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Perceptions on the Causes of Individual and Fraudulent Co-offending: Views of Forensic Accountants

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Abstract Individual and/or co-offenders fraudulent activities can have a devastating effect on a company's reputation and credibility. Enron, Xerox, WorldCom, HIH Insurance and One.Tel are examples where stakeholders incurred substantial financial losses as a result of fraud and led to a loss of confidence in corporate dealings by the public in general. There are numerous theoretical approaches that attempt to explain how and why fraudulent acts occur, drawing on the fields of sociology, organisational, management and economic literature, but there is limited empirical evidence published in accounting literature. This qualitative inductive study analyses perceptions and experiences of forensic accountants to gain insights into individual fraud and co-offending in order to determine whether the conceptual framework developed from literature accurately depicts the causes of fraud committed by individuals and groups in the twenty-first century. Findings from the study both support and extend the conceptual framework, demonstrating that strain and anomie can result in fraud, that deviant sub-groups recruit and coerce members by providing relief from strain, and that inadequate corporate governance mechanisms both contribute to fraud occurring, and provide the opportunity for fraudulent activities to be executed and often remain undetected. Additional factors emerging from this study (the 'techno-conomy', addiction and IT measures) were also identified as contributors to fraud, particularly relevant to the twenty-first century, and consequently, a refined conceptual framework is presented in the discussion and conclusion to the paper.

Keywords Forensic accounting · Fraud · Corporate crime · Governance · Differential association · General strain theory

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Introduction

Fraudulent activities perpetrated by employees at all levels of an organisation can negatively impact on a company's reputation, credibility, and, in some circumstances, survival (Zahra et al. 2007). There has been significant attention from government, the media, academic and practitioner literature on the costs of corporate fraud. Often touted as a prime example of fraudulent co-offending is the infamous US case of Enron (Denteh 2011; Coffee Jr 2003) along with other notable financial scandals such as Arthur Andersen (Kelly 2006), Xerox, WorldCom (Sidak 2003), BAE Systems (Crawford-Brown 2010) and, more recently, Sunbeam, Dell and Refco. Australia is not immune, with similar acts of fraudulent conduct in firms such as HIH Insurance (Latimer 2003), Harris Scarfe and One.Tel and all resulted in substantial financial losses for stakeholders. However, it is not just fraudulent conduct by senior management groups that attract attention; individuals acting alone (at all levels) are committing large-scale frauds in Australia, e.g. Queensland Health $16.4 million, ING $50 million and Leightons Contractors $20 million.

Fraud perpetrated in organisations has many guises and is generally categorised under the label of 'white collar crime', a concept originally established by Edwin Hill

(1870s), and later cemented by Sutherland (1949), who describes white collar crime as that committed by a person of respectability and high social status in the course of his or her occupation. He argues that, typically, white collar criminals are opportunists, intelligent and affluent whose work often involves access to large sums of money.

Distinguishing between types of white collar crime, Davis (2000) and Stone and Miller (2012) suggest that there are two basic fraud categories: financial statement fraud (the creation and dissemination of materially misleading financial statements); and (2) asset misappropriation (fraud that involves third parties or employees abusing their position to steal from an organisation, e.g. embezzlement through the manipulation of accounts, false invoicing, deception by employees, payroll fraud, intellectual property theft). Zahra et al. (2005, p. 806) argue that fraud can occur *"as part of either occupational or corporate crime, can be perpetrated by those at the very top or the very bottom of the managerial hierarchy, and can result from active participation or passive acquiescence"*. In this study, we use the terms individual fraud and co-offending to describe incidences that are perpetrated by individuals and/or groups in the corporate world.

To investigate, resolve and minimise fraud, forensic accounting practitioners are consulted for their specific skills and expertise. Their work includes investigating financial inconsistencies, analysing evidence, interviewing potential suspects and preparing expert reports in their attempt to identify the person or persons responsible for the crime. In addition, the ability to profile a potential suspect forms part of their role and may require a basic understanding of how the criminal mind works, what motivated a suspect to commit fraud and how the crime was executed.

Whilst there are numerous theoretical approaches explaining why corporate employees and management commit fraudulent crimes, published work to date demonstrates that no single theoretical approach has been identified as the best explanation (Benson and Mandensen 2009; Zahra et al. 2005; Donegan and Ganon 2008; Cohen et al. 2010). Further, little accounting research is currently available that distinguishes between individuals who commit fraud and groups acting together within (and outside) an organisational setting. As Zahra et al. (2007) suggest, research needs to address what motivates lower level through to senior managers to engage in fraud and how people succeed in co-opting and involving others in their fraudulent schemes.

As a result of this gap in the literature, the research problem addressed in this qualitative inductive study is to *identify the causes and enablers of individuals and co-offenders who commit fraud*. To address the research problem, we present three research questions:

1. What behavioural, environmental and social contexts lead to individuals and co-offenders committing fraud?
2. How do groups form in organisations to commit fraud?
3. What governance and control system weaknesses are identified as contributing to fraud and enabling fraudulent individuals and co-offenders?

There has been much attention on causes of fraud based around the 'Fraud Triangle', developed by Cressey (1953). The theory originated from sociology literature and was adopted as an empirically valid explanation of fraud describing three necessary conditions for crimes to occur: pressure (a non-shareable financial problem), opportunity (lack of internal controls) and rationalisation (the ability to justify one's actions) (Donegan and Ganon 2008). Cressey's (1953) theory focused on the individual, and identified improving organisational internal control measures as the deterrent for preventing fraud. Coleman (2002, p. 195) criticised Cressey's (1953) work by indicating: *"There appears to be no necessary reason why an embezzlement must result from a non-shareable problem instead of a simple desire for more money"*. This view was supported by Albrecht et al. (2008) who suggest that pressure can be financial or non-financial, providing examples of the latter as the need to report results better than actual performance or frustration with work. As a result of shortcomings identified in the fraud triangle, a number of studies have since expanded the original model (see for example Donegan and Ganon 2008; Zahra et al. 2005; Kassem and Higson 2012; Dorminey et al. 2012; Albrecht et al. 2008; Wolfe and Hermanson 2004; and Kranacher et al. 2011). Both Kassem and Higson's (2012) and Dorminey's et al. (2012) adapted models incorporate the contexts of motivation, opportunity, integrity, ego and capability, which they argue address inherent limitations in Cressey's original theory.

