Journal of Business Ethics (2010) 97:505–516
DOI 10.1007/s10551-010-0521-2

The Effects of Ethical Codes on Ethical Perceptions of Actions Toward Stakeholders

Joseph A. McKinney
Tisha L. Emerson
Mitchell J. Neubert

ABSTRACT. As a result of numerous, highly publicized, ethical breaches, firms and their agents are under ongoing scrutiny. In an attempt to improve both their image and their ethical performance, some firms have adopted ethical codes of conduct. Past research investigating the effects of ethical codes of conduct on behavior and ethical attitudes has yielded mixed results. In this study, we again take up the question of the effect of ethical codes on ethical attitudes and find strong evidence to suggest that business professionals employed at firms with ethical codes of conduct are significantly less accepting of ethically questionable behavior toward most stakeholders. One notable exception relates to ethical actions toward customers.

KEY WORDS: ethics codes, ethical attitudes

Introduction

A consistent and seemingly endless string of ethical lapses in business, across industries and in organizations large and small, has contributed to a crisis of trust in the marketplace (Tenbrunsel et al., 2003; Trevino et al., 2006). Owing to the interdependencies of stakeholders, ethical breaches by business agents can have disastrous effects on the business, its stockholders, employees, customers, and potentially on both the domestic and global economies. Stakeholders, as generally defined, are simply constituents within and outside of the organization, which have a stake in an organization's functioning and outcomes (Freeman, 1984). The causes of ethical breaches also often originate within a complex web of stakeholder interdependences. For example, those tracing the roots of the global financial crisis that began in 2008 have pointed to ethical lapses in several areas as contributing factors: government relaxing stringent standards, lending institutions that abrogated their fiduciary responsibilities in failing to scrutinize the creditworthiness of customers, customers who were untruthful on loan applications, mortgage brokers who knowingly made loans to unqualified customers to collect fees, and credit rating agencies that gave unrealistic bond ratings because of conflicts of interest. From this perspective, one interpretation of the financial crisis is a lack of vigilance in ethically managing stakeholder relationships.

The notion that an organization should concern itself with stakeholders other than shareholders has gained acceptance in academia and among practitioners (Agle et al., 2008). Beyond a normative view, stakeholder theory offers an instrumental value in providing a framework for guiding the actions of organizational members to ensure that the relationships that contribute to their financial viability are managed responsibly (Donaldson and Preston, 1995; Freeman et al., 2007). A stakeholder view need not consider all stakeholders as equal in decisions, but may in fact make distinctions based on contributions to the organization's financial well-being (Kaler, 2009).

Taken to the extreme, a stakeholder approach has been used to argue for the responsibility organizations have in redistributing wealth and power among stakeholders (Stieb, 2009). In contrast, Milton Friedman contended that "there is one and only one social responsibility of business – to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the

All the authors contributed equally to this work.
This work builds on and greatly benefits from the work of Justin Longenecker and Carlos Moore, both deceased.

game…'' (Friedman, 1962, p. 133). In a more recent contribution, Robert Reich has stated that ''Corporate executives are responsible for obeying the law, and should be held accountable for any illegality. But they cannot and should not be expected to do anything more…'' (Reich, 2007, p. 211). If organizational leaders adopt this stance, then organizational members are likely to do no more than simply follow the established ''rules of the game'' set forth by the legal system. In contrast, a more expansive approach to creating an ethical business climate is to establish internal ''rules of the game'' or codes of conduct that include expected behaviors directed toward a range of stakeholders. Admittedly, there is an extensive legal and regulatory framework that governs the proper functioning of many stakeholder relationships in the business system. Even so, the recent global financial crisis can, to some degree, be attributed to deficiencies in this regulatory framework. However, the legal and regulatory system cannot be sufficiently detailed to anticipate every conceivable situation within which unethical behavior might take place nor is it likely to evolve at a rate fast enough to keep up with that of the constantly changing business environment. Furthermore, expecting or even demanding that all behavior be regulated would be suffocating for business activity and costly for individual businesses to monitor and comply with regulations that are not directly relevant to their specific business conditions. Therefore, a case can be made for proactively establishing ethical expectations for relating to a firm's stakeholders that are conducive to ethical behavior above and beyond what is required by law.

In an attempt to encourage responsible behavior and avoid the destructive consequences of unethical behavior some businesses have codified their standards of ethical conduct. Furthermore, many business leaders adopt a code of ethics because it communicates to stakeholders that the business is committed to norms of appropriate behavior. Publicizing the existence of a code of ethics is a way of signaling that the firm values and adheres to high ethical standards. Long and Driscoll (2007) argue that codes can be a strategic means to legitimize the organization's ethical reputation. Unfortunately, this strategic use of codes may not be associated with a sincere intention to promote ethical behavior internally (Long and Driscoll, 2007).

Despite the widespread opinion that adopting codes of ethics by businesses is beneficial, the empirical literature on the effect of ethical codes on behavior has yielded mixed results. In this study, we re-examine the question of the effectiveness of ethical codes of conduct in influencing the ethical attitudes of employees. With a sample of over 2800 business professionals, we find that employees at firms with ethical codes of conduct tend to perceive the ethically questionable behavior depicted in a series of vignettes to be less acceptable than employees at firms without ethical codes. More specifically, for 12 of the 16 (i.e., 75%) ethically charged situations, respondents from firms with ethical codes of conduct were significantly less accepting of the ethically questionable behavior than were their counterparts at firms without ethical codes. Thus, our findings indicate that the adoption of formal codes of ethics can be a positive step towards improving the ethical climate in business.

The remainder of the article is organized as follows. ''Literature'' section discusses the relevant literature and the contribution of this study to this literature. ''Data and methodology'' section presents the data and methodology employed in our data analysis. ''Results'' section summarizes our empirical findings. ''Discussion and summary'' section summarizes, offers some possible extensions, and concludes.

