Article

Identifying Organisational Climate Elements that can be used to Detect and Prevent Management Fraud

Leon Bezuidenhoud
https://orcid.org/0000-0002-4799-1775
University of the Free State
LBezuidenhoud@ufs.ac.za

Dirk Geldenhuys
https://orcid.org/0000-0002-8030-6004
University of South Africa
Geldedj@unisa.ac.za

Abstract

Management fraud is a global problem that has become more widespread than ever before. Current modes for detecting and preventing fraud, such as those based on demographic factors, have not been very successful. It is argued that organisational psychology—more specifically the study of organisational climate—provides excellent vantage points from which to understand management fraud. The purpose of this study was to identify organisational climate elements that increase the potential risk of management fraud within an organisation. The study has done this in order to employ these elements in detecting and preventing potential management fraud. A mixed research design was employed, encompassing two broad phases, namely: classification, whereby a framework was developed; and empirical validation, which made use of analytical induction as well as Lawshe's content validity ratio. It was found that leadership style and managerial values are the elements that relate most to the detection and prevention of management fraud. It was also found that ethical leniency, poor example setting and hypocrisy were likely to create climates in which management fraud takes place. In terms of values, the study found that it is not simply the adoption or communication of values that is important in shaping a fraud-conducive climate, but rather whether or not any professed values are seen to be implemented or lived.

Keywords: certified fraud examiners; leadership style; managerial values; management fraud; organisational climate; organisational psychology

Southern African Business Review
https://upjournals.co.za/index.php/SABR
Volume 23 | 2019 | #4269 | 28 pages

https://doi.org/10.25159/1998-8125/4269
ISSN 1998-8125 (Online)

Introduction

Fraudulent behaviour on the part of management has become a global concern that cuts across cultural and political divides (Zahra, Priem, and Rasheed 2005) and is more prevalent than previously believed (Pathak and Wells 2008).

In South Africa, fraud and embezzlement are among the largest non-recorded expenses for government, organisations and institutions (Roxas 2011). Recent well-known organisational cases include Steinhoff and McKinsey, while KPMG has suffered significant reputational damage owing to their associations with the Gupta family. This family is accused of corrupt state contracts secured through their ties to the previous president, Jacob Zuma.

The high incidence of contemporary management fraud accentuates the fact that current modes of governance in organisations do not sufficiently protect investors or safeguard public interest (Brooks and Dunn 2010; Litzky, Eddleston, and Kidder 2006; Roxas 2011). It is, therefore, crucial to examine fraud and management from new perspectives (Free 2015). This includes perspectives from the behavioural sciences such as psychology (Albrecht, Albrecht, Albrecht, and Zimbelman 2009; De Cremer, Tenbrunsel, and van Dijke 2010; Dorminey, Fleming, Kranacher, and Riley 2012; Murphy, Free, and Branston 2011). Murphy and Free (2016), as well as Ramamoorti and Olsen (2007), argue that these disciplines offer a unique approach to addressing fraud detection and prevention by focusing on how to deal with underlying behavioural dynamics.

There has also been growing consensus that the organisational environment has a strong influence on unethical behaviour (Mayer, Kuenzi, and Greenbaum 2010). According to Agarwal and Malloy, Wyld and Jones, as well as Key (all cited in Erakovich, Bruce, and Wyman 2002), organisational climate is a normative construct generated through the shared behavioural perceptions of policies, procedures, systems and behaviours in an organisation that directs organisational members' ethical actions and decisions. These cumulative collections of shared practices and behavioural perceptions are observable and have an effect on employees in terms of their ethical decision-making processes (Erakovich et al. 2002).

Understanding the elements that determine climate within an organisation is critical since the elements are an integral part of the nomological network and provide a deeper comprehension of the concept of organisational climate, which can lead to further conceptual and methodological progress (Allen 2003). What is evident from the literature, according to Schminke, Arnaud, and Kuenzi (2007), is that ethical climate can be measured and, therefore, managed. Silverstone and Davia (2005) provide the following appropriate analogy to describe the proactive process of fraud detection: medical doctors examine their patients for signs of malignancies, solely because they are in special risk categories, even though the patients may not have any symptoms and are in good health. In a similar fashion, proactive fraud investigators examine entities at risk of fraud that may have no obvious symptoms regarding the occurrence of fraud. The most cost-effective way to fight fraud is to prevent it from happening, as organisations victimised by fraud rarely recover their losses (Kranacher 2007; Murdock 2008). Prior research on management fraud detection based the likelihood of fraud on numbers and ratios. However, these methods are usually too late to be effective, since they detect fraud long after the ruinous financial results are irreversible (Churyk, Lee, and Clinton 2008). If it were possible to detect management fraud sooner, this would reduce the impact of management fraud considerably as most fraudulent activities commence slowly and expand over time (Kranacher 2007).

Management Fraud

Despite myriad causes and occasions, fraud can be classified into two broad categories, namely asset misappropriation (employee fraud), and financial misstatements (management fraud) (Murcia and Borba 2007; Rezaee and Riley 2010). Pednault (2009) echoes the above by stating that the two main areas of fraud in the accounting world are employee fraud or embezzlement and management fraud, also known as financial statement fraud. In contrast, Holtfreter (2005), Charron and Lowe (2008) and Pickett (2011) provide an additional category of fraud, namely corruption. Lister (2007) supports the latter view by stating that there are three main branches of fraud and provides a Fraud Tree model that illustrates how examples of fraudulent activities are related to each branch.

This article focuses on management fraud. Management fraud requires a number of individuals and the breeding ground for this type of fraud has two general characteristics: overly aggressive targets for financial performance and a “can-do” organisational culture that does not tolerate poor performance (Sweeney 2003). Hemraj (2004), Pathak and Wells (2008), Albrecht et al. (2009), and Tickner (2010) all emphasise the collusive aspect of fraud. They further concur that a significant proportion of management fraud is committed by more than one person.

For the purposes of this study, management fraud was defined as fraud committed by a group of knowledgeable, highly-educated perpetrators who are in positions of power, trust, respectability and responsibility. These groups use well-planned collusive schemes to abuse the trust and authority normally associated with their positions.

Organisational Climate

Although the study of organisational climate has evolved over the past 25 years, it remains a difficult concept to define, with a number of researchers defining the concept differently (Benjamin 2012; Webber 2007). The definition of organisational climate, as provided by Castro and Martins (2011, 2), was significant for this study, because it speaks to the ways in which organisational climate can influence behaviour:

> The relatively enduring and shared perceptions of feelings and attitudes that organisational members have about fundamental elements of the organisation, which reflect the established norms, policies, values, and attitudes of the organisation's culture and influence individuals' behaviour positively or negatively.

A number of factors, both internal and external, potentially contribute to an organisation's climate (Lindell and Brandt 2000; Schneider, Ehrhart, and Macey 2013). Organisational variables that influence organisational climate include: economic conditions; leadership style; organisational policies; managerial values and structure; characteristics of members; nature of business; organisational size; and organisational life stage.

Organisational Determinants of Climate

Economic Conditions

The Institute of Internal Auditors indicates that allegations of fraud are more likely to emerge under unfavourable economic conditions (Spathis 2002). According to Tracey, Gordon, White, and MacPhail (2009), as economic conditions decline, both locally and globally, new fraud threats emerge. When economic survival is threatened (either that of the organisation or the individual), the line separating acceptable and unacceptable behaviour can, for some, become blurred (Tracey et al. 2009). Gill (2011) suggests, however, that caution should be exercised before concluding that there is a causal relationship between adverse economic climates and an increase in fraud. Rather, it may simply be that fraudulent crimes are more likely to be discovered during fiscally trying times, as these are periods when auditors and accountants are called upon to complete extensive evaluations. When organisations are performing well, there may be no need to evaluate current practices, so existing fraud may remain undetected (Gill 2011).