Regardless of the adaptations to Cressey's (1953) work, there is considerable empirical evidence stemming from criminology, organisational and management literature that suggests there are further limitations to the fraud triangle—namely the exclusion of organisational/governance and criminological contexts (Cohen et al. 2010; Donegan and Ganon 2008; Ramamoorti 2008; Zahra et al. 2005, 2007), and that the fraud triangle is not a general theory or adequate tool for explaining or detecting every occurrence of fraud (Lokanan 2015). In particular, prior research suggests that examining fraud through a criminology lens (Donegan and Ganon 2008; Ramamoorti 2008; Zahra et al. 2007) and incorporating governance theory (Bell and Carcello 2000; Loebbecke et al. 1989; Beasley 1996; Young 2000; Simpson and Piquero 2002) can provide deeper and broader insights to fraudulent co-offending at the individual and organisational level (Holtfreter 2005). We believe our study provides a more comprehensive approach to understanding by incorporating behavioural science and corporate governance constructs, extending the work of Zahra et al. (2005) into a new refined conceptual framework.

The significance of this study is that it is the first of its kind to gather qualitative empirical data from forensic accounting practitioners' perceptions and experiences on the causes of individual and collusive fraud. The study also contributes to accounting, governance and management academic literature by moving beyond Cressey's (1953) Fraud Triangle to demonstrate that strain and anomie, particularly financial pressures and environmental conditions, commonly lead to fraud; that deviant sub-groups (co-offenders) recruit and coerce members by providing relief from strain; and, finally, inadequate corporate governance mechanisms not only contribute to incidences of fraud occurring, but also provide the opportunity for fraudulent activities to be executed and remain undetected. We also develop and refine a conceptual framework on the causes of fraud, extending work by Zahra et al. (2005) and Cohen et al. (2010) by iterating between the fraudulent conceptual framework developed from the literature and the qualitative perceptions of fraud investigative experiences from forensic accountants.

The remainder of the paper is structured thus: we review theoretical approaches used to examine management fraud within the disciplines of behavioural science (focused on criminology) and corporate governance. This is followed by the presentation and discussion of the conceptual framework used in this study that emerged from the literature. The research design is described, followed by the findings, discussion and conclusion which includes discussion of the refined conceptual framework.

Alternative Theories on Causes of Management Fraud

Much of the focus of current literature on the occurrence of fraud emanates from organisational theory (e.g. corporate governance) and/or behavioural sciences, namely, Cressey's (1953) fraud triangle. Any organisation can be impacted by fraud, and Ramamoorti (2008) provides examples where behavioural science supports the interdisciplinary field of fraud examination and forensic accounting (for example, see Ramamoorti and Olsen 2007; Pavlo and Wineberg 2007; De Angelis 2000), and concurs with Devine (1960) that behavioural accounting research remains "hopelessly inadequate".

In accounting literature, many predictors of fraud have been identified such as rapid company growth (Loebbecke et al. 1989), tone from the top (Horton 2002; Bruisnsma and Wemmenhove 2009), weak internal controls (Goh 2009), and auditor change and insider trading (Summers and Sweeney 1998). However, psychological and sociological factors from the behavioural sciences have also been used to better understand fraud by demonstrating how levels of 'strain' contribute to the problem (see for example Barton 2001; Guidry et al. 1999; Summers and Sweeney 1998; Brennan and McGrath 2007; DuCharme et al. 2001; Zahra et al. 2007; Baucus 1994; and Ashforth and Anand 2003). The relevance of reviewing behavioural research is that it moves beyond Cressey's (1953) work, and supports Carl Devine who suggested in 1960 that behavioural accounting research will improve understanding of the motivations behind acts of fraud.

Criminology—Strain and General Strain Theory

To address our first research question, we investigate the behavioural science discipline of criminology as it provides an approach to the study of crime that considers the behavioural, environmental and social contexts of criminal behaviour by individuals (Ramamoorti 2008). There are many sub-categories within criminology theory including classical theory, individual trait theory, social disorganisation theory, differential association theory, anomie theory, strain and general strain theory, and rational choice theory (see Cullen and Agnew 2002). A growing body of accounting and organisational research supports the application of criminology theory to examine the motivations of accountants and CEOs who have been involved in fraud, and many of those studies integrate two or more of the above theories (Free and Murphy 2015; Zahra et al. 2005, 2007; Cohen et al. 2010; Donegan and Ganon 2008). For example, Donegan and Ganon (2008) support Colvin et al. (2002) who suggest that the integration of coercion/strain and differential association theories provides possible explanations for criminal behaviour by accountants at both the individual and group level.

Cressey (1953) would describe strain as motivated purely by financial anxiety and represented in the fraud triangle as 'pressure'. However, Agnew (1992) suggests the removal of something positive from an individual's life due to the hostile actions of others (through, for example, intimidation or hostility from supervisors, loss of respect from peers, bullying) can also lead to fraudulent activities, and, from this notion, General Strain Theory (GST) emerged. Strain theorists also suggest that social problems such as crime result from a failure of institutions, families and other structures to provide for the functional and effective needs of individuals (Merton 1938). This ineffectiveness creates a sense of alienation, commonly referred to as *anomie*, which can manifest through a number of harmful actions including fraud. Strain and anomie can arise from circumstances such as unattainable economic goals that create ongoing anxiety over the gap between an individual's present statuses and approved societal goals of wealth and desirable levels of success (Zahra et al. 2005; Cohen et al. 2010; Donegan and Ganon 2008; Langton and Piquero 2007). Strain is not a condition felt only by those of low social class, but affects anyone who feels blocked from attaining financial success, even if, as Donegan and Ganon (2008) suggest, they are already considered wealthy and successful. How an individual responds to strain will determine their reaction, and, as Agnew et al. (2002) and Zahra et al. (2007) posit, it is the personality traits that impact on an individual's reaction to strain and determines whether this will lead to fraud.

In an organisational context, General Strain Theory (GST) posits that anomie is created through what Colvin (2000) describes as *interpersonal* or *impersonal coercion* at either the micro- and/or macro-level. *Interpersonal* (micro-level) coercion results from negative relationships within an organisation, and *impersonal* (macro-level) coercion from circumstances beyond an individual's control such as structural arrangements and circumstances (Colvin et al. 2002). Regardless of where the coercion originates, the result can be feelings of anxiety, desperation and anger, which may lead to fraud.

GST is relevant to our study as it considers contexts such as large, bureaucratic organisations where success may be less attainable, firms with harsh promotion policies, unattainable budgets and unrealistic productivity demands—all of which can lead to feelings of anomie and may result in fraud (Colvin et al. 2002; Donegan and Ganon 2008; Simpson and Piquero 2002; Eichenwald 2005). GST suggests that coercive interpersonal relations (e.g. unjust treatment) or impersonal forces (e.g. external economic pressures) lead to feelings of anomie and strain (Agnew et al. 2002; Colvin et al. 2002). If a person feels pushed by negative stimuli (whether interpersonal or impersonal), this produces a 'strain point', which can lead to depression or anti-social behaviour and, in an organisational context, fraud.