Literature

The negative results of unethical behavior on the part of firms and their agents are numerous. Ethical lapses by officers or employees of a firm can cause severe damage to the reputation of the firm, and in some cases can cause the firm's demise (Barsky, 2008). If laws are violated, then such lapses can lead to criminal prosecution and prison terms of those in responsible positions. As illustrated in the cases of Enron and Arthur Andersen, such improper behavior can impose large costs not only on the firm and its employees, but on the firm's shareholders, creditors, customers, and society.

Avoiding the pitfalls of unethical behavior and establishing an ethical climate within the firm requires an ethical infrastructure of both formal and informal influences that control unethical behavior and promote ethical behavior (Tenbrunsel et al., 2003; Weaver et al., 1999). A code of ethics is increasingly a critical component of a firm's ethical infrastructure that managers can employ both to educate employees concerning ethical issues and to inform employees of management's expectations concerning employee conduct (Schwartz, 2004). Such efforts by firms are consistent with the guidelines for compliance and ethics programs issued by the United States Sentencing Commission (USSC). According to the USSC, effective compliance and ethics programs require that, in addition to exercising the due diligence necessary to prevent and detect criminal conduct, organizations should "promote an organizational culture that encourages ethical conduct and a commitment to compliance with the law." (USSC, 2005)

Ethics codes are typically based on a deterrence approach that explicitly states behaviors or conduct that are prohibited or are to be avoided (Gibbs, 1975), although codes can also be used to promote virtuous, ethical, or socially responsible behavior (Caza et al., 2004). The explicit moral standards of a code "provide guidance to employees to understand what behaviors are morally acceptable or improper" (Schwartz, 2004, p. 324). The use of codes to make specific behaviors salient as ethical or unethical is consistent with research on moral development that suggests that the moral development of most adults is at a conventional level, which indicates that their judgments of what is right or wrong are substantially influenced by rules and laws (Kohlberg and Kramer, 1969; Trevino, 1986; Trevino et al., 2006). According to Kohlberg, at the highest stage of moral development individuals would pursue ethical actions as ends in themselves, because they are the right thing to do. But Kohlberg found that few individuals reach this stage of moral development. Therefore, in most cases, an organizational code of ethics is an important external source of influence on the judgments and behaviors of organizational members (Kohlberg, 1981).

An extensive literature exists concerning corporate codes of ethics. Some of the studies address differences in codes across countries (Farrell and Cobbin, 1996; Lefebvre and Singh, 1996; Wood, 2000). Others address codes of ethics as they relate to specific issues, such as bribery (Gordon and Miyake, 2001; McKinney and Moore, 2008), child labor (Kolk and van Tulder, 2002), or liability prevention (Blodgett and Carlson, 1997). Still others examine the characteristics of codes in specific industries, such as publishing (Borkowski and Welsh, 2000), education (Sirgy et al., 2006) and banking (Cowton and Thompson, 2000). The ethics codes of various professional groups, such as accountants (Neill et al., 2005), sales professionals (Valentine and Barnett, 2002), human resource managers (Wiley, 2000), and software engineers (Gotterbarn, 1999) also have been analyzed and evaluated.

Another stream of research on business codes of ethics focuses on the effectiveness of ethics codes in affecting attitudes of business professionals and the ethical climate of business firms. Empirical assessments of code effectiveness have yielded varying results. In a summary of such studies, Schwartz (2001) finds that eight studies (Ferrel and Skinner, 1988; Hegarty and Sims, 1979; Kitson, 1996; Laczniak and Inderrieden, 1987; McCabe et al., 1996; Pierce and Henry, 1996; Rich et al., 1990; Singhapakdi and Vitell, 1990) report a significant, positive relationship between having a code of ethics and either more positive ethical attitudes or ethical behavior. Five of the studies were based on questionnaire surveys, while the other three were based on interviews or laboratory experiments. Schwartz finds that two studies (Murphy et al., 1992; Weeks and Nantel, 1992), both of them based on questionnaire surveys, reported a weak but positive relationship between the existence of an ethical code and ethical behavior. Schwartz finds nine studies (Akaah and Riordan, 1989; Allen and Davis, 1993; Badaracco and Webb, 1995; Brief et al., 1996; Callan, 1992; Chonko and Hunt, 1985; Clark, 1998; Ford et al., 1982; Hunt et al., 1984) that reported an insignificant relationship between having an ethical code, and either positive ethical attitudes or positive ethical behavior.

More recent studies on code effectiveness have likewise yielded mixed results, although the recent studies tend to find a more positive effect of ethical codes than did earlier studies. The positive findings are, however, sometimes nuanced and qualified. Adams et al. (2001), after having interviewed 766 company employees, the majority of which (465) were employed in companies having a code of ethics, conclude that the attitudes of employees were positively influenced by the process of developing a code. Boo and Koh (2001), in surveying 400 employed MBA students in Singapore, find that having a corporate code of ethics favorably affects ethical behavior in the organization. Peterson (2002), based on 203 responses to a questionnaire survey of alumni of a United States business school, concludes that the implementation of a clear code of ethics would likely reduce unethical behavior. Valentine and Barnett (2002) on the basis of 390 questionnaire responses of sales professionals find that codes of ethics have a ''modest but significant'' positive effect on ethical values. Pflugrath et al. (2007), after surveying 112 professional accountants and auditing students, find that the presence of an organizational code of ethics improves the ethical quality of judgments made by professional accountants, but does not have such an effect on students. On the other hand, Farrell et al. (2002), based on a questionnaire survey of 545 employees and 25 managers of eight large Australian firms, find no discernible effect of an ethical code. Likewise, McKendall et al. (2002), after studying 108 major United States corporations conclude that having a code of ethics has no effect on the likelihood of a firm violating regulations of the Occupational Safety and Health Administration.