Leadership Style

Due to the growing interest in ethics in the field of management, researchers have begun to consider the ethical implications of leadership, with a number of researchers arguing that leadership is the key variable influencing the ethics and integrity of employees (Brown 2007; De Hoogh and Den Hartog 2008; Robbins and Judge 2011). If the leaders seem unconcerned with ethics and condone unethical behaviour in order to boost profits, employees will be more inclined to commit fraud (Brown 2007; Uhl-Bien and Carsten 2007; Simpson and Taylor 2013; Zahra, Priem, and Resheed 2007).

What is evident from the literature is that leadership is critical in determining the tone of the organisation. Data suggest that poor tone at the top has contributed to nine per cent of all the fraud cases reported to the Association of Certified Fraud Examiners (ACFE). More significant perhaps, is that this factor was cited as the primary cause in 18 per cent of cases that resulted in a loss of $1 million or more (ACFE 2012). Examples of organisations that failed to lead from the top include, among others: WorldCom

(Bernie Ebbers); Tyco International (Dennis Kozlowski), and Enron (Jeffrey Skilling and Kenneth Lay) (Schwartz 2013).

Organisational Policies

Bierstaker, Brody, and Pacini (2006) as well as Mullane (2009) state that well-written guidelines are useful for leaders when facing ethical dilemmas in the workplace, and that every organisation should create and maintain a fraud policy to guide behaviour. Handal and Blount (2009) define a fraud and corruption risk management policy as a statement that embodies the goals and behavioural norms that the organisation wants to instil in its staff and put into practice in its business dealings. Embedding systems and processes to support the tone at the top will help influence an organisation's culture and provide a means for evaluating leadership in ethical terms (Simpson and Taylor 2013).

Managerial Values and Structure

When corporate scandals make headlines, the values of managers are a topic of debate, with values being identified as an important basis for individual differences in ethical behaviour (Ghosh 2008; Quick and Nelson 2009). The work of Rokeach (cited in Brief, Dukerich, Brown, and Brett, 1996) emphasises the role that personal values play in the incidence of fraudulent financial reporting. Rokeach distinguished between two types of values, namely instrumental and terminal: the latter refers to goals which an individual would like to achieve during his/her lifetime, while the former is the means used to achieve these. Instrumental values generally come to dominate a person's behaviour (Robbins 2001).

An understanding that individuals' values differ, but tend to reflect the societal values that were dominant in the period during which they entered the workforce, may assist in explaining and predicting behaviour (Robbins 2001). Robbins lists the following four dominant work values in today's workplace: Protestant work ethic (1940s: work is at the centre of life and morality); Existential (1960s–1970s: the greatest concern is with quality of life); Pragmatic (1970s–1980s: value is placed on achievement, success and ambition); and Generation X (flexibility, a balanced lifestyle, and the achievement of job satisfaction are valued). Generation Y (or millennials) can now also be added to the list. Millennials enter the world of work with the belief that they have been charged with cleaning up the mess left behind by the two preceding generations (Shepard 2004). Millennials are confident, highly team orientated and unconventional. They tend to be strong achievers if they are properly motivated and are driven by morals, so they do not understand the need for external authority in their lives (Shepard 2004). Millennials are more entrepreneurial and socially conscious and challenge existing assumptions (Bergh 2011). There are, however, objections to these gross generalisations concerning the various generations (see, for example, Robbins and Judge 2011).

Schwartz (2013, 42) proposes the following universal core ethical values:

- Trustworthiness, including honesty, keeping promises, integrity, transparency, reliability and loyalty.
- Respect, including respect for human rights.
- Responsibility, including accountability, acknowledging mistakes and not blaming others.
- Fairness, including notions of process, impartiality and equity.
- Caring, including sensitivity towards others and avoiding unnecessary harm.
- Citizenship, including obeying laws, assisting the community, and protecting the environment.

Characteristics of Members

Research conducted by Zahra et al. (2007) demonstrates how personal factors can either weaken or strengthen the effects of industrial or organisational pressures on the incidence of top management fraud. Individual characteristics affect the degree to which increasing pressure from society, the industry or the organisation may result in a decision to commit fraud. In 2007, KPMG conducted research on the profile of the "white collar fraudster," using details of fraud cases in Europe, India, the Middle East and South Africa. This research highlighted common facts and figures in relation to fraudsters such as ethnicity, age, gender, period of employment and level within the organisation. This report also found that the role of the person in the organisation is often related to the nature of the fraud perpetrated. Ordinary employees are most likely to be involved in asset misappropriation, whereas owners and executives are responsible for the majority of fraudulent financial statements (Doody 2008).

Nature of Business

Fraud and management fraud are issues that all organisations face, regardless of size, industry type or country (Doody 2008; Stalebrink and Sacco 2007). Most studies have been limited to single organisations, or single types of organisations, resulting in little knowledge about how variation in the organisational setting might contribute to the varieties of fraud committed (Vaughan 2001).

Literature has suggested that crime, in general, might be more likely in certain types of organisations (e.g., bureaucracies), but has failed to identify whether certain types of crime are more common in specific organisational settings (Fleckenstein and Bowes 2000). Looking at fraud across organisations that differ in function and purpose should make it possible to determine whether types of fraud correlate with unique settings. The results of a survey conducted by PwC demonstrated that organisations reporting fraud were spread across many industries (Doody 2008). The findings of the ACFE indicate that nearly 40 per cent of organisations which experienced fraud were privately owned, while 28 per cent were publicly traded, implying that two-thirds of the cases were from profit organisations (ACFE 2012). Research by Stalebrink and Sacco (2007) suggests that financial statement fraud in the government has its origins in political rather than economic incentives and that it is perpetrated by elected rather than non-elected officials.

Organisational Size

Sutherland's ground-breaking research on large corporations first called attention to organisational size as an important explanatory factor in white-collar crime research (Holtfreter 2005). The finding that larger organisations were associated with a greater incidence of crime has been consistently supported (Zona, Minoja, and Coda 2013). Baucus and Near's (1991) model of illegal corporate behaviour used an empirical test to demonstrate that larger organisations, which operate in dynamic bountiful environments, are most likely to behave illegally (Zona et al. 2013). However, according to the ACFE, small organisations, which employ fewer than 100 employees, suffer fraud more frequently than large organisations. The former are, however, hit by higher average losses, resulting in high profile fraud which is reported more extensively in the media (ACFE 2012; Doody 2008).

Larger organisations are more likely to employ or hire CFEs to formally investigate fraud cases, have more rules, more documentation, and are more specialised (ACFE 2012). This means that larger organisations might also contain more groups or sub-cultures that view themselves as distinct from the organisation. These sub-cultures can start to develop solutions to certain issues that are outside established codes of conduct (Simpson and Taylor 2013).

Organisational Life Stage

It is evident from the literature that newly created organisations tend to be less formal and smaller, while mature organisations tend to be larger and more formal (DuBrin 1984). This determinant overlaps with a number of previously stated determinants (organisational policies, structure and size).

Aim of the Study

The aim of this study was to identify elements within an organisation's climate that can be used to detect and prevent the potential risk of management fraud.

Research Method

Research Design

An interpretative framework was used in this study which may, through a social science theoretical lens, be seen as having followed a post-positivist approach (Creswell 1994). Creswell (1994) implies that researchers using this approach view inquiry as a series of logically related steps, and believe in multiple perspectives from participants rather than a single reality. Post-positivist researchers prefer rigorous methods of qualitative data collection and analysis, seeking to use traditional qualitative methods such as interviews and case studies in as quantifiable a manner as possible (Ponterotto 2010).