The appropriateness of GST is identified in a number of studies where examples of strain and anomie are argued as causes of fraud. For example, Brennan and McGrath (2007) examined 14 cases of financial statement fraud and found that motivations included the desire for personal gains, inflated stock prices and difficulties in meeting external forecasts. Donegan and Ganon (2008) report that strain experienced by top management was often induced by market-level demands. They also suggest that *anomie* was present in the majority of cases where self-interested actions conducive to maximising wealth and power contributed to incidences of fraud. However, in both studies, other contributing factors are identified, many of which can be explained through cultural deviance theories.

Criminology: Cultural Deviance/Differential Association Theory

The second research question in this study seeks to investigate how groups form in an organisational context for the purpose of fraudulent co-offending. A commonly applied theory related to group fraud is Sutherland's theory of differential association, which Hochstetler et al. (2002, p. 559) describe as 'invaluable' to understand fraudulent co-offending. In essence, Sutherland (1949) postulated that criminal behaviour, including both the technical skills necessary to commit fraud as well as the attendant attitudes and rationalisations, is learned in intimate social groups. Although Sutherland (1949) argues that exposure to criminal behaviour is by itself not sufficient to motivate criminal behaviour, his core proposition is that an excess of criminogenic "definitions" as opposed to conformist "definitions" is conducive to criminality.

In short, Sutherland (1949) suggests that individuals' interaction with deviant peers results in cognitive changes that make offending more attractive and are subsequently *recruited* into the group. This theorization has been augmented by several scholars who suggest that the application of rewards and sanctions (so-called "operant and participant conditioning") is a significant source of behavioural reinforcement (Free and Murphy 2015; Tibbetts et al. 2005; Donegan and Ganon 2008; Colvin et al. 2002; Cullen and Wright 1997; Cloward and Ohlin 1960).

Social support within a sub-group is described by Donegan and Ganon (2008) as including financial assistance, resources, positive affirmations of self-worth and dignity, the giving of advice, guidance, and connections for positive social advancement (Colvin et al. 2002). The social support system can reduce the impact of strain, either by providing resources that allow individuals to cope with adversity through non-criminal means (Cullen and Wright 1997), or through coercively pushing the adoption of the deviant acts of the sub-group.

We have seen many examples of sub-group deviant behaviour from accountants and top management in cases such as Enron, Arthur Anderson and HIH Insurance where a collective group of people who had previously acted ethically and had no prior criminal history committed fraud. The sub-groups that formed within these organisations adopted norms that were morally and ethically opposed to those of the more general groups within each organisation (Cohen et al. 2010; Donegan and Ganon 2008). This indicates that behaviour of those involved in corporate scandals may have been learned from others through socialisation with members with whom they identified (Hagan and McCarthy 1997; Cullen and Wright 1997). Once formed, the deviant sub-cultural groups in each of the organisations provided illegitimate sources of social support (Colvin et al. 2002; Cullen 1994), thereby enabling crime to occur. However, although intuitively appealing, empirical investigations of the theory have been inconclusive. Studies that have sought to empirically test the differential association hypothesis (Albanese 1984; Clinard 1946; Tibbetts et al. 2005; Lane 1953) have delivered mixed results and proven largely inconclusive. This study will therefore provide further insights into the appropriateness of the theory in explaining collusive acts of fraud through the experiences of fraudulent acts forensic accountants have investigated.

Both general strain and differential association theories provide insights into individual and group-level contexts, structural conditions and characteristics that may lead to criminal behaviour. An approach developed by Colvin et al. (2002) to explain causes of crime called the 'Differential Social Support and Coercion' model integrates both theories. This approach is particularly relevant for examining corporate scandals where organised groups of accountants and management form deviant sub-groups to support their criminal activities. As Colvin et al. (2002) suggest, a culture of competitive individualism coupled with the "dog-eat-dog" mentality of westernised society exacerbates the problem of white collar crime.

In addition to criminology and behavioural science theory is a substantial body of accounting literature that identifies inadequate corporate governance and weak control systems as contributing to fraudulent behaviour by employees and management, and this is presented next.

Corporate Governance Mechanisms and Fraud

To investigate the third research question of this study, we examine accounting literature that demonstrates a relationship between inadequate corporate governance, weak control systems and fraudulent acts. Strong evidence suggests that the absence of appropriate systems and processes contributes to the occurrence of fraud (Brennan and McGrath 2007; Coram et al. 2008; Bruisnsma and Wemmenhove 2009; Johansson and Carey 2015; Goh 2009; Ramos 2003; Chapple et al. 2009; Sundaramurthy and Lewis 2003) and can be categorised into five main areas: composition and role of the board of directors; tone from the top; internal control environment; internal and external audit function; and strength and composition of audit committees.

It has been argued that board characteristics such as the proportion of outside directors, the number of board meetings and the tenure of the chair person may impact on the likelihood of management fraud occurring which may lead to insufficient monitoring of management actions and poor organisational performance (Zahra and Pearce 1989; Chapple et al. 2009; Zahra et al. 2005; Chen et al. 2006). Further, inadequate separation of ownership and control between the owners of the organisation and those who manage it may also enable criminal activities (Chapple et al. 2009; Fama and Jensen 1983) as was demonstrated in the WorldCom scandal.

Tone from the top is described as the ethical attitude and culture of integrity the board of directors and senior management disseminate down through the organisation (Brennan and McGrath 2007; Hunton et al. 2011; Patelli and Pedrini 2015; Chen et al. 2006). It is argued that tone from high-level management will either help to prevent fraud or enable it (Patelli and Pedrini 2015), and as Zahra et al. (2005, p. 806) argue: "*Top manager's attitudes and actions towards fraud can promote similar behaviours by others throughout the firm*". It has also been suggested that if the tone from the top does not encourage reliable financial reporting, have positive management attitudes to fraud prevention and/or establish a strong internal control environment, then individual fraud and co-offending (such as financial statement fraud) are more likely to occur (Schaubroeck et al. 2012; Weber 2010; Bruisnsma and Wemmenhove 2009; Brennan and McGrath 2007; Loebbecke et al. 1989; Horton 2002).

A weak internal control environment has also been argued as a significant enabler of fraud. Goh (2009) found that weak internal controls coupled with an ineffective audit committee contributed to criminal activities. Asset misappropriation has also been found to occur where internal controls were weak, specifically segregation of duties and lack of authorisation (Bell and Carcello 2000). Further, inadequate job rotation and inappropriate reviewing of internal controls are highlighted by KPMG (2013) as contributing to the problem. Lack of IT controls has also been identified as being significant enabler of fraud (Ponduri et al. 2014).

Internal audit is another contributing factor identified by Ramos (2003), Coram et al. (2008), Chapple et al. (2009) and Law (2011), who found that if the internal audit function does not undertake additional audit services (directed by the board or audit committee), fraud will occur or not be uncovered quickly. External auditors can also contribute to incidences of criminal activity if, as the ASA240 (ICAA 2013) standards state, they do not maintain professional scepticism throughout an audit and identify, assess and respond to the risks of management fraud.