One summary of the research investigating the impact of codes indicates that 51% of the studies support the effectiveness of codes in positively shaping behavior, 33% of the studies yield insignificant results, in 14% of the studies the results are mixed, and one study finds that a code has a negative impact on behavior (Kaptein and Schwartz, 2008). After reviewing the evidence in 2007 concerning the effectiveness of corporate codes of ethics, Helin and Sandstrom (2007) wrote the following:

> In sum, the main question here is: are codes effective? In responding to this, the studies seek to measure the effectiveness of codes in influencing behavior, and there is a clear bias towards the use of surveys and snapshot research. Together, however, these studies contribute to our knowledge about CCEs [corporate codes of ethics], even though they represent a mixed image of the effectiveness of CCEs. That is, there still seems to be some uncertainty about whether CCEs lead to 'more ethical' behavior.

Some of the uncertainty stems from the characteristics of the various studies. In summarizing the research, Kaptein and Schwartz (2008) indicate that variance in results can be explained, in part, by differences in the content of the codes and by the size and composition of the sample. For example, student samples tend to yield less positive results (Kaptein and Schwartz, 2008).

Furthermore, the studies that attempt to determine the effects of a code of ethics on attitudes or behavior have generally been limited to a snapshot of specific industries or professions, which have covered a much narrower range of issues than the current study. Valentine and Barnett (2002), for example, sent questionnaires to 3000 sales professionals, attempting to assess individuals' perceptions concerning the ethical orientation of their organizations. Nwachukwu and Vitell Jr. (1997) sent questionnaires to 3000 marketing and advertising practitioners, comparing the responses to hypothetical advertisements of persons from firms having codes of ethics and those that did not, in an attempt to determine the influence of corporate culture on ethics. Harrington (1996) sent questionnaires to 219 information system professionals to determine whether abuses of information systems were more common in firms having codes of ethics as opposed to those that do not. This study is directed toward addressing the uncertainty in the research related to the effectiveness of codes by drawing on the responses of a large, diverse sample of working adults to a range of ethical situations which encompass interactions with a variety of stakeholders including employees, government, competitors, shareholders, customers, and the environment.

Data and methodology

In order to study the ethical attitudes of business professionals, surveys were mailed to a random sample of 10,000 business leaders (as identified by a major business periodical publisher) in 1993 and 2001.[1] Survey respondents were presented with 16 ethically charged scenarios and were asked to ''rate'' the degree to which they found the behavior depicted in each vignette acceptable on a Likert-type scale (ranging from never acceptable, ''1,'' to always acceptable, ''7''). Respondents were also asked a variety of questions to elicit demographic and firm related data.

Response rates were roughly 18% and 12%, respectively, with 1877 responses in 1993 and 1234 responses in 2001. The total sample includes responses from 3111 professionals. Owing to omitted responses to various questions, the total usable sample is somewhat smaller and varies across vignettes from 2729 to 2804. That the response rates would be relatively low is to be expected for a survey dealing with sensitive ethical issues. In surveys with very large sample size, response rates such as those reported above are generally considered adequate. A common method of testing for possible non-response bias is to compare the results of surveys returned early with those returned later, on the assumption that early respondents might be more interested in or aware of the issues, and that later respondents would be more similar to non-respondents. For the 1993 survey, the half of the responses returned first were compared with the half returned later, and for the 16 vignettes only two exhibited significant differences. For the 2001 survey, the responses of the first one third, the second one third and the last one third were compared, and no significant differences were detected. These results provide evidence that the responses received were representative of the entire sample, although we realize that being able to generalize our results to the entire population of business professionals in the United States is somewhat limited.

Descriptive statistics for each of the 16 vignettes are presented in Table I. The mean level of acceptability of the ethically charged situations described in the 16 vignettes ranged from a low of 1.349, indicating a relatively low level of acceptance, for vignette A (padding expense account) to a high of 3.642, indicating a relatively high level of acceptability, for vignette L (accounting manipulations).

Descriptive statistics for the respondent characteristics used in the model estimation are presented in Table II. Survey respondents were largely male (84.6%). They ranged in age from 20s to 70s with the majority in the 31–60 age range (83.1%). Respondents were employed at firms in varying sizes. Over a quarter of respondents (28.2%) worked at firms with under 20 employees, and nearly half of the sample (45.1%) worked at firms with under 100 employees. Other respondents, however, came from relatively large firms with 14.4% employed at firms with over 10,000 employees, and 32.8% at firms with 1000 or more employees. Just over half (54.4%) of the respondents reported having codes of ethics at their firms. Finally, slightly more than one third of responses (38.3%) were collected in 2001 with the remainder having been collected in 1993.

The survey instrument employed in this study asked respondents to "rate" the acceptability of each

TABLE I

Summary of responses to vignettes

Vignette	Brief description	Mean	Standard deviation	Sample size
A	Pad expense account	1.349	0.901	2796
B	Exceed legal limit of pollution	1.424	0.910	2801
C	Recommend bad stock	1.582	1.061	2804
D	Underreport income for tax	1.762	1.379	2801
E	Bribe to foreign official	2.951	1.729	2786
F	Hire employee to get secret	3.482	1.976	2781
G	Collusion to reduce competition	2.473	1.823	2782
H	Bribe to purchasing agents	3.074	1.752	2780
I	Insider stock purchase	1.646	1.378	2780
J	Promotion of friend over other	3.400	1.693	2778
K	Safety design flaw cover-up	2.050	1.368	2764
L	Acct manipulation to conceal embarrassing financial facts	3.642	1.883	2762
M	Hire male employee rather than equally qualified female	2.736	1.731	2775
N	Deceptive advertising	2.608	1.778	2779
O	Cigarette campaign challenging health concerns	3.099	2.076	2729
P	Free software, violation of ©	2.173	1.548	2767