This research hypothesised that there are factors within an organisation's climate that will play a role in an individual's decision to commit management fraud. However, the study fell within the interpretivist paradigm as the researchers' intention was to attempt to understand the phenomenon through the subjective understanding of those who encounter it (Schurink and Schurink 2012). Therefore, as Henning, Van Rensburg, and Smit (2004) state, it was anticipated that knowledge in this study is not only constituted by observable phenomena (management fraud), but also by descriptions of people's intentions, viewpoints, morals and reasons, meaning making and self-understanding which are implied by the term "organisational climate." Organisational climate is formed as a result of individual employees' perceptions. The interpretivist paradigm was appropriate, given this study's contention that current theory on organisational climate can be adapted in order to detect the prevalence of management fraud in organisations. The purpose of this study was to gain a deep understanding of the effect of organisational climate on management fraud. Working within this framework further allows the researcher to develop insights not possible through other forms of analysis (Shah and Corley 2006).

In order to identify organisational climate elements, an iterative approach was applied to Dubin's (1969; 1978) methodology. Robert Dubin's classic book, *Theory Building: A Practical Guide to the Construction and Testing of Theoretical Models* (1969), presents an informed argument for theory building that is relevant to applied disciplines such as management, marketing and organisation theory (Ardichvili, Cardozo, and Ray 2003; Dubin 1969; Dubin 1978; Lynham 2002; Swanson 2007; Upton and Egan 2010). The second phase digressed from Dubin's (1969; 1978) empirical validation process and utilised analytical induction (Barnard and Fourie 2007; Oosthuizen 2009) to validate the organisational elements of climate. In addition, Lawshe's (1975) content validity ratio was used as a method for estimating content validity. Since its introduction in 1975, critical acceptance of Lawshe's content validity ratio has grown, and it remains one of the most widely used methods for quantifying content validity (Newman, Lim, and Pineda 2013; Wilson, Pan, and Schumsky 2012).

Steps taken to ensure an accurate account of information during the analysing, reporting and sharing phases are presented in Table 1.

Table 1: Constructs considered to enhance the validity and reliability of this study

Characteristic	Description	Application in this study
Credibility	"How congruent are the findings with reality?" (Merriam as cited in Shenton 2004, 64).	*The adoption of well-established research methods:* This study used analytic induction, Lawshe's content validity ratio, and interviews; *Triangulation*: Different individual viewpoints and experiences were verified against one another, and a rich picture of the attitudes, needs and/or behaviour of those being investigated was pieced together. *Tactics to help ensure honesty in informants when contributing data:* Each person interviewed was given the opportunity to refuse to participate in the project; *Peer scrutiny of the research project*: This was frequently done by my promoter. In addition, this research was discussed during a formal workshop with colleagues and video-taped for referral. *Member checks:* Guba and Lincoln (as cited in Shenton 2004) list this provision as the single most important characteristic to ensure a study's credibility. In terms of this study, the information supplied by the interviewees was read back to them to check the accuracy of the data, and any theories emerging during the dialogues were verified in interviews. *Detailed description of the phenomenon under investigation:* Detailed description through a literature review and a consideration of appropriate methodology added credibility, as it helped to convey the nature and context of the phenomenon under investigation. *Examination of previous findings:* Previous findings related to similar research were sourced and included in the manuscript.
Transferability	Merriam as cited in Shenton (2004, p.69) views this characteristic as "the extent to which the findings of one study can be applied to other situations."	This study aimed to clarify the following in order to enhance this characteristic: • Data collection methods that were employed were discussed. • The average length of each interview was mentioned. • The time span used for the data collection was stated.
Dependability	If the study is replicated, then similar findings will be obtained.	The research design of this study is documented and detailed.
Confirmability	Findings will be confirmed by an objective other.	A data-orientated approach was followed in this study; this specifically illustrates how the data was gathered and processed, making confirmation by another researcher possible.

Proper ethical consideration was given to ensure that no harm could arise to any person as a result of the research. The researchers concurred that ethical responsibility to conduct meaningful and trustworthy research extends beyond duty, mechanical approaches and pre-described solutions (Koro-Ljungberg 2010).

Research Strategy

The research strategy was two-pronged. Nomothetic-deductive reasoning was used in order to discover general patterns or laws of human behaviour evident in the literature reviewed. This was combined with inductive hypothesising based on empirical research (Babbie, Mouton, Vorster, and Prozesky 2010).

Theory generation within the interpretivist paradigm is iterative, recurring, and typically nonlinear; movement between the various research stages is critical to the development of new ideas and insights (Alvesson and Karreman 2011; Holton and Lowe 2007). Working within this paradigm required the design of the study to be nonlinear and, therefore, this study is based on what Berg (2007) refers to as the Spiralling Research Approach (see Figure 1 below).

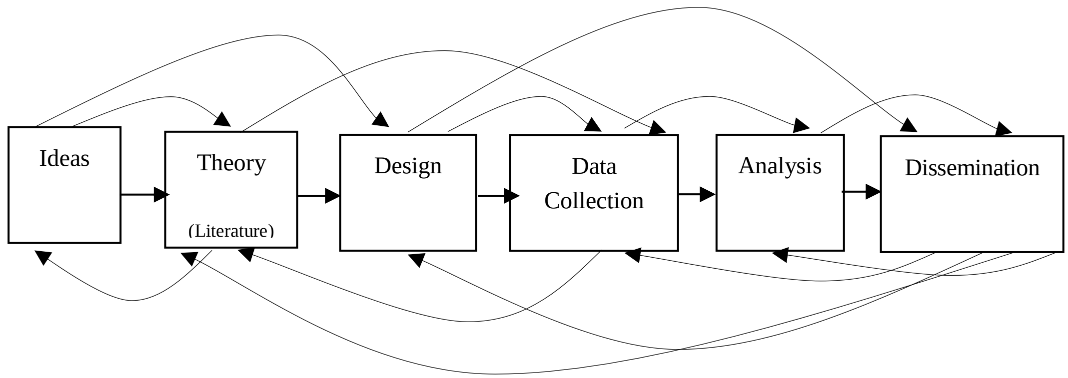

Figure 1: The spiralling research approach (Berg 2007, 24)

Data Collection

A semi-standardised interview structure was used in the study. This entails a number of predetermined questions which are asked in a systematic and ordered fashion, but the interviewer has the freedom to digress and to probe certain answers (Berg 2007). After the researcher had explained the purpose and structure of the interview, emphasising confidentiality and clarifying certain key concepts, participants were encouraged to share how they currently detect management fraud within their professional roles. Participants were further encouraged to share why they thought managers engage in fraud. Due to the way in which participants were geographically dispersed, the researchers initiated contact via e-mail to explain the purpose of the study and to obtain consent. After they had responded electronically, participants were contacted telephonically at a time convenient for them, and a face-to-face or telephonic interview was then conducted. The average time for each interview was approximately 73 minutes. The semi-structured interview not only allowed the researcher to explore certain key themes originating from the theory, but also to explore the experiences and interpretations of the participants.

Sampling and Participants

Convenience sampling (Silverman 2001)—supplemented by snowball sampling (Berg 2007; Noy 2008)—was used for the empirical study. Participants were selected based on their potential to contribute to the unpacking and/or testing of the theoretical concepts. They were also requested to refer the researcher to further potential participants.

For the first part of the empirical study, the initially-devised Management Fraud Climate Framework was tested using four participants. Based on their responses, the researcher reformulated and proposed the revised fraud-related organisational climate elements to the same four individuals, as well as to 13 new participants. Feedback in terms of the framework as a whole was then sought from nine additional individuals. Three of the nine additional participants did not respond. However, the 23 (in total) individuals canvassed resulted in theoretical saturation.