Finally, an ineffective audit committee is identified in a number of studies as contributing to fraud (Chapple et al. 2009; Young 2000; Law 2011). Young (2000) found that unless the audit committee is the "vanguard" in fraud prevention and detection, then companies are more likely to suffer financial losses. It is also suggested by Chapple et al. (2009) that audit committee quality is dependent on the number of independent audit committee members. Beasley (1996) adds that the effectiveness of the audit committee is lessened if they do not meet on a regular basis.

The literature demonstrates that ineffective governance can contribute to and enable fraud and allow it to continue unabated, and, in some cases, it is years before corporate wrong-doing is discovered. What became evident when reviewing literature on governance and its relationship to fraud was that many studies revealed both governance and criminological contexts. Examples include rapid growth (economic and/or organisational), economic recessions, inadequate or inconsistent profitability, unachievable expectations of the market, misplaced executive incentives, greed, educator failures and management placing undue emphasis on meeting earnings forecasts (for example, see Albrecht et al. 2004; Brennan and McGrath 2007; Bell and Carcello 2000). We now present the conceptual framework that emerged from reviewing criminology and governance literature and depict the relationship between the three research questions.

Conceptual Framework

This study seeks to identify and examine the causes of fraud committed by individuals acting alone and by co-offenders within an organisational setting. We suggest that causes of fraud are as complex and variable as the individuals who commit them. Therefore, we present a conceptual framework (Fig. 1) developed from the literature discussed above to examine why individuals and groups within an organisation are involved in criminal activities. The framework uses an interdisciplinary approach that encapsulates contexts and constructs identified in previous studies as contributing to individual fraud and co-offending.

With the complexity of human nature, it would be naïve to believe that a *one size fits all* approach to understanding why people commit fraud is appropriate. The framework (Fig. 1) provides a number of possible explanatory variables for tracing the causes of fraud within an organisational, behavioural and environmental context. We do not suggest that all factors need to be present for fraud to occur. Instead, the framework may be able to be used as a road map providing insights into the events, decisions,

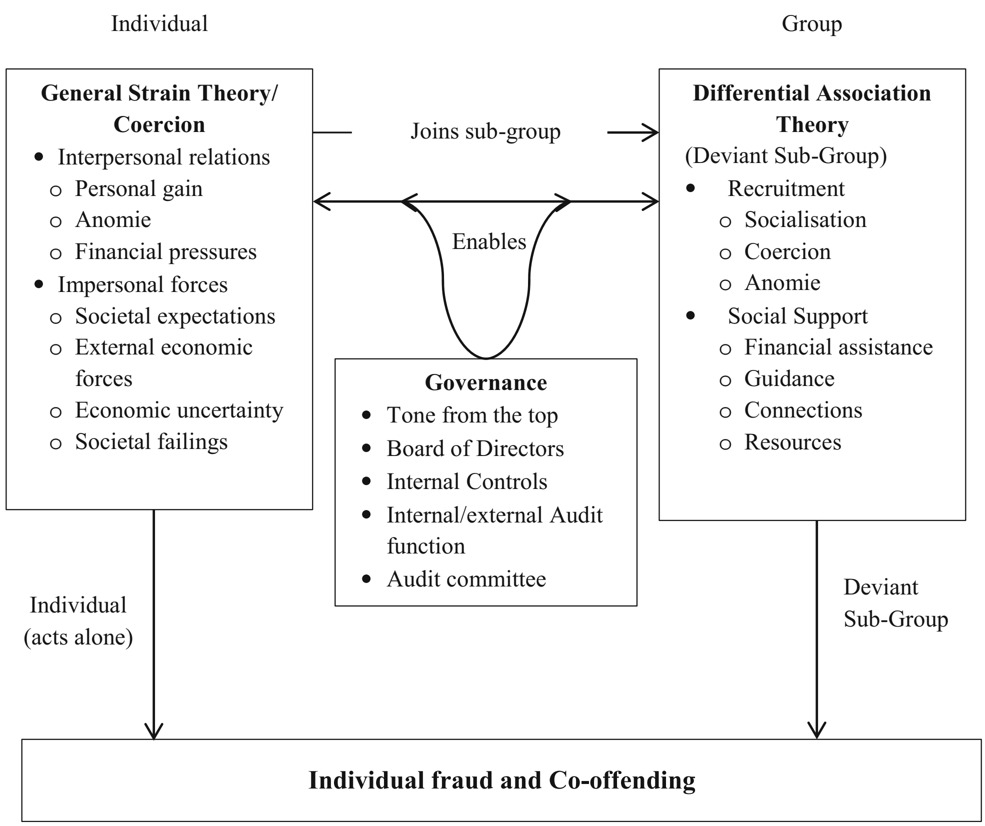

Fig. 1 Conceptual framework of individual fraud and co-offending—causes and enablers. *Sources* Zahra et al. (2005), Cohen et al. (2010), Colvin et al. (2002), Agnew (1992), Donegan and Ganon (2008), Sutherland (1949), Brennan and McGrath (2007), Loebbecke et al. (1989), Beasley (1996)

reactions and actions of institutions, organisations, individuals and/or groups and how each, or a combination of factors, may lead to the corporate scandals and fraudulent crimes we see all too often in the media. When applying the model, the following points should be noted:

- Fraud can be committed by an individual (e.g. Joel Barlow of Queensland Health) or collusively (e.g. Enron, WorldCom).
- People can only be recruited into a sub-group if they are already experiencing strain or anomie, unless coerced forcibly (Zahra et al. 2005; Colvin et al. 2002; Donegan and Ganon 2008; Tibbetts et al. 2005).
- Not all people who experience strain and anomie will turn to fraud. Individual characteristics will determine how an individual reacts (Langton and Piquero 2007; Zahra et al. 2005; Colvin et al. 2002; Agnew et al. 2002).
- Not all people who experience strain or anomie will join a deviant sub-group (Cohen et al. 2010; Donegan and Ganon 2008; Agnew et al. 2002).
- Governance issues can create feelings of frustration and anger leading to strain and anomie (Loebbecke et al. 1989; Albrecht et al. 2004).
- Lack of corporate governance can enable/escalate fraud (Zahra et al. 2005; Loebbecke et al. 1989; Brennan and McGrath 2007; Chapple et al. 2009; Coram et al. 2008; Chen et al. 2006; Beasley 1996; Bell and Carcello 2000).

The term *coercion,* raised in *General Strain Theory,* describes the oppressive environment that can lead to criminal behaviour at the micro- (interpersonal) and/or macro- (impersonal) level. It is argued by Colvin (2000) that the strength of the coercive force (whether interpersonal or impersonal), and the consistency with which it is applied or experienced will impact on the level of strain experienced by an individual or groups within an organisation (research question one).