TABLE II

Characteristics of respondents in study

Characteristics of respondents	Percentage of sample	Sample size
Firm has ethics code	54.4	2822
Number of employees in firm		2822
Under 20	28.2	
20–49	9.8	
50–99	7.1	
100–249	8.8	
250–499	7.0	
500–749	3.7	
750–999	2.5	
1000–10,000	18.4	
Over 10,000	14.4	
Age of respondent		2822
Under 21	0.2	
21–30	7.8	
31–40	23.9	
41–50	35.0	
51–60	24.2	
61–70	7.3	
Over 70	1.6	
Male	84.6	2822
Respondents from 2001 Survey Collection	38.3	2822

of the 16 vignettes depicting ethically questionable behavior. Respondents were asked to use a seven-point Likert-type scale (ranging from never acceptable, "1," to always acceptable, "7"). As a result, our dependent variable takes on ordered integer values. By using an ordered probit model for our analysis, we account for the ordinal and discrete (as opposed to cardinal and continuous) nature of our data. This type of estimation procedure provides consistent and efficient estimates of the relationship between the vignette "acceptability" responses and the individual characteristics of the respondent.

The independent variables used to explain the variation in the ordered response dependent variable are the demographic variables elicited at the end of the questionnaire. More specifically, according to Maddala (1983, p. 47), the underlying response model is

$$Y = \mathbf{B}'x_i + v_i \quad (i = 1, 2, \ldots, n)$$

where Y is the underlying response variable, $\mathbf{B}$ is a vector of parameter estimates that correspond to the vector of explanatory variables, x_i, and v_i is the residual. The independent variables include the presence of an ethics code at respondent's firm and controls for the following: size of the respondent's firm, respondent's age and gender, and the wave of data collection.

Results

In this study, we find that business professionals working at firms with a written code of ethics tended to find ethically questionable situations less acceptable than those at firms without such a written code. More specifically, in 12 of the 16 vignettes (A, B, D, E, F, H, I, J, L, M, N, and P), respondents were significantly less accepting of the ethically questionable behavior depicted in the vignettes if they had a written code of ethics at their firm. The existence of a code had a particularly positive effect on decreasing the acceptability of unethical behavior that involved implications for not only the actor but also the government (legal and environmental concerns), other employees (fairness concerns), competitors (inappropriate competitive advantage), and shareholders (profit considerations). A consistent finding emerged when examining the content of the four non-significant vignettes; they all involved the customers as a stakeholder (Vignettes C, G, K, and O). In the vignettes where the presence of an ethical code was not a significant predictor of ethical attitudes, customers were potentially harmed by questionable investment recommendations (Vignette C), inflated price fixing (Vignette G), a safety hazard (Vignette K), and health hazards (Vignette O). In contrast, ethical attitudes are significantly related to the presence of an ethical code for two vignettes relating to customers. The presence of a code was associated with the lesser acceptance of giving gifts to potential customers (Vignette H) and of marketing an existing product as new by simply changing its color (Vignette J). Since the relationship between having a code and lower acceptability of unethical behavior was significant for 12 of the 16 vignettes, the overall conclusion from these results indicates that codes are generally associated with more ethical responses to common dilemmas that arise in businesses in dealing with a variety of stakeholders.

Table III indicates the associations of the controls with the perceptions of acceptability of each scenario. We control for differences over time with the variable "2001 Survey Collection." While there were differences in responses across time, significant differences are estimated for less than half of the scenarios and differences were not in a consistent direction (i.e., for some scenarios respondents were less accepting in 2001 than in 1993 and vice versa). All other results, including the finding of primary interest – the effect of ethical codes of conduct on ethical perceptions – remain after controlling for timing of survey administration.

Discussion and summary

This study makes a contribution beyond previous studies on the effects of ethical codes in a number of ways. The respondents to this survey were a diverse set of business professionals who in their work are faced with ethical dilemmas, as opposed to students in some previous studies whose knowledge of the actual business environment is limited. Respondents came from all sectors of business, from firms of all sizes, and from all levels of management. While this study was limited to firms in the United States, many of them are engaged in international business operations and are, therefore, familiar with the international business environment. The large number of responses, more than 2800, also allowed statistical analysis of the responses with a high degree of confidence. The ordered probit analysis used here is relatively sophisticated in comparison to many of the previous studies, and allowed us to control for such factors as respondents' age and gender, and firm size. The inclusion of controls also allowed for investigating possible interactive effects between having a code and demographic variables. Although age and gender were found to have significant effects across a majority of the vignettes, post hoc analyses did not offer support for potential interactive effects.

A second contribution of this study that is unique from other studies is that the impact of ethics codes is associated with respondents' ethical attitudes toward scenarios encompassing a range of stakeholder relationships. This provides insight into the extent to which organizational ethics codes impact the relationships that affect the viability of an organization. The ability of our study to assess attitudes toward a variety of stakeholders demonstrated that across a diverse sample of working adults, ethics codes were associated with reduced acceptability of unethical behaviors related to owners, employees, suppliers, the government, and the environment, but were not consistently associated with reduced acceptability of behaviors directed toward customers. Customers are the lifeblood of an organization and their loyalty and referrals are based on trusting relationships (Piercy and Lane, 2007). Our results suggest that most ethics codes as presently constructed do little to discourage unethical behavior and promote ethical behavior with respect to customers. Although this research did not explore the specific content of ethics codes, future research should explore the extent to which codes prescribe preferred behavior toward customers, and how that shapes behavior. In similar research, the existence of stakeholder language in mission statements was not associated with lower levels of product concerns, but inclusion of diversity-oriented language did transfer to lower levels of diversity concerns (Bartkus and Glassman, 2008). Research may indicate that instead of insisting that the "customer is always right," organizations may be well-served to make explicit that the customer is always treated right.