A further round of feedback on the framework was solicited from five participants who were all certified fraud investigators with a minimum designation of head of department, and were drawn from various companies including Discovery Holdings, Pricewaterhouse Coopers, Deloitte, the Auditor General's Office (South Africa) and ACFE (South African Chapter). The certification of a fraud examiner denotes proven expertise in fraud prevention, detection and deterrence (ACFE 2012). These participants were carefully chosen as they possess a unique set of skills that are not found in any other career field or discipline; they combine knowledge of complex financial transactions with an understanding of law and how to resolve allegations of fraud (ACFE 2012).

Participants

The biographical characteristics of the participants are summarised in Table 2.

Table 2: Biographical characteristics of the participants

Participant	Education	Experience
RP1	Qualified auditor	13 years' experience in finance in both private and public sectors.
RP2	Diploma (Internal Accounting)	32 years' experience in internal auditing and risk management.
RP3	Master's Degree (Public Administration)	38 years' experience years in public finance.
RP4	PhD (Industrial Psychology)	14 years (statistics and model development specialist).
RP5	Degree (Humanities)	25 years' public service management experience in a financial office.
RP6	Degree (Law)	4 years' experience involved in the allocation of tenders within the public sector.
RP7	Degree (Financial Management)	8 years' financial experience in the Public sector. Currently in 3rd year of employment as a risk consultant in the private sector.
RP8	No formal financial qualification	Involved in awarding of tenders within the public sector.
RP9	Degree (Social Sciences)	Financial officer and employed within internal auditing department as section head.
RP10	Degree	2 years' experience within public finance.
RP11	Degree	1.5 years' experience within public finance.
RP12	Postgraduate degree in financial management and auditing	26 years' financial management experience; currently section head of an internal auditing division.
RP13	No formal qualification	Involved in an internal investigation which resulted in a manager being dismissed for fraudulent financial transactions.
RP14	Degree	Retired director of a large national group; RP14 was also implicated in, but later vindicated of, financial fraud committed by a sub-ordinate, to the value of approximately 6 million over a 11 year time span.
RP15	Formal police training	9 years' experience in the organised crime division.
RP16	No formal qualification	Owns a small private company that employs 3 people and has been the victim of fraud to the value of approximately R150 000.
RP17	PhD	Specialist in organisational climate.

Data Analysis

The propositions which formed the basis of the framework were validated by means of analytical induction (Barnard and Fourie 2007; Oosthuizen 2009). This study followed the qualitative comparative analysis (QCA) approach as proposed by Charles Ragin (cited in Bernard 2013), who formalised the logic of this approach using a Boolean approach. Boolean algebra involves two states: true or false; present or absent; one or zero (Bernard 2013). Qualitative comparative analysis provides a simple and compact way of analysing patterns of causation in a small to moderate number of cases and looks at combinations of conditions found across a given set of cases (Lee and Fielding 2004).

Lawshe's content validity ratio (CVR) was used to provide additional verification information concerning content validity (cited in Newman, Lim, and Pineda 2013; Wilson et al. 2012). Lawshe's content validity ratio calls for the establishment of a group of subject matter experts (SMEs) who each rate an instrument's items on a 3-point scale: a) "essential"; b) "useful, but not essential"; and c) "not necessary" (Wilson et al. 2012). This process was applied in the current study by using experts working in the field of management fraud. These experts were then asked to evaluate the proposed climate elements by focusing on the degree to which the elements are representative of the factors influencing management fraud.

A CVR value can be computed for each item on the scale as well as for the overall scale, with the following formula being used (Lawshe 1975; Polit, Beck, and Owen 2007):

$$\mathrm{CVR} = \frac{\mathrm{Ne} - \frac{\mathrm{N}}{2}}{\frac{\mathrm{N}}{2}}$$

In the above equation, Ne is the number of SMEs indicating "essential" and N is the total number of experts. While CVR is directly based on the percentage saying "essential" characteristics of the equation include the following (Lawshe 1975, 567):

- When fewer than half say "essential," the CVR is negative.
- When half say "essential" and half do not, the CVR value is zero.
- When all say "essential," the CVR is computed to be 1.00 (it is adjusted to 0.99 for ease of manipulation).
- When the number saying "essential" is more than half, but less than all, the CVR is somewhere between 0 and 0.99.

Findings

The responses from the participants in terms of propositions 1 to 8 (see the key below Table 3), including the CVR values, are presented in a truth table (Table 3).

Table 3: Truth table representing participants' feedback in terms of organisational climate determinants.

Research Participant	ECC	LS	OP	MV	CM	NB	OS	OLS
RP1	T	T	T	T	T	F	T	T
RP2	F	T	T	T	T	T	F	T
RP3	T	T	T	T	T	F	F	T
RP4	T	T	T	T	T	T	T	T
RP5	T	T	T	T	T	T	F	T
RP6	T	T	*F	T	T	F	T	T
RP7	F	T	T	T	T	T	F	F
RP8	T	T	T	T	T	T	T	T
RP9	F	T	*F	T	T	F	T	T
RP10	F	T	T	T	T	T	T	T
RP11	T	T	T	T	T	T	F	F
RP12	T	T	T	T	T	T	T	T
RP13	T	T	T	T	T	T	T	F
RP14	T	T	T	T	T	T	T	T
RP15	T	T	T	T	T	T	T	T
RP16	T	T	T	T	T	T	T	T
RP17	T	T	*F	T	T	T	T	F
CVR	.53	.99	.65	.99	.99	.53	.41	.53

Note: * qualified (T = true; F=False)
Note: ECC = economic climate conditions; LS = leadership style; OP = Organisational policies; MV = Managerial values; CM = Characteristics of Members; NB = Nature of business; OS = Organisational size; OLS = Organisational life stage; CVR = Content validity ratio

From Table 3 it is evident that, according to Lawshe's content validity ratio, all CVR values satisfy the five per cent level and therefore, in terms of Lawshe's method, could be retained in the model. However, the results obtained from analytical induction take precedence over CVR (Lawshe 1975). Based on the results from analytical induction, the following determinants of organisational climate were, therefore, presented for a second round of feedback:

- Leadership style.
- Organisational policies.
- Managerial values.
- Characteristics of members.

Although a CVR value of .65 was obtained for organisational policies as a determinant—and all participants agreed that this does have an effect—most participants emphasised instead the implementation and regulation of the policies as what mattered most in determining whether management fraud would occur. Therefore, applying analytical induction as a method of validation resulted in proposition three being amended to: “The implementation and regulation of organisational policies will have an effect on an individual’s inclination to commit management fraud.”

Supporting evidence from interviews conducted

Supporting evidence for the findings from the interviews is presented in Table 4.

Table 4: Supporting evidence in terms of organisational climate determinants

Propositions	Interviews
Economic conditions	RP1: “I think everyone is feeling the economic strain, so managers just like everyone else sometimes need to find ways to support their lifestyles. So yes, I do think economic conditions play a role.” RP5: “Definitely, it goes about lifestyle, and the Joneses next door live like that and I want to live the same, although I can’t. Greed, greed and greed is a major factor affecting fraud.” RP6: “Unfortunately, in the Free State, our economy is declining because of a lack of service delivery, because of greed and a lack of leadership, and, as a result, managers fight for limited resources and use any means necessary to get these limited resources.” RP7: “They are not aware of economic conditions; it’s just plain greed.” RP9: “People steal even if it is going well.” RP10: “Managers don’t need the money; they earn enough.” RP14: “Everything just increases, petrol, school fees and food. The only thing that does not increase is our salaries. So people need to find ways to support themselves. You cannot live from your salary anymore, because life has become too expensive. So yes, economic conditions play an important role.”
Leadership style	RP3: “By examining the strategic plan, a person can see how seriously the leaders take fraud.” RP4: “Lenient managers who don’t keep to the regulations themselves will result in employees doing the same.” RP6: “Most definitely, he is in a leadership position, and you expect him to act correctly, but you don’t see leaders often behaving correctly, and their employees do the same and no-one understands why.” RP8: “Definitely, most definitely.” RP11: “Everyone just looks at the manager for guidance. If she bends the rules just a little, then everyone also bends the rules just a little.” RP14: “If your leader is corrupt then he points the direction.”