When fraud is committed by a sub-group within an organisation, *differential association theory* will allow for the examination of the presence of a *sub-group* culture that provides *social support* to its members (research question two). To demonstrate social support, it will be important to: firstly, identify how the sub-group provides assistance to its members such as financial support, resources, positive affirmations, advice, guidance and social advancement to its members (Colvin et al. 2002; Donegan and Ganon 2008); and secondly, identify how individuals were recruited (voluntarily or coerced), as well as assessing the level of strain already being experienced by organisational members (Cullen 1994; Colvin et al. 2002; Sutherland 1949).

In regard to *governance* (research question three), examination of the literature identified five broad issues that resulted in or enabled the continuation fraud and includes the composition and role of the board of directors; tone from the top; the internal control environment; the internal and external audit function; and the strength and composition of the audit committee. The presence of each of these factors on incidences of individual fraud and co-offending is examined by iterating between this conceptual framework (Fig. 1) and the qualitative perceptions relating to fraud gathered from forensic accountants. Based on responses from participants, the original conceptual framework is refined and presented as Fig. 2 at the end of the paper. The qualitative inductive approach used in this study is presented next.

Research Design

The previous sections identified a plethora of different approaches to examining and understanding causes of individual and fraudulent co-offending, but few have sought the perceptions and experiences of those in the corporate world who investigate these crimes to assess and refine a conceptual framework developed from fraud related literature. Our choice of a qualitative inductive approach for this study is appropriate to aiding our understanding of the causes and enablers of fraud, and in particular, the complex milieu of organisational, environmental and behavioural contexts that contribute to the problem (Berg and Lune 2011; Goodstein et al. 2015). We deliberately focused our attention on gaining the perceptions of forensic accounting practitioners who had been directly involved in the investigation of fraudulent acts. In the context of refining our conceptual framework developed from the literature (Fig. 1), we focus on their views, stories and perceptions associated with the causes and enablers of individual fraud and fraudulent co-offending. As forensic practitioners are experienced, highly skilled and knowledgeable individuals, their contribution to this study, significantly improves the quality and relevance of the refined conceptual framework (Fig. 2). Further, the inclusion of a representative sample of the forensic practitioner population across Big 4, mid-tier and boutique forensic accounting firm practitioners ensures a broad range of fraud is considered at both the individual and group level in the refinement of the conceptual framework.

Data Collection

In order to conduct interviews, a database representing the population of forensic practitioners undertaking forensic

Table 1 Sampling matrix for management fraud research

Sampling matrix					
Size of accounting firm					
Type of service offered	Large firms (3)	Medium firms (2)	Small firms (5)	Total firms (10)	Total participants
Forensic accounting	3	4	9	6	16
Investigative accounting	3	0	3	4	6
Computer forensics	0	1	2	3	3

accounting services across Australia was developed based on information gathered from the Forensic Accounting Special Interest group (FASIG), Institute of Chartered Accountants in Australian (ICAA) (now Chartered Accountants Australia and New Zealand (CA ANZ)) and known professional contacts of the authors. Forensic practitioners were identified by the type of forensic work they undertook (forensic accounting, investigative accounting or computer forensics) and by the size of the firm where they undertook their forensic work. These two characteristics were considered important to ensure a representative sample of the forensic practitioner population across Australia participated in the study. The initial database of 62 potential practitioners was grouped by firms and firm size and the final database consisted of 15 firms including four large, three medium-tier and eight small firms.

To ensure a broad representative sample of forensic practitioners participated in the study, the Head Partner of each of the 15 firms was initially approached for permission to allow forensic practitioners working in their firm to participate in the study using a stratified purposive sampling approach (Lincoln and Guba 1985; Patton 1990). This approach ensured maximum variation between the forensic practitioners being sought to participate in the study using the stratifying characteristics of firm size and types of forensic services undertaken by forensic practitioners (forensic accounting, forensic investigation or computer forensics). The aim of this process was to ensure that at least one firm which was representative of each cell in the stratification process would provide this permission. After follow-up processes, 10 firms provided this permission being three large, two medium and five small firms. The permission from the Head of each firm was included in the interview consent documents sent out by email to individual forensic practitioners seeking their participation in the study. The Head of the firm was not advised who the authors sought to contact within each firm and practitioners were advised of this when seeking their participation in the study. The study had ethical approval from the University Ethics Committee.

Within these 10 firms, 32 potential participants were invited to be a part of the study, and 25 forensic practitioners agreed and provided informed consent. Table 1 displays the categories of interview participants in a matrix format under the heading 'type of service offered' cross referenced with the size of the firm. This result meant that only two stratification cells (large firm—computer forensic professionals and medium firm—investigative accountants) were not represented by participants in the interviews due to time pressures of potential participants. The final 25 participants included 16 forensic accountants, six investigative accountants and three computer forensic professionals. Interviews were conducted with the consenting 25 forensic practitioners from these 10 firms across a range of states (Queensland, New South Wales, Victoria and Tasmania) within Australia. The forensic practitioners who were interviewed worked for three large, two medium and five small firms and this ensured a representative sample of the forensic practitioner population was interviewed as part of this study.

The majority of interviews (22) were over the telephone and three were face to face. As the participants were familiar with the interviewers from other professional interactions, conducting the interviews by telephone did not reduce the depth and richness of the interview data. Participants were informed that the interview and any reports emanating from the study would remain anonymous. Semi-structured interviews were conducted with participants via a series of open-ended questions that were designed to elicit motivations and causes of individual fraud and co-offending based on actual frauds participants had investigated (King 1994). Questions asked of participants varied slightly to elicit further details when needed. The semi-structured interview protocol is presented in "Appendix" section. Interviewees were encouraged to tell their stories and provide in-depth descriptions of fraud investigations they were directly involved in. All details provided by participants were kept confidential to protect client confidentiality. The interview questions included the three main themes associated with the research questions of this study: causes and/or motivations for committing fraud (individual or group); how fraudulent co-offenders formed, recruited and supported one another; and the role of corporate governance in contributing to and/or enabling fraud to occur.

For anonymity in the findings presented below, participants are described by interview number (e.g. I20), role (e.g. forensic accountant, forensic investigator or computer forensics) and their position description (e.g. partner, director, manager). At the beginning of each interview, permission to record was sought from each interviewee and anonymity was assured. All interviews were re-coded and fully transcribed and completed interview transcripts returned to each participant for an accuracy check and to allow participants to remove any potentially sensitive information.