Another strength of this research is that, in contrast to many other studies, we did not ask respondents for opinions about the effectiveness of corporate codes of ethics. Instead, we surveyed the attitudes of respondents concerning a wide variety of ethical dilemmas, and then isolated the effect of their firm's having a code on the attitudes of respondents concerning the dilemmas. Ideally, we would have followed up with in-depth interviews of respondents to further probe their attitudes concerning the issues. However, the confidential nature of the survey as well as the large number of respondents made this impossible. Future research could surely yield additional insights through probing interviews of executives to gain explanations of the rationales underlying their attitudes toward the various situations described.

A limitation of this study is that we did not explore the content of the code of ethics in the organizations (Kaptein and Schwartz, 2008). For example, our results indicate that codes in general seem to have less of an impact on interactions with customers. Of course, this may not be the case with

TABLE III

Ordered probit analysis of relationship between ethical evaluation of vignettes, ethical codes of conduct, and characteristics of respondents

	Results by vignette							
	A	B	C	D	E	F	G	H
Firm has ethics code	−0.153***	−0.173***	0.003	−0.253***	−0.094**	−0.093**	−0.044	−0.095**
	(0.059)	(0.055)	(0.052)	(0.051)	(0.045)	(0.044)	(0.047)	(0.044)
Firm size	0.002	−0.015	0.016*	−0.008	0.002	−0.002	−0.006	−0.026***
	(0.010)	(0.009)	(0.009)	(0.008)	(0.007)	(0.007)	(0.008)	(0.007)
Age	−0.166***	−0.000	−0.182***	−0.142***	−0.049**	−0.128***	−0.137***	−0.152***
	(0.025)	(0.023)	(0.023)	(0.022)	(0.019)	(0.019)	(0.020)	(0.019)
Male	0.114	0.281***	−0.014	0.059	0.259***	0.269***	−0.433***	0.052
	(0.076)	(0.075)	(0.065)	(0.065)	(0.058)	(0.056)	(0.058)	(0.056)
2001 Survey Collection	−0.008	−0.171***	−0.005	0.002	0.035	0.167***	0.099**	0.101**
	(0.058)	(0.054)	(0.051)	(0.050)	(0.044)	(0.043)	(0.046)	(0.043)
Observations	2796	2801	2804	2801	2786	2781	2782	2780
	Results by Vignette							
	I	J	K	L	M	N	O	P
Firm has ethics code	−0.149***	−0.080*	−0.025	−0.176***	−0.188***	−0.133***	−0.026	−0.187***
	(0.054)	(0.044)	(0.048)	(0.044)	(0.046)	(0.046)	(0.046)	(0.047)
Firm size	−0.028***	−0.029***	0.011	0.003	−0.022***	0.001	0.007	−0.038***
	(0.009)	(0.007)	(0.008)	(0.007)	(0.008)	(0.007)	(0.008)	(0.008)
Age	−0.166***	0.009	−0.070***	−0.173***	−0.017	−0.081***	−0.046**	−0.086***
	(0.023)	(0.019)	(0.021)	(0.019)	(0.019)	(0.020)	(0.020)	(0.020)
Male	−0.107	0.419***	0.364***	0.065	0.697***	0.187***	0.143**	−0.121**
	(0.067)	(0.056)	(0.063)	(0.056)	(0.062)	(0.058)	(0.058)	(0.059)
2001 Survey Collection	0.054	−0.004	−0.162***	−0.036	−0.032	0.105**	−0.214***	−0.038
	(0.053)	(0.043)	(0.047)	(0.043)	(0.044)	(0.044)	(0.045)	(0.046)
Observations	2780	2778	2764	2762	2775	2779	2729	2767

Standard errors reported in parentheses.
*Significant at 10%; **significant at 5%; ***significant at 1%.

all codes. We would expect that a more detailed inquiry into the content of the organizational codes may find that behavioral guidelines related to customers are either altogether missing or ambiguously defined. Ethics codes, similar to goals, provide behavioral direction the extent to which they are specific and measurable (Latham, 2004; Locke and Latham, 1990). The utility of codes also is increased by specifying guidelines for behaviors beyond what is obviously appropriate in light of social norms or common sense (Schwartz, 2001). To this end, codes of conduct post Sarbanes–Oxley Act of 2002 have changed to provide more specificity related to legal and compliance issues (Canary and Jennings, 2008). Moreover, codes that not only identify specific behaviors but also include potential punishments for violations are likely to be more effective in changing perceptions and behaviors (Lere and Gaumnitz, 2007). These issues of content specificity and enforcement are not addressed in this research and require further study.

Another issue that was not investigated relates to how the code is created and communicated. Research on goals indicates that participation in the process of setting goals increases commitment to achieving goals (Locke and Latham, 1990). Similarly, the creation of ethics codes using participative processes is likely to increase the commitment of organizational members to abide by the code of conduct. In the absence of participation, the rationale for goals must be clearly communicated to engender commitment (Li and Butler, 2004; Locke and Latham, 1990). As such, how the ethics code is communicated influences its impact on organizational members. For example, is the rationale for the code communicated during employee orientation and reinforced in annual employee training, or is it simply posted or included in an employee manual with little explanation or justification? Further, are employees tested on its contents or asked to sign a statement acknowledging having read and understood its contents? The answers to these questions require more in-depth research related to the manner in which ethics codes are created and communicated as well as, perhaps, the frequency in which the code is discussed.