Organisational policies	RP3: “The most vital part of a fraud strategy is a sound and effective fraud policy, but it must be communicated to all people on all levels.” RP6: “We can only make recommendations to senior management in terms of policies; yet there are times when management overrides the stated policies, and this happens often.” RP9: “The lack of organisational policies and the way they are implemented and if people keep to the policies. In the government sector, we have policies which are in line with the best in the world, but not always applied by managers. The application of policies is the key point. Policies on paper do not mean anything.” RP12: “Good, tight, enforceable policies make people think twice.” RP17: “They are up there; they are the ones controlling everything; they can manipulate everything. They do not need to sign anything; the junior staff are the ones who sign and then the managers benefit.”
Managerial values	RP3 “If one manager does not have ethical values, then the whole organisation becomes sick.” RP4: “In every strategic plan the values are listed: integrity, honesty, value for money. If you develop a strategic plan, then you at least expect management to comply with this plan. But you don’t see these values in management’s behaviour.” RP8: “People look up to management, and if they are behaving in a certain way, then people copy that behaviour.” RP11: “A fish always, and I mean always, rots from the head.” RP17: “The values of managers spill into all aspects of the organisation. Employees always look up.”
Characteristics of members	RP3: “The older the workforce, the greater the chance of fraud. Older people do not want to change if it worked that way when they started. People who commit fraud are cleverer than you and I, and people who commit fraud see the opportunity and take it.” RP4: “Older employees are sometimes placed in positions that they are not able to do because of politics. And then this manager realises that he has only a few years to get rich. So yes, he takes chances and also helps his friends to get rich.” RP8: “The longer you have been in the business, the more comfortable you are with the rules, and you know where the gaps are.” RP12: “I think men in power positions can force more people to help them commit fraud. Men are more ruthless than women.”
Nature of business	RP1: “Fraudsters don’t discriminate; they look for opportunities in any organisation.” RP3: “I think any organisation or department has a risk of fraud. Both people working within the department and people outside the organisation work together to commit fraud.” RP 4: “Certain businesses will attract more fraud. Fraudsters know where the money is and quickly find ways to get the money.” RP9: “I don’t think so, fraud can happen in any organisation.” RP4: “People know which departments work with more money, and then they target these departments.”

Organisational size	RP6: "Smaller businesses probably suffer more, since they don't have departments such as an internal audit department, which manages and enforces stringent control." RP7: "The more people in an organisation, the greater the chance of fraud, but fraud also happens in small organisations; so it can play a role, but it is dependent on other factors: policies, reward systems and procedures." RP10: "Smaller amounts of fraud are not so easily detected in large organisations, but will be picked up in small organisations. So yes, larger organisations lose more small amounts of money, which are never detected and, if ever detected, then they are written off." RP11: "The bigger the organisation becomes, the more cumbersome and difficult control becomes."
Organisation's life stage	RP2: "Old organisations, like government, are more prone to fraud, as all the paperwork and employees increase the likelihood of fraud." RP5: "Fraudsters will sometimes tackle new organisations in the form of cheque fraud or fake cash deposits." RP7: "Younger organisations don't always have the controls, especially if they don't appoint the correct person in the beginning, and then only when fraud happens for the first time, then they start looking at closing the loopholes." RP13: "I don't think that plays a role, as newer organisations have fewer members, while older organisations have more members but usually also more controls." RP17: "Organisational life stage has the least effect although it still has an effect, as can be seen in the Report to the Nations."

Feedback on the adapted framework from research participants

The feedback on the adapted framework (as a whole) is presented in Table 5. These participants were all senior certified fraud investigators.

Table 5: Feedback on adapted framework from research participants

Research Participant	Feedback
RP18	"No change recommended. Workable model."
RP19	"The list accounts for the different types of determinants I have observed during my years as a fraud investigator."
RP20	"The 'process' of fraud is a complex one, and a multitude of factors generally play a role. Great approach, would like to see your final work."
RP21	"I would add informal sub-cultures to the determinants of organisational climate. Model is similar to the effect of seasonality in terms of spheres of business—i.e. higher crime rate in summer, higher sales and transactions over Easter and the Festive season—employees, including management, also experience the effect of seasonal behaviour. The levels of concentration and propensity for mistakes, blatant disregard of policies and procedures and fraud are cyclical. Internal and management fraud risk increases during lower peak periods when employees have capacity and time available to investigate and test systems and policies."
RP23	"All factors mentioned play a role, although I would include the following determinant: entrenchment of ethical values, and in the moderating factors I would include the history of the organisation in dealing with similar cases."

Discussion

The aim of the study was to identify elements within an organisation's climate that can be used to detect and prevent the potential risk of management fraud. The literature reviewed showed that there are a number of elements which shape organisational climate. This study found that, among these, the two primary elements that influence the likelihood of management fraud are leadership and the articulation of managerial values.

Leadership style or "tone at the top" creates an ethical or unethical atmosphere in the workplace (Vinten 2003; Zahra et al. 2007). According to Engelbrecht, Van Aswegen, and Theron (2005), leaders are responsible for developing and sustaining a strong ethical climate. Management's attitudes and actions have the power to set the ethical tone of an organisation (Simpson and Taylor 2013). Even when leaders do not engage in fraudulent behaviour directly, they can still promote wrongdoing by rewarding it, covering it up, or ignoring or condoning unethical activity (Zahra et al. 2007). Leaders need to behave ethically in their everyday talk, decisions and actions, as the tone at the top (as expressed through the words and actions of senior leaders), plays a vital part in setting the standard of behaviour in an organisation (Kuntz, Kuntz, Elenkov, and Nabirukhina 2013).

This focused review of existing commentary on the importance of leadership style in terms of setting an ethical tone, along with the data collected in this study, supports the hypothesis that leadership style is a predominant element when it comes to considering the likelihood of management fraud in an organisation. The findings of this study further suggest that this element is significant as an indicator and predictor of management fraud in particular. As such, it would be vital to include it in any model that sought to predict or prevent management fraud.

Values held by managers are acknowledged from previous research as playing a critical role in an employee's decision to commit fraud, since values lead to action and shape decisions, but even organisations like Enron—despite being quite explicit in their office banners and training videos about core ethical values, including integrity, honesty and respect—failed to live up to them (Kullik, O'Fallon, and Salimath 2008; Schwartz 2013). The reason for this, according to Ghosh (2008), is that Enron CEO, Skilling, considered cheating as acceptable behaviour as long as employees made money and hence unethical behaviour became the norm. Grojean, Resick, Dickson, and Smith (2004) propose that leaders, specifically middle management, should be trained in acceptable organisational values, as climate regarding ethics is a value-laden construct. Litzky et al. (2006) argue that managers need to acknowledge their role in shaping organisational ethics and seize the opportunity to create an organisational climate that can strengthen the relationships and reputations on which the organisation's successes depend. This is echoed by commentators like Pareek (cited in Srivastav 2009).

This study confirmed that one of the most significant elements influencing the perpetration of fraudulent behaviour in an organisation is whether or not any professed values are put into practice or not. Further, this study found that, interestingly, the effective inculcation of values within an organisation even has the potential to delimit the perpetration of fraud on the part of management. This confirms the significance and power of organisational climate in detecting and preventing the potential risk of fraud within an organisation. Even those who are invested with the power, trust and responsibility to shape what is understood as respectable in an organisation, are themselves moulded by that organisation's climate; especially if they have failed to integrate ethical values in key organisational systems.