Data Analysis

As a result of our qualitative inductive research approach, we analysed the interview responses of forensic practitioners using a detailed content analysis procedure (Goodstein et al. 2015; Berg and Lune 2011; Miles and Hubermann 1994; Strauss and Corbin 1990). The first stage involved a research assistant coding all the interview data using Nvivo 10 into lower-level nodes using an open, axial and selective coding of fraud issues being raised in the rich interview data (Glaser and Strauss 1967; Strauss and Corbin 1998). This coding was then checked by the authors as they performed the second stage of the process. The second stage centred on categorising the interview data into emergent themes or patterns by allowing themes to emerge from the data. This involved grouping the lower-level nodes from the first stage under key top level domain nodes (themes) which related to the three research questions of the study (Miles and Huberman 1994). This process was cross checked between the two authors. Finally, the content analysis approach involved iterating between the themed data and the possible theoretical constructs identified in the conceptual framework (Fig. 1) to determine which constructs appeared to be supported by specific data (quotes/examples). This iterative process also supported additional theoretical constructs to emerge from the rich informative interview data. The qualitative inductive process was completed by the refinement of the conceptual framework (Fig. 1) to keep supported theoretical constructs in the framework and to incorporate any newly identified constructs from the content analysis approach into the refined conceptual fraud framework presented in the discussion and conclusion section as Fig. 2.

Findings

This section presents an analysis of the findings. The narrative is structured into three sub-sections that address each of the three research questions: evidence of general strain theory at the interpersonal (micro) and impersonal (macro) level; evidence of differential association theory related to recruitment and social support; and evidence of governance as a contributor and/or enabler. Table 2 provides a summary of the findings with each category (GST, Differential Association Theory, Corporate Governance) showing constructs in order of importance for both causes and enablers and each is discussed next.

General Strain Theory

In this section, we report on whether micro- and macro-level relations contributed to the occurrence of fraud. Findings are presented in order of importance as demonstrated in Table 2. We also provide examples where participants identify coercive forces leading to fraudulent co-offending due to the level of strain experienced in cases they investigated.

Interpersonal (Micro)

Findings highlight the major contributors to fraudulent acts as a desire for personal gains; threats or perceived mistreatment; and personal addictions to drugs, alcohol, gambling and sex.

Strain Caused by a Desire for Personal Gain

There were many instances where participants described a desire for personal gain that had ultimately led to fraud:

> Most of its lifestyle related, you know, they need the fast car… (I19: Forensic Accountant, Director)
> People who've got a desire to have a lifestyle that they can't afford otherwise, or that they believe that they're entitled to. (I10: Forensic Accountant, Partner)

Many participants identified a desire for greater personal wealth and highlighted this as a significant contributor to individual fraud in incidences they had investigated. It was commonly reported that individuals felt compelled to demonstrate to others that they were successful—a finding that exhibits how societal norms of rewarding and holding in high regard those who are successful (wealth, status) placed pressure on individuals to meet those expectations resulting in fraud.

Strain Caused by Addictions

Often highlighted by participants as a major cause of fraud by individuals were addictions (drugs, gambling, alcohol and sex), suggesting that they turn to crime when the need to support their habit reaches a point where stealing relieves some of the strain from the financial pressure the

Table 2 Summary of findings in order of importance—causes/enablers of fraudulent behaviour

Categories and Sub-Categories	Findings—Causes	Findings—Enablers
General strain theory	Causes—creates strain/anomie	Enablers
Interpersonal (micro)	A desire for greater wealth, status and prestige	
	Addictions to gambling, drugs, alcohol and sex	
	Feelings of frustration leading to anomie from threatened job loss/ redundancy from superiors, unfair treatment	
Impersonal (macro)	Economic conditions in-country (economic uncertainty/oppressive financial environment)	Technological environment and social media
	Technological environment and social media ("technoconomy")	
	Dropping values in society/lowering of societal moral fibre	
	Societal expectations and media attention on superannuation requirements	
Differential association	Causes—Recruitment and support of others	
Recruitment	Power of high-level management over subordinates who were coerced into compliance with fraudulent activities	
	Recruitment based on previous personal relationship and appealing to desire for greater wealth (strain)	
Social support	Individuals aiding others in the group to gain skills and knowledge.	
	Feeding back information to co-conspirators for personal gain	
	Support for allowing fraudulent activities and covering up for others	
Corporate Governance	Causes—lack of corporate governance	Enablers
Tone from the top	Lack of culture, visibility and transparency	Arrogance, too trusting, denial that management fraud can happen to them
	'Laissez faire' attitude of management	
Board of Directors	No established policy for management and employees (integrity, vigilance)	Did not monitor management behaviour
	Poor corporate culture	Lack of clear IT policy and monitoring of this policy
	Lack of ethics	
Internal controls		Ineffective IT control measures
		Lack of authorisation
		Insufficient segregation of duties
Internal/external audit		Ineffective internal and external audit function in preventing and detecting fraud.
Audit committee		Inadequate monitoring of accounting systems and processes

addiction has created. Note that participant I12 identifies a 'point of distress', which aligns well with strain theory:

> Gambling, drugs, more so with drugs. We're seeing it more even at lower level type fraud; counter payments, petty cash and what not. It's more the younger people in the workplace trying to sustain their weekend illicit drug use…A number of them were saying, I was in a point of distress at that time. I was only going to borrow the money. (I12: Forensic Accountant, Partner)
>
> The type of investigation was a fraud investigation for a financial institution. The amount of funds was $9 million loss…No funds were recovered and the main motivation was to feed a gambling habit. (I23: Forensic Accountant, Director)
>
> We do see a lot of gambling situations. You see people under financial stress or duress and they're causing—that's the driver of the misconduct. (I11: Forensic Accountant, Director)

Participants highlighted fraud occurring as a result of many different negative micro-level relations, all of which lead to strain and anomie. Whether fraud occurs as a result of financial pressure, unjust treatment, personal gain, an addiction or a fear of not meeting societal expectations, the result was a feeling of alienation on the part of the fraudster leading to strain and, in these cases, fraud.

Strain Caused by Anomie

Interpersonal relations (when individuals feel harassed, intimidated, threatened or fearful of others in an organisation) were also identified as contributing to fraud, in particular, the threat of a job loss and perceived unjust treatment stemming from negative interpersonal relations:

> It's quite common for someone to say, look I can rationalise what I've done because I should have been paid a hell of a lot more than what I was being treated like….I got passed over for promotions and blah, blah, blah, and I'm the poor victim here. I had one case where a particular accounting person in an organisation was told that they'd been there for quite a long time, and they were told their job wasn't there anymore because they wanted to move it from a book keeping type role to a more formal accountant type role, which she wasn't qualified to do. Next thing you know all their data has been deleted. (I10: Forensic Accountant, Partner)
>
> Some people, people do feel under pressure, they think they can lose their jobs, companies are restructuring. As soon as you get into the period of stressful change you can have employees lose their affiliation with you and just look to look after themselves. (I21: Forensic Investigator, Principal)

The above quotes emphasise that interpersonal relations can create levels of strain leading to anomie and, in these cases, fraud. In particular, in the second quote, the participant identifies feelings of alienation (anomie) that result from stress, which can also lead to fraudulent activities.

The following section presents the findings on impersonal (macro-level) aspects of general strain theory.