It has been argued the codes do not act in isolation; they are but one part of an ethical infrastructure of an organization (Tenbrunsel et al., 2003). As such, in addition to controlling for organizational size and personal characteristics, future research should delineate and investigate a greater number of formal and informal aspects of an ethical infrastructure. Other formal aspects of an ethical infrastructure include training, hot lines, and monitoring and sanctioning systems (Tenbrunsel et al., 2003). It is likely that increasing the number of formal systems that communicate and reinforce the ethics code will increase its effectiveness in influencing employee behavior. An informal aspect of the ethical infrastructure is the actions and example of leaders. Ethical leadership behavior is gaining attention as a factor that influences employee behavior and plays a critical role in creating the ethical climate of the organization (Brown and Treviño, 2006; Brown et al., 2005; Neubert et al., 2009). Codes will be undoubtedly more effective to the extent that leaders are themselves following the code, communicating it frequently, and holding employees accountable for compliance.

Although we have indicated that much is left to be learned about the implementation and communication of codes of conduct, our research provides evidence from a large and diverse sample of working adults to suggest that business professionals employed at firms with ethical codes of conduct are significantly less accepting of ethically questionable behavior. As a foundational step toward promoting an attitude among employees that rejects unethical behavior, organizational leaders are likely to benefit from making ethics expectations clear through employing an ethics code. Furthermore, a code of ethics is a critical component of an ethical infrastructure that is likely to contribute toward developing an organizational character that can maintain or restore a firm's ethical reputation in the eyes of its stakeholders.

Note

[1] These data sets have been previously analyzed along other dimensions in McKinney and Moore (2008), Longenecker et al. (2004, 2006), Vynoslavska et al. (2005), and Weeks et al. (2005).

Acknowledgement

The authors gratefully acknowledge financial support from Baylor University.

References

Adams, J. S., A. Tashchian and T. H. Shore: 2001, 'Codes of Ethics as Signals for Ethical Behavior', *Journal of Business Ethics* **29**, 199–211.

Agle, B. R., T. Donaldson, R. E. Freeman, M. C. Jensen, R. K. Mitchell and D. J. Wood: 2008, 'Dialogue: Towards Superior Stakeholder Theory', *Business Ethics Quarterly* **18**(2), 153–190.

Akaah, I. P. and E. A. Riordan: 1989, 'Judgments of Marketing Professionals About Ethical Issues in Marketing Research: A Replication and Extension', *Journal of Marketing Research* **26**(February), 112–120.

Allen, J. and D. Davis: 1993, 'Assessing Some Determinant Effects of Ethical Consulting Behavior: The Case of Personal and Professional Values', *The Journal of Business Ethics* **12**, 449–458.

Badaracco, J. L. Jr. and A. P. Webb: 1995, 'Business Ethics: A View from the Trenches', *California Management Review* **37**(2), 8–28.

Barsky, A.: 2008, 'Understanding the Ethical Cost of Organizational Goal-Setting: A Review and Theory Development', *Journal of Business Ethics* **81**(1), 63–81.

Bartkus, B. and M. Glassman: 2008, 'Do Firms Practice What They Preach? The Relationship Between Mission Statements and Stakeholder Management', *Journal of Business Ethics* **83**(2), 207–216.

Blodgett, M. S. and P. J. Carlson: 1997, 'Corporate Ethics Codes: A Practical Application of Liability Prevention', *Journal of Business Ethics* **16**, 1363–1369.

Boo, E. H. Y. and H. C. Koh: 2001, 'The Influence of Organizational and Code-Supporting Variables on the Effectiveness of a Code of Ethics', *Teaching Business Ethics* **5**, 357–373.

Borkowski, S. C. and M. J. Welsh: 2000, 'Ethical Practice in the Accounting Publishing Process: Contrasting Opinions of Authors and Editors', *Journal of Business Ethics* **25**(1), 15–31.

Brief, A. P., J. M. Dukerich, P. R. Brown and J. F. Brett: 1996, 'What's Wrong with the Treadway Commission Report? Experimental Analyses of the Effects of Personal Values and Codes of Conduct on Fraudulent Financial Reporting', *Journal of Business Ethics* **15**, 183–198.

Brown, M. E. and L. K. Treviño: 2006, 'Ethical Leadership: A Review and Future Directions', *The Leadership Quarterly* **17**, 595–616.

Brown, M. E., L. K. Treviño and D. A. Harrison: 2005, 'Ethical Leadership: A Social Learning Perspective for Construct Development and Testing', *Organizational Behavior and Human Decision Processes* **97**, 117–134.

Callan, V. J.: 1992, 'Predicting Ethical Values and Training Needs in Ethics', *Journal of Business Ethics* **11**, 761–769.

Canary, H. E. and M. M. Jennings: 2008, 'Principles and Influence in Codes of Ethics: A Center Resonance Analysis Comparing Pre- and Post-Sarbanes–Oxley Codes of Ethics', *Journal of Business Ethics* **80**, 263–278.

Caza, A., B. A. Barker and K. S. Cameron: 2004, 'Ethics and Ethos: The Buffering and Amplifying Effects of Ethical Behavior', *Journal of Business Ethics* **52**, 169–178.

Chonko, L. B. and S. D. Hunt: 1985, 'Ethics and Marketing Management: An Empirical Examination', *Journal of Business Research* **13**, 339–359.

Clark, M. A.: 1998, 'Can Corporate Codes of Ethics Influence Behavior?', *Journal of Business Ethics* **17**(6), 619.

Cowton, C. J. and P. Thompson: 2000, 'Do Codes Make a Difference? The Case of Bank Lending and the Environment', *Journal of Business Ethics* **24**(2), 165–178.

Donaldson, T. and L. Preston: 1995, 'The Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications', *Academy of Management Review* **1**(20), 65–91.