Leaders who demonstrated hypocrisy in terms of ethical behaviour, or who were lenient towards unethical behaviour, contributed towards a fraud-conducive climate in the opinion and experience of the participants. In the view of the participants, for values to be effective, members of the organisation (at every level) must perceive that professed values are being implemented consistently and that they are manifest in behaviours, attitudes and policies throughout the organisation. Nevertheless, leaders are still seen as the primary custodians and representatives of these values.

Conclusion

In this study, it was found, in the views and experiences expressed by the participants, that leadership style and managerial values play a role in management fraud. Organisational policies were also seen to be factors influencing the potential for management fraud. However, the study found that perceptions concerning the consistent implementation of such policies were more impactful on the occurrence of management fraud than whether or not the organisation simply had such policies. Factors that were not seen as influential in terms of management fraud were economic conditions, characteristics of members, nature of business, organisational size and life span.

Organisational climate remains a predominant factor whether or not managers choose to commit fraud. The contribution of this study had been to highlight three elements that are hugely significant in determining whether or not an organisational climate conducive to management fraud can come to exist. The logical extension of this study would be to operationalise these elements in such a way that the potential of management fraud can be measured. Such measurement is likely to employ dimensions of organisational climate, namely autonomy, degree of structure, reward/recognition, trust, group and team cohesion, perceived individual pressure, risk taking, and fairness/innovation (Koys and DeCotis 1991). The exact relationship between these dimensions and the elements explored in this study provides a future research prospect.

Implications for Practice

The aim of the study was to identify elements within an organisation's climate that can be used to detect and prevent the potential risk of management fraud. In accordance with the literature reviewed, this study found that leadership style, management values and implementation of policies are the primary climate-derived factors determining the likelihood of management fraud.

It is recommended that leadership on all levels communicates and enacts certain values with employees. Communication and enactment of these values will demonstrate an adoption of core ethical values of the organisation. These principles need to be consistently fostered in employees by means of encouragement, reward and socialisation (Grosjean et al. 2004). For example, the performance management system of an organisation can reward employees for demonstrating appropriate ethical behaviour.

Continuous and regular assessment of the identified elements within an organisation may encourage open communication between employees and management and lead to a positive climate that encourages and rewards whistle-blowing. This study has proposed apposite elements that may form the basis of any organisational assessment mechanism. It is clear that a primary factor in creating a unified climate is ensuring that leaders communicate and apply a consistent set of ethical standards. The behaviour of leaders is a powerful communication mechanism that conveys the expectations, values and assumptions of the organisational culture and climate to the rest of the organisation (Grosjean et al. 2004).

Limitations of this study

Several limitations of this study need to be considered:

- Value could have been added if perspectives from multiple individuals charged or prosecuted in relation to management fraud could have been obtained. It is suggested that such a study would elicit important information currently unavailable.
- Strictly speaking, this was a pilot study. It would be prudent and beneficial to repeat it with a wider base of participants. If this were done, it would also allow for significant analysis concerning multiple variables such as industry context or level in organisation. It would be valuable if this study could be replicated in a specific industry.
- The study has identified two determinant elements relating to a fraud-conducive climate. The challenge is now to operationalise these elements in such a way that they can be readily employed to detect and predict the probability of management fraud in an organisation.

Acknowledgements

We would like to thank Dr Eugene de Klerk for his comments and language editing.

References

ACFE. 2012. "Report to the Nations on Occupational Fraud and Abuse: 2012 Global Fraud Study," s.l.: Association of Certified Fraud Examiners.

Albrecht, W. S., Albrecht, C. C., Albrecht, C. O., and Zimbelman, M. F. 2009. *Fraud Examination* (3rd edition). USA: South-Western Cengage Learning. https://doi.org/10.4016/10828.01.

Allen, D. K. 2003. "Organisational Climate and Strategic Change in Higher Education: Organisational Insecurity." *Higher Education* 46: 61–92. https://doi.org/10.1023/A:1024445024385.

Alvesson, M., and Karreman, D. 2011. *Qualitative Research and Theory Development: Mystery as Method.* London: Sage Publications. https://doi.org/10.4135/9781446287859.

Ardichvili, A., Cardozo, R., and Ray, S. 2003. "A Theory of Entrepreneurial Opportunity Identification and Development." *Journal of Business Venturing* 18: 105–123. https://doi.org/10.1016/S0883-9026(01)00068-4.

Babbie, E., Mouton, J., Vorster, P., and Prozesky, B. 2010. *The Practice of Social Research: South African Edition.* New York: Oxford University Press.

Barnard, G., and Fourie, L. 2007. "Exploring the Roles and Contributions of Industrial Psychologists in South Africa against a Multi-Dimensional Conceptual Framework." *S.A. Journal of Industrial Psychology* 33 (2): 45–53. https://doi.org/10.4102/sajip.v33i2.375; https://doi.org/10.4102/sajip.v33i2.376.

Baucus, M. S., and Near, J. P. 1991. "Can Illegal Corporate Behaviour be Predicted? An Event History Analysis." *Academy of Management Journal* 34 (1): 9–36. https://doi.org/10.5465/256300; https://doi.org/10.2307/256300.

Benjamin, A. 2012. "Human Resource Development Climate as a Predictor of Citizenship Behaviour and Voluntary Turnover Intentions in the Banking Sector." *International Business Research* 1 January, 5 (1): 110–119. https://doi.org/10.5539/ibr.v5n1p110.

Berg, B. L. 2007. *Qualitative Research Methods for the Social Sciences* (7th edition). Boston: Pearson Education.

Bergh, Z. 2011. *Introduction to Work Psychology.* Cape Town: Oxford University Press.

Bernard, H. R. 2013. *Social Research Methods: Qualitative and Quantitative Approaches* (2nd edition). California: Sage Publishing.

Bierstaker, J. L., Brody, R. G., and Pacini, C. 2006. "Accountants' Perceptions Regarding Fraud Detection and Prevention Methods." *Managerial Auditing Journal* 21 (5): 520–535. https://doi.org/10.1108/02686900610667283.

Brief, A. P., Dukerich, J. M., Brown, P. B., and Brett, J. F. 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* Volume 15: 183–198. https://doi.org/10.1007/BF00705586.

Brooks, L. J., and Dunn, P. 2010. *Business and Professional Ethics for Directors, Executives and Accountants.* South Western: Cengage Learning.

Brown, M. E. 2007. "How to Avoid Potential Pitfalls." *Organizational Dynamics* 36 (2): 140–155. https://doi.org/10.1016/j.orgdyn.2007.03.003.

Castro, M. L., and Martins, N. 2010. "The Relationship between Organisational Climate and Employee Satisfaction in a South African Information and Technology Organisation." *SA Journal of Industrial Psychology* 36 (1), Art. #900, 9 pages. https://10.4102/sajip.v36il.800.

Charron, K. F., and Lowe, D. J. 2008. "Skepticism and the Management Accountant: Insights for Fraud Detection." *Management Accounting Quarterly* 9 (2).

Churyk, N. T., Lee, C., and Clinton, D. 2008. "Can we Detect Fraud Earlier? A Technique Called Content Analysis Raises the Possibility." *Strategic Finance* 51–54.

Creswell, J. W. 1994. *Research Design: Qualitative and Quantitative Approaches.* California: Sage Publications.

De Cremer, D., Tenbrunsel, A. E., and Van Dijke, M. 2010. "Regulating Ethical Failures: Insights from Psychology." *Journal of Business Ethics* 95: 1–6. https://doi.org/10.1007/s10551-011-0789-x.