Impersonal (Macro)

Economic uncertainty: Participants identified strain caused through other economic issues such as the global financial crisis (GFC) and economic uncertainty, describing how the oppressive financial environment had resulted in criminal behaviour:

> I think it's—I think coming out of the global financial crisis, I think the local economy, as well as the global sort of economic circumstances, have been a contributing factor [to fraud increasing]. (I14: Forensic Accountant, Partner)
>
> Generally what I'm more recently seeing is just the economic uncertainty. What is happening with the interest rates? What is happening with house prices? Superannuation? So all that uncertainty, but they say I want to pay off my home; but am I going to have a job? People were starting to lose their jobs on the mines and contractors. There was a little bit of a spike in fraud. (I12: Forensic Accountant, Partner)

These findings suggest that coercive forces at the macro-level increased strain, that is, the more pressure that is placed on individuals due to political decisions made by the State or from the economic climate, the more likely fraud will occur.

Technology and World-wide User Sophistication

An interesting finding emerging from the study relates to a perception that there is a direct relationship between world-wide advances in technology, the growing sophistication of employees and managements' technological skills and criminal activity:

> I think the circumstance of "technoconomy" has caused people to do things that previously they haven't. That would probably be the main driver. (I13: Forensic Accountant, Partner)
>
> I think advances in technology and the prevalence of social media's another factor [that contributes to fraud]. (I14: Forensic Accountant, Partner)

It was argued that world-wide developments in technology and the consequent improvement in an individual's technical abilities had ultimately led to an increase in fraud. Participants expressed a perception that technology had depersonalised individuals leading to feelings of anomie and, subsequently, incidences of fraud.

Societal failing (values/morals/ethics): A number of participants felt that the lowering of the moral fibre of society in general was an important contributing factor:

> The values of society are dropping in general, so people are more prone to misconduct, fraud, bad behaviour, disloyalty, dishonesty. People's general view of what's acceptable and not acceptable or right and wrong, I think is deteriorating. (I4: Forensic Accountant, Partner)

Although not commonly raised, three participants suggested that impersonal macro-level forces had contributed to fraud in the form of a general lowering of societal values, ethics and norms. This finding supports Merton (1938), who argues that a failure of institutions and other structures can create a sense of alienation (anomie), manifesting in fraud.

External Economic Forces

Finally, strain caused by coercive forces such as the external economic circumstances outside the control of individuals was found to result in fraud, particularly in relation to superannuation requirements and the media hype associated with this, as the following quotes demonstrate:

> Getting people who are saying, look I've worked here for 20 years, I'm about to retire and I've only got $250,000 in super. The world, the media tells me I need $1 million, so I'm basically just trying to get my super up and really they owe me this money. (I24: Computer Forensics, Director)
> I think there's a general pressure on people financially. I always say it's tough times people are more inclined to put their hand in the till. (I10: Forensic Accountant, Partner)

In these situations, strain was created by perceptions of individuals who were under pressure due to external forces such as the push by government and media that high levels of superannuation were necessary, or difficult economic times in general. In these situations, when the level of strain increased to a certain point (dependent on individual characteristics), employees felt compelled to turn to fraudulent activities to relieve feelings of strain.

The following section presents the findings on differential association theory providing evidence where individuals formed deviant sub-groups, recruited members to commit fraud and provided social support to their members to ensure the fraud continued.

Differential Association Theory

There were many examples of deviant sub-group behaviour provided by participants including evidence of recruitment and examples of social support. Participants were asked to describe fraudulent co-offending cases they had investigated and findings in this section are presented only when more than one perpetrator was involved. Examples include high-level management and lower-level employees who had formed *deviant sub-groups* and were involved in fraudulent co-offending, most often over a substantial period of time:

> I've been dealing with [this case] for the last three years, and through that process, it is Australia's largest ever superannuation fraud. So through that group, the extent of the fraud was about $170 million. (I2: Forensic Accountant, Partner)
> It was a financial services business and the two offenders who colluded with each other were in an asset management role. (121: Forensic Investigator, Principal).
> It was very much about in the regional sector and it was to do with litigations of kick back arrangements between procurement, between people in the organisation and supply. (I11: Forensic Investigator, Partner)

Participants provided examples of deviant sub-groups that formed in organisations to collusively undertake criminal activities. In each case, when senior organisational members discovered the fraud it was reported immediately, which suggests the sub-group's norms and attitudes conflicted with others in the organisation. Participants identified increasing personal wealth as the major motivation behind criminal activities by individuals within the sub-groups, which suggests that individuals recruited were experiencing levels of strain such as financial problems or a desire for greater wealth described in the previous section.

Recruitment: Evidence was provided of *recruitment* activities where two or more high-level executives within an organisation worked co-operatively to commit fraud. Due to their high-ranking position in the company, in some instances, the recruitment of members to the sub-group involved a level of coercion. This is demonstrated in the example below where the CFO had the power to instruct others to aid in fraudulent activities.

> It's just—they can tell—in effect they can instruct an employee to countersign a cheque or make an entry in the system because that's their job. So CFO-type fraud is very difficult to deal with because of the level of seniority they have within the organisation. (I18: Forensic Accountant, Partner)

There was also evidence of *recruitment* where person B (and others) was coerced by person A to join in fraudulent activities for personal gain based on a prior personal relationship:

> Person A got a job at a corporate doing some contracting work, managing contracts on behalf of the company. He then awarded some work under those contracts to his former business partner, person B. He said to person B, I can channel this work to you. What you need to do is go out and get some specialist skills for people who can do the work. What I want you to do—you get those skills; I'll channel it through you; you pay them; you give me a cut of a [third of a percentage] of what work I channel. (I3: Forensic Accountant, Director)

The above provides an example of how a person or persons can be coerced into joining others to commit fraud based on a prior relationship and demonstrates that through illegitimate sources and recruitment (person A), person B was able to gain knowledge and skills to undertake criminal activities.

Social Support

Participants also identified levels of *social support*, which can include financial assistance, resources, positive affirmations, the giving of advice, guidance and connections for advancement. It was evident in many of cases of co-offending that those committing fraud provided some level of social support, particularly in relation to financial assistance, resources, advice, guidance and for feeding back information to co-conspirators:

> It's a listed company, [and we were] contacted by the CEO and HR Manager, they've got concerns about three employees based upon various comments that they have heard in the workplace. It's also based upon the fact that it has been identified that confidential files on the corporate server have had their authorisations changed so that access to those confidential folders has been extended to everyone within the company. Also, this company is the subject of a takeover bid by the Chinese and there were concerns that these particular employees were in bed with the Chinese and looking to attain some gain from feeding information back to the purchaser. (I22: Forensic Accountant, Partner)

Investigations described by participants emphasise how deviant sub-groups provided support to group members through illegitimate sources that promoted fraudulent co-offending. These types of activities demonstrate a support network within each of the sub-groups enabling the criminal activities to continue. This is confirmed by a participant who describes how a sub-group crumbled when Person B perceived a lack of support and resources:

> …but then [Person A] went and set up a number of people who could do [the work]. Person B became aggrieved when he asked for a larger amount [but did not receive it]. Silly boy—I say silly boy—he went to the CEO and said, this is a scam that has been in operation for the last 2 years. They're both implicated. (I3: Forensic Accountant, Director)

The following section presents the findings on corporate governance theory and whether participants perceive governance practices (or lack thereof) as contributing to or enabling individual fraud and co-offending.