Farrell, B. J. and D. M. Cobbin: 1996, 'A Content Analysis of Codes of Ethics in Australian Enterprises', *Journal of Managerial Psychology* **11**(1), 37–55.

Farrell, B. J., D. M. Cobbin and H. M. Farrell: 2002, 'Can Codes of Ethics Really Produce Consistent Behaviours?', *Journal of Managerial Psychology* **17**(6), 468–490.

Ferrell, O. C. and S. J. Skinner: 1988, 'Ethical Behavior and Bureaucratic Structure in Marketing Research Organizations', *Journal of Marketing Research* **25**(February), 103–109.

Ford, R. C., B. Gray and R. Landrum: 1982, 'Do Organizational Codes of Conduct Really Affect Employees' Behavior?', *Management Review* **77**(June), 53–54.

Freeman, R. E.: 1984, *Strategic Management: A Stakeholder Approach* (Pittman, Marshfield, MA).

Freeman, R. E., J. E. Harrison and A. C. Wicks: 2007, *Managing for Stakeholders: Survival, Reputation, and Success* (Yale University Press, New Haven, CT).

Friedman, M.: 1962, *Capitalism and Freedom* (University of Chicago Press, Chicago).

Gibbs, J. P.: 1975, *Crime, Punishment, and Deterrence* (Elsevier, Amsterdam).

Gordon, K. and M. Miyake: 2001, 'Business Approaches to Combatting Bribery: A Study of Codes of Conduct', *Journal of Business Ethics* **34**, 161–173.

Gotterbarn, D.: 1999, 'Not All Codes are Created Equal: The Software Engineering Code of Ethics, a Success Story', *Journal of Business Ethics* **22**(1), 81–89.

Harrington, S. J.: 1996, 'The Effect of Codes of Ethics and Personal Denial of Responsibility on Computer Abuse Judgments and Intentions', MIS Quarterly September, 257–278.

Hegarty, W. H. and H. P. Sims Jr.: 1979, 'Organizational Philosophy, Policies, and Objectives Related to Unethical Decision Behavior: A Laboratory Experiment', *Journal of Applied Psychology* **64**(3), 331–338.

Helin, S. and J. Sandstrom: 2007, 'An Inquiry into the Study of Corporate Codes of Ethics', *Journal of Business Ethics* **75**, 253–271.

Hunt, S. D., L. B. Chonko and J. B. Wilcox: 1984, 'Ethical Problems of Marketing Researchers', *Journal of Marketing Research* **21**(August), 309–324.

Kaler, J.: 2009, 'An Optimally Viable Version of Stakeholder Theory', *Journal of Business Ethics* **86**(3), 297–312.

Kaptein, M. and M. S. Schwartz: 2008, 'The Effectiveness of Business Codes: A Critical Examination of Existing Studies and the Development of an Integrated Research Model', *Journal of Business Ethics* **77**, 111–127.

Kitson, A.: 1996, 'Taking the Pulse: Ethics and the British Cooperative Bank', *Journal of Business Ethics* **15**(9), 1021–1031.

Kohlberg, L.: 1981, *Essays on Moral Development, Vol. I: The Philosophy of Moral Development* (Harper & Row, San Francisco, CA).

Kohlberg, L. and R. Kramer: 1969, 'Continuities and Discontinuities in Childhood and Adult Moral Development', *Human Development* **12**, 93–120.

Kolk, A. and R. van Tulder: 2002, 'The Effectiveness of Self-Regulation: Corporate Codes of Conduct and Child Labour', *European Management Journal* **20**(3), 260–271.

Laczniak, G. R. and E. J. Inderrieden: 1987, 'The Influence of Stated Organizational Concern Upon Ethical Decision Making', *The Journal of Business Ethics* **6**, 297–307.

Latham, G. P.: 2004, 'The Motivational Benefits of Goal-Setting', *Academy of Management Executive* **18**(4), 126–129.

Lefebvre, M. and J. B. Singh: 1996, 'A Comparison of the Contents and Foci of Canadian and American Corporate Codes of Ethics', *International Journal of Management* **13**(2), 156–170.

Lere, J. C. and B. R. Gaumnitz: 2007, 'Changing Behavior by Improving Codes of Ethics', *American Journal of Business* **22**(2), 7–17.

Li, A. and A. B. Butler: 2004, 'The Effects of Participation in Goal Setting and Goal Rationales on Goal Commitment: An Exploration of Justice Mediators. Preview', *Journal of Business and Psychology* **19**(1), 37–51.

Locke, E. A. and G. P. Latham: 1990, *A Theory of Goal Setting and Task Performance* (Prentice Hall, Englewood Cliffs, NJ).

Long, B. S. and C. Driscoll: 2007, 'Codes of Ethics and the Pursuit of Organizational Legitimacy: Theoretical and Empirical Contributions', *Journal of Business Ethics* **77**, 173–189.

Longenecker, J., C. Moore and J. McKinney: 2004, 'Religious Intensity, Evangelical Christianity, and Business Ethics: An Empirical Study', *Journal of Business Ethics* **55**, 371–384.

Longenecker, J., C. Moore, L. Palich, W. Petty and J. McKinney: 2006, 'Ethical Attitudes in Small Businesses and Large Corporations: Theory and Empirical findings from a Tracking Study Spanning Three Decades', *Journal of Small Business Management* **44**, 167–183.

Maddala, G.: 1983, *Limited-Dependent and Qualitative Variables in Econometrics* (Cambridge University Press, New York).

McCabe, D. L., L. K. Trevino and K. D. Butterfield: 1996, 'The Influence of Collegiate and Corporate Codes of Conduct on Ethics-Related Behavior in the Workplace', *Business Ethics Quarterly* **6**(4), 461–476.