De Hoogh, A. H., and Den Hartog, D. N. 2008. "Ethical and Despotic Leadership, Relationships with Leaders' Social Responsibility, Top Management Team Effectiveness and Subordinates' Optimism: A Multi-Method Study." *The Leadership Quarterly* Volume 19: 297–311. https://doi.org/10.1016/j.leaqua.2008.03.002.

Doody, H. 2008. *Fraud Risk Management: A Guide to Good Practice,* UK: CIMA.

Dorminey, J., Fleming, A. S., Kranacher, M. J., and Riley, R. R. 2012. "The Evolution of Fraud Theory." *Issues in Accounting Education* 27 (2): 555–579. https://doi.org/10.2308/iace-50131.

Dubin, R. 1969. *Theory Building: A Practical Guide to the Construction and Testing of Theoretical Models.* New York: The Free Press.

Dubin, R. 1978. *Theory Building: Revised Edition.* New York: The Free Press.

DuBrin, A. J. 1984. *Foundations of Organizational Behaviour: An Applied Perspective.* London: Prentice-Hall.

Engelbrecht, A. S., Van Aswegen, A. S., and Theron, C. C. 2005. "The Effect of Ethical Values on Transformational Leadership and Ethical Climate in Organisations." *South African Journal of Business Management* 36 (2): 19–27.

Erakovich, R., Bruce, R., and Wyman, S. 2002. "Preliminary Results: A Study of the Relationship of Ethical Work Climate and Organisational Culture in Public Organisations." American Society for Public Administration National Conference. Phoenix, Arizona.

Fleckenstein, M. P., and Bowes, J. C. 2000. "When Trust Is Betrayed: Religious Institutions and White Collar Crime." *Journal of Business Ethics* 111–115. https://doi.org/10.1023/A:1006283213766.

Free, C. 2015. "Looking through the Fraud Triangle: A Review and Call for New Directions." *Meditari Accountancy Research* 23 (2): 175–196. https://doi.org/10.1108/MEDAR-02-2015-0009.

Ghosh, D. 2008. “Corporate Values, Workplace Decisions and Ethical Standards of Employees.” *Journal of Managerial Issues* XX (1): 68–87.

Gill, M. 2011. “Fraud and Recessions: Views from Fraudsters and Fraud Managers.” *International Journal of Law, Crime and Justice* Volume 39: 204–214. https://doi.org/10.1016/j.ijlcj.2011.05.008.

Grojean, M. W., Resick, C. J., Dickson, M.W., and Smith, D. B. 2004. “Leaders, Values, and Organizational Climate: Examining Leadership Strategies for Establising an Organizational Climate Regarding Ethics.” *Journal of Business Ethics* 55 (3): 223–241. https://doi.org/10.1007/s10551-004-1275-5.

Handal, K. V., and Blount, S. 2009. “Now more than Ever.” *Using Technology to Simplify Compliance* 28 (7): 14–16.

Henning, E., Van Rensburg, W., and Smit, B. 2004. *Finding your Way in Qualitative Research.* Pretoria: Van Schaik Publishers.

Hemraj, M. B. 2004. “Preventing Corporate Scandals.” *Journal of Financial Crime* 11 (3): 268–276. https://doi.org/10.1108/13590790410809202.

Holtfreter, K. 2005. “Is Occupational Fraud ‘Typical’ White-Collar Crime? A Comparison of Individual and Organizational Characteristics.” *Journal of Criminal Justice* Volume 33: 353–365. https://doi.org/10.1016/j.jcrimjus.2005.04.005.

Holton III, E. F., and Lowe, J. S. 2007. “Toward a General Research Process for Using Dubin's Theory Building Model.” *Human Resource Development Review* 6 (3): 297–320. https://doi.org/10.1177/1534484307304219.

Huberts, L., Kaptein, M., and Lasthuizen, K. 2007. “A Study of the Impact of Three Leadership Styles on Integrity Violations Committed by Police Officers.” *Policing: An International Journal of Police Strategies and Management* 30 (4): 587–607. https://doi.org/10.1108/13639510710833884.

Koro-Ljungberg, M. 2010. “Validity, Responsibility, and Aporia.” *Qualitative Inquiry* 16 (8): 603–610. https://doi.org/10.1177/1077800410374034.

Koys, D. J., and DeCotis, T. A. 1991. “Inductive Measures of Psychological Climate.” *Human Relations* 44 (3): 265–285. https://doi.org/10.1177/001872679104400304.

Kranacher, M. 2007. “An Ounce of Prevention.” *The CPA Journal*.

Kullik, B. W., O’Fallon, M. J., and Salimath, M. S. 2008. “So Competitive Environments Lead to the Rise and Spread of Unethical Behavior? Parallels from Enron.” *Journal of Business Ethics* 83: 703–723. https://doi.org/10.1007/s10551-007-9659-y.

Kuntz, J. R. C., Kuntz, J. R., Elenkov D., and Nabirukhina, A. 2013. “Characterizing Ethical Cases: A Cross-Cultural Investigation of Individual Differences, Organisational Climate, and Leadership on Ethical Decision-Making.” *Journal of Business Ethics* 113: 317–331. https://doi.org/10.1007/s10551-012-1306-6.

Lawshe, C. 1975. “A Quantitative Approach to Content Validity.” *Personnel Psychology* Volume 28: 563–575. https://doi.org/10.1111/j.1744-6570.1975.tb01393.x.

Lee, R. M., and Fielding, N. G. 2004. *Handbook of Data Analysis.* London: Sage Publications.

Lindell, M. K., and Brandt, C. J. 2000. “Climate Quality and Climate Consensus as Mediators of the Relationship Between Organizational Antecedents and Outcomes.” *Journal of Applied Psychology* 85 (3): 331–248. https://doi.org/10.1037/0021-9010.85.3.331.

Lister, L. M. 2007. “A Practical Approach to Fraud Risk.” *Internal Auditor* December: 61–65.

Litzky, B. E., Eddleston, K. A., and Kidder, D. 2006. “The Good, the Bad, and the Misguided: How Managers Inadvertently Encourage Deviant Behaviours.” *Academy of Management Perspectives* February, 20 (1): 91–103. https://doi.org/10.5465/amp.2006.19873411.

Lynham, S. 2002. “The General Method of Theory-Building Research in Applied Disciplines.” *Advances in Developing Human Resources* 4: 221–241. https://doi.org/10.1177/15222302004003003; https://doi.org/10.1177/15222302004003002 https://doi.org/10.1177/1523422302043002.

Mayer, D. M., Kuenzi, M., and Greenbaum, R. L. 2010. “Examining the Link between Ethical Leadership and Employee Misconduct: The Mediating Role of Ethical Climate.” *Journal of Business Ethics* 95 (Supplement 1): 7–16. https://doi.org/10.1007/s10551-011-0794-0.

Mullane, S. 2009. *Ethics and Leadership,* s.l.: University of Miami. White paper series: Leadership Institute.

Murcia, F. D. R., and Borba, J. A. 2007. “Framework for Detecting Risk of Financial Statement Fraud: Mapping the Fraudulent Environment.” *Brazilian Business Review* 4 (3): 162–177. https://doi.org/10.15728/bbr.2007.4.3.1.

Murdock, H. 2008. “The Three Dimensions of Fraud.” *Internal Auditor* 81–83.

Murphy, P. R., and Free, C., 2016. “Broadening the Fraud Triangle: Instrumental Climate and Fraud.” *Behavioral Research in Accounting* 28 (1): 41–56. https://doi.org/10.2308/bria-51083.

