253
Change in Adjusted R^2		.006	.072	.154
df (regression, residual)	(5, 304)	(6, 303)	(11, 298)	(20, 289)
F	2.35*	2.45*	4.10**	6.24**

Note.   Standardized regressions coefficients (betas) are shown.
† < .1   * p < .05   ** p < .01

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[1] Many thanks to Jan van Dalen for discussing the setup of the current study, Rob van Tulder for helping to create the empirical dataset, and Niki den Nieuwenboer for providing suggestions on a previous version.

[2] The remaining questions are (see Table 1 in Kaptein (2008) for full a list and description): 1.2, 1.3, 1.5, 1.7, 1.8, 2.1, 2.2, 3.2, 3.3, 4.1, 4.2, 4.3, 5.1, 5.2., 5.4, 5.5, 6.1, 6.2, 6.3., 6.6, 6.7, 7.3, 7.5, 7.6, 7.7, 8.2, 8.7, 8.8, and 8.9.

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