McKendall, M., B. DeMarr and C. Jones-Rikkers: 2002, 'Ethical Compliance Programs and Corporate Illegality: Testing the Assumptions of the Corporate Sentencing Guidelines', *Journal of Business Ethics* **37**(4), 367–383.

McKinney, J. A. and C. W. Moore: 2008, 'International Bribery: Does a Written Code of Ethics Make a Difference in Perceptions of Business Professionals', *Journal of Business Ethics* **79**, 103–111.

Murphy, P. R., J. E. Smith and J. M. Daley: 1992, 'Executive Attitudes, Organizational Size and Ethical Issues: Perspectives on a Service Industry', *Journal of Business Ethics* **11**, 11–19.

Neill, J. D., O. S. Stovall and D. L. Jinkerson: 2005, 'A Critical Analysis of the Accounting Industry's Voluntary Code of Conduct', *Journal of Business Ethics* **59**(1), 101–108.

Neubert, M. J., D. S. Carlson, K. M. Kacmar, J. A. Roberts and L. B. Chonko: 2009, 'The Virtuous Influence of Ethical Leadership Behavior: Evidence from the Field', *Journal of Business Ethics* **90**, 157–170.

Nwachukwu, S. L. S. and S. J. Vitell Jr.: 1997, 'The Influence of Corporate Culture on Managerial Ethical Judgments', *Journal of Business Ethics* **16**, 757–776.

Peterson, D. K.: 2002, 'The Relationship Between Unethical Behavior and the Dimensions of the Ethical

Climate Questionnaire', *Journal of Business Ethics* **41**, 313–326.

Pflugrath, G., N. Martinov-Bennie and L. Chen: 2007, 'The Impact of Codes of Ethics and Experience on Auditor Judgments', *Managerial Auditing Journal* **22**(6), 566.

Pierce, M. A. and J. W. Henry: 1996, 'Computer Ethics: The Role of Personal, Informal, and Formal Codes', *Journal of Business Ethics* **15**(4), 425–437.

Piercy, N. and N. Lane: 2007, 'Ethical and Moral Dilemmas Associated with Strategic Relationships Between Business-to-Business Buyers and Sellers', *Journal of Business Ethics* **72**(1), 87–102.

Reich, R. B.: 2007, *Supercapitalism: The Transformation of Business, Democracy and Everyday Life* (Alfred A. Knopf, New York).

Rich, A. J., C. S. Smith and P. H. Mihalek: 1990, 'Are Corporate Codes of Conduct Effective?', *Management Accountant* **72**(September), 34–35.

Schwartz, M. S.: 2001, 'The Nature of the Relationship Between Corporate Codes of Ethics and Behaviour', *Journal of Business Ethics* **32**(3), 247–262.

Schwartz, M. S.: 2004, 'Effective Corporate Codes of Ethics: Perceptions of Code Users', *Journal of Business Ethics* **55**, 323–343.

Singhapakdi, A. and S. J. Vitell: 1990, 'Marketing Ethics: Factors Influencing Perceptions of Ethical Problems and Alternatives', *Journal of Macromarketing* **12**(Spring), 4–18.

Sirgy, M., J. Johar and T. Gao: 2006, 'Toward a Code of Ethics for Marketing Educators', *Journal of Business Ethics* **63**(1), 1–20.

Stieb, J.: 2009, 'Assessing Freeman's Stakeholder Theory', *Journal of Business Ethics* **87**(3), 401–414.

Tenbrunsel, A. E., K. Smith-Crowe and E. Umphress: 2003, 'Building Houses on Rocks: The Role of Ethical Infrastructure in Organizations', *Social Justice Research* **16**(3), 285–307.

Trevino, L. K.: 1986, 'Ethical Decision Making in Organizations: A Person Situation Interactionist Model', *Academy of Management Review* **11**(3), 601–617.

Trevino, L. K., G. R. Weaver and S. J. Reynolds: 2006, 'Behavioral Ethics in Organizations: A Review', *Journal of Management* **32**(6), 951–990.

United States Sentencing Commission (USSC): 2005, 'Remedying Harm from Criminal Conduct, and Effective Compliance and Ethics Program', in *2005 Federal Sentencing Guidelines*, Chapter 8, Part B.

Valentine, S. and T. Barnett: 2002, 'Ethics Codes and Sales Professionals Perceptions of Their Organizations Ethical Values', *Journal of Business Ethics* **40**(3), 191–200.

Vynoslavska, O., J. Longenecker, C. Moore and J. McKinney: 2005, 'Transition Ethics: A Comparison of Ukrainian and United States Business Professionals', *Journal of Business Ethics* **61**, 283–299.

Weaver, G. R., L. K. Trevino and P. L. Cochran: 1999, 'Corporate Ethics Programs as Control Systems: Influences on Executive Commitment and Environmental Factors', *Academy of Management Journal* **42**, 539–552.

Weeks, W., J. Longenecker, C. Moore and J. McKinney: 2005, 'The Role of Mere Exposure Effect on Ethical Tolerance: A Two-Study Approach', *Journal of Business Ethics* **58**, 281–294.

Weeks, W. A. and J. Nantel: 1992, 'Corporate Codes of Ethics and Sales Force Behavior: A Case Study', *Journal of Business Ethics* **11**, 753–760.

Wiley, C.: 2000, 'Ethical Standards for Human Resource Management Professionals: A Comparative Analysis of Five Major Codes', *Journal of Business Ethics* **41**(1), 93–114.

Wood, G.: 2000, 'A Cross Cultural Comparison of the Contents of Codes of Ethics: USA, Canada and Australia', *Journal of Business Ethics* **25**(4), 287–298.

Baylor University,
Waco, TX, U.S.A.
E-mail: joe_mckinney@baylor.edu;
Tisha_Nakao@baylor.edu;
Mitchell_Neubert@baylor.edu