Murphy, P. R., Free, C., and Branston, C. 2011. *Organizational Culture as a Predictor of Fraud,* 27 (9)

Newman, I., Lim, J., and Pineda, F. 2013. “Content Validity Using a Mixed Methods Approach: Its Application and Development Through the Use of a Table of Specifications Methodology.” *Journal of Mixed Methods Research* 7 (3): 243–260. https://doi.org/10.1177/1558689813476922.

Noy, C. 2008. “Sampling Knowledge: The Hermeneutics of Snowball Sampling in Qualitative Research.” *Journal of Social Research Methodology* 11 (4): 327–344. https://doi.org/10.1080/13645570701401305.

Oosthuizen, D. J. 2009. “Constructing a Smoking Behaviour Model to Guide Decision-Making in Dark Marketing.” Johannesburg: Unpublished Doctorate Thesis.

Pathak, J., and Wells, A. 2008. “Financial Fraud: Causes, Consequences and the Accounting Profession’s Role: A Canadian Perspective.” *The Icfai Journal of Audit Practice* 5 (1): 24–35.

Pednault, S. 2009. *Fraud 101* (3rd edition). New Jersey: John Wiley & Sons.

Pickett, K. 2011. *Fraud Smart.* West Sussex: John Wiley & Sons. https://doi.org/10.1002/9781119208853.

Polit, D. F., Beck, C. T., and Owen, S. V. 2007. “Is the CVI an Acceptable Indicator of Content Validity? Appraisal and Recommendations.” *Research in Nursing and Health* Volume 30: 459–467. https://doi.org/10.1002/nur.20199.

Ponterotto, J. G. 2010. “Qualitative Research in Multicultural Psychology: Philosophical Underpinnings, Popular Approaches, and Ethical Considerations.” *Cultural Diversity and Ethnic Minority Psychology* 16 (4): 581–589. https://doi.org/10.1037/a0012051.

Quick, J. C., and Nelson, D. L. 2009. *Principles of Organizational Behaviour: Realities and Challenges* (6th edition*).* Australia: South-Western Cengage Learning.

Ramamoorti, S., and Olsen, W. 2007. “Fraud: The Human Factor.” *Financial Executive* 53–55.

Rezaee, Z., and Riley, R. 2010. *Financial Statement Fraud:Prevention and Detection.* (2nd edition). New Jersey: John Wiley & Sons.

Robbins, S. 2001. *Organizational Behaviour.* (9th edition). New Jersey: Prentice-Hall.

Robbins, S., and Judge, T. 2011. *Organizational Behaviour.* (14th edition). New Jersey: Prentice-Hall.

Roxas, M. L. 2011. “Financial Statement Fraud Detection Using Ratio and Digital Analysis.” *Journal of Leadership, Accountability and Ethics* 8 (4): 56–66.

Schminke, M., Arnaud, A., and Kuenzi, M. 2007. “The Power of Ethical Work Climates.” *Organisational Dynamics* 36 (2): 171–186. https://doi.org/10.1016/j.orgdyn.2007.03.005.

Schneider, B., Ehrhart, M. G., and Macey, W. H. 2011. *The Handbook of Organizational Culture and Climate* (2nd edition). Los Angeles: Sage Publications.

Schurink, W., and Schurink, E. 2012, May 29–31. "Qualitative Research: Proposal Writing." Workshop on Qualitative Research for the Department of Industrial Psychology. Bloemfontein, Free State Province, South Africa.

Schwartz, M. 2013. "Developing and Sustaining an Ethical Corporate Culture: The Core Elements." *Business Horizons* Volume 56: 39–50. https://doi.org/10.1016/j.bushor.2012.09.002.

Shah, S. K., and Corley, K. G. 2006. "Building Better Theory by Bridging the Quantitative-Qualitative Divide." *Journal of Management Studies* 43 (8): 1821–1833. https://doi.org/10.1111/j.1467-6486.2006.00662.x.

Shenton, A. K. 2004. "Strategies for Ensuring Trustworthiness in Qualitative Research Projects." *Education for Information* 22: 63–75. https://doi.org/10.3233/EFI-2004-22201.

Shepard, S. 2004. *Managing the Millennials.* Vermont: Shepard Communications Group.

Silverman, D. 2001. *Interpreting Qualitative Data: Methods for Analysing Talk, Text and Interaction.* London: Sage Publications.

Silverstone, H., and Davia, H. R. 2005. *Fraud 101: Techniques and Strategies for Detection.* New Jersey: John Wiley & Sons.

Simpson, J., and Taylor, J. 2013. *Corporate Governance, Ethics and CSR.* London: KoganPage.

Spathis, C. T. 2002. "Detecting False Financial Statements Using Published Data: Some Evidence from Greece." *Managerial Auditing Journal* 17 (4): 179–191. https://doi.org/10.1108/02686900210424321.

Srivastav, A. 2009. "Heterogeneity of Organisational Climate." *Research and Practice in Human Resource Management* 17 (2): 1–13.

Stalebrink, O. J., and Sacco, J. F. 2007. "Rationalization of Financial Statement Fraud in Government: An Austrian Perspective." *Critical Perspectives on Accounting* Volume 18: 489–507. https://doi.org/10.1016/j.cpa.2006.01.009.

Swanson, R. A. 2007. "Theory Framework for Applied Disciplines: Boundaries, Contributing, Core, Useful, Novel, and Irrelevant Components." *Human Resource Development* 6: 321–339. https://doi.org/10.1177/1534484307303770.

Sweeney, P. 2003. "Fraud: What Starts Small Can Snowball." *Financial Executive International.*

Tickner, P. 2010. *How to be a Successful Frauditor: A Practical Guide to Investigating Fraud in the Workplace for Internal Auditors and Managers*. West Sussex: John Wiley & Sons.

Tracey, J., Gordon, A., White, T., and MacPhail, L. 2009. "Fraud in a Downturn: Review of how Fraud and other Integrity Risks Affect Business in 2009." www.pwc.co.za.

Uhl-Bien, M., and Carstens, M. K. 2007. "Being Ethical when the Boss Is Not." *Organizational Dynamics* 36 (2): 187–201. https://doi.org/10.1016/j.orgdyn.2007.03.006.

Upton, M. G., and Egan, T. M. 2010. "Three Approaches to Multilevel Theory Building." *Human Resource Development Review* 9 (4): 333–356. https://doi.org/10.1177/1534484310380333.

Vaughan, D. 2001. "Toward Understanding Unlawful Organisational Behaviour." *Michigan Law Review Association* 80 (7): 1377–1402. https://doi.org/10.2307/1288553.

Vinten, G. 2003. "Enronitis: Dispelling the Disease." *Managerial Auditing Journal:* 448–455. https://doi.org/10.1108/02686900310482597.

Webber, S. 2007. "Ethical Climate Typology and Questionnaire: A Discussion of Instrument Modifications." *The Journal of Academic Librarianship* 33 (5): 567–580. https://doi.org/10.1016/j.acalib.2007.05.003.

Zahra, S. A., Priem, R. L., and Rasheed, A. A. 2005. "The Antecedents and Consequences of Top Management Fraud." *Journal of Management* 31 (6): 803–828. https://doi.org/10.1177/0149206305279598.

Zahra, S. A., Priem, R. L., and Rasheed, A. A. 2007. "Understanding the Causes and Effects of Top Management Fraud." *Organizational Dynamics* 36 (2): 122–139. https://doi.org/10.1016/j.orgdyn.2007.03.002.

Zona, F., Minoja, M., and Coda, V. 2013. "Antecedents of Corporate Scandals: CEOs' Personal Traits, Stakeholders' Cohesion, Managerial Fraud, and Imbalanced Corporate Strategy." *Journal of Business Ethics* Volume 113: 265–283. https://doi.org/10.1007/s10551-012-1294-6.