Corporate Governance Mechanisms

Participants identified all issues described in Fig. 1 as contributing to fraud and/or enabling fraud to continue undetected. However, some were more prevalent than others, and within each corporate governance category, the findings are presented in order of importance.

Tone from the Top

The importance of *tone from the top* was highlighted by a number of participants as one of the key factors leading to fraud. The following quote is representative of many raised by participants:

> For me, personally, I think the most important thing is the ethical culture and the tone from the top. Now, if the tone of the top is wrong, the lack of visibility, transparency through all of the organisation's boarding lines, then things slip through the cracks and opportunities arise. (I11: Forensic Investigator, Partner)

Participants indicated that when tone from the top was lacking, the opportunity for fraud to occur was greatly increased. Participants also highlighted that ineffective tone from the top included senior management taking their "eye off the ball", a 'laissez faire' approach, or an "it won't happen to us" mindset to fraud prevention. This had led to a reduction in vigilance from employees in authorising and reviewing others work activities (two elements of internal control).

Board of Directors

The role of the *board of directors* was also identified as contributing to the occurrence of fraud if companies had not established policy for management and employees to follow and to monitor management behaviour. In addition, reference to culture, an ethical environment and tone from the top is often set at board level in organisations, and many participants identified an absence of this as contributing to fraudulent behaviour. Also raised as a significant enabler was the lack of clear IT policy and monitoring of employees by the board:

> I think a lack of clear IT policy and enforcement and communication of IT policy. But also monitoring seems to be another area. That would be the main ones. (122: Forensic Accountant, Partner)
> The [Board of Directors] should have rules, guidelines towards shareholder entitlement, director entitlement, employee entitlement. Quite a common fraud we'll see is the woman in charge of charity, some $40,000 out for entertainment. The Board will come to me and say, she had no authority to take that money. I'd say well, that may be the case, but did you ever communicate that non-authority to her? (I13: Forensic Accountant, Director)

Internal Controls

Internal controls include IT control measures, lack of authorisation and insufficient segregation of duties.

Ineffective IT Control Measures

The most common enabler of fraud that emerged from participants was a lack of, or ineffective, internal IT control measures and identified as a major enabler for individual and collusive acts of fraud. Many argued that various IT measures were completely ineffective in companies they investigated and included a lack of IT access controls and ineffective password control measures:

> I constantly am baffled by when we get engaged on some jobs and some of the situations that we come across in terms of how lacking in security [they are]. So to give you an example, things such as allowing employees to bring in their own personal devices, personal computers and then plugging them into a corporate network. There are massive security risks in that. Allowing people to bring their own USB thumb drives/storage drives and plug those into the network. Giving unfettered access to the internet to online repositories such as Dropbox, Google workspaces and so forth where it makes it very, very easy for people who want to commit misconduct and fraud to be able to commit those types of offences. (120: Computer Forensics, Associate Director)

According to participants, the lack of IT control measures had a substantial impact on occurrences of fraud and aligns with an earlier finding that the "technoconomy" plays a role in causing and enabling fraudulent activities. Views and experiences from participants suggest that the ubiquitous nature of computing and the growing level of technological sophistication of employees provide opportunities for those suffering some form of strain to turn to fraudulent activities.

Lack of Authorisation

Insufficient authorisation (e.g. double signing of payments or accepting goods) coupled with inadequate IT access and password controls was also identified as providing significant enablers for fraud to occur. Participants suggested that weak internal controls and the ability of management to override authorisation policy (assuming it existed) had allowed occurrences of fraud to continue undetected:

> Well, ultimately it's—I think you generally get two categories of fraud. The fraud that's committed by more junior employees who are doing so because there is a hole somewhere in procedures or policies or controls, which they can access. Then there is another group of fraud which is committed by very senior employees where no amount of controls is going to stop them because they have the power and authority to override controls anyway. (I18: Forensic Accountant, Partner)

It was suggested by many participants that both high-level management and low-level employees are involved in fraudulent activities and suggest that for lower-level employees, tighter governance activities such as double authorisation of payments and receiving of goods would reduce incidences of fraud and/or help to identify them earlier. However, for senior employees, it was suggested that the power and authority of their position in the firm will negate attempts to uncover fraud that is occurring. This would suggest that separation of the board and management, and stronger monitoring by the board to ensure management compliance is an important consideration for fraud mitigation and detection at the senior executive level.

Insufficient Segregation of Duties

A control measure that was also identified as enabling fraud and not detecting its presence was insufficient segregation of duties:

> Lack of segregation of duties is the key one. Fraud occurs in organisations with generally poor internal control systems. Yes there is a generally poor attitude to improving internal controls in many organisations. (I23: Forensic Accountant, Partner)

Internal and External Audit Function and Audit Committee

The internal and external audit function and audit committee were also identified as contributing factors but was less significant than the governance constructs discussed above. It emerged that the audit function often enabled corporate wrongdoings to continue undetected and two participants felt that the audit function should help in preventing and detecting fraudulent activities, suggesting that at times, it was inadequate:

> One of the biggest controls that's not effective at the moment is that people [in management and the audit committee] aren't actually looking at their business …or whatever it is. Saying, I appreciate that fraud is a risk for me and I'm going to have a look at it, understand it and do something about it. It's a control mechanism, understanding that you've got a problem and actually looking at it and working out how big it is. (I4: Forensic Accountant, Partner)

In some instances, forensic accounting practitioners indirectly raised matters that internal and external auditors and/or the audit committee would be responsible for or should be monitoring. Examples include many of the points raised above on internal control measures, authorisation and segregation of duties. In particular, the role of the audit committee is to follow policy and directives of the board and ensure a high level of monitoring for accounting systems, processes and risk management. However, experiences from participants suggest that this is inadequate in many organisations where fraud has occurred as the following representative quote demonstrates:

> They become familiar with their supervisors or whatever the case may be, and people tend to just turn a blind eye and they think it can't be going on. Not so much that the guidelines are lacking, it's the application of the [audit committee] guidelines that's lacking. (I24: Computer Forensics, Director)

Therefore, the argument presented based on experiences of participants was that there is a direct relationship between the governance functions of an organisation and the causes and enablers of individual and collusive acts of fraud. There was a level of frustration from many participants who had all too often experienced a lack of awareness of the importance of the governance function in minimising and/or detecting fraud.

Discussion

The aim of this study has been to gain a deeper understanding through theoretical and empirical evidence on the causes and enablers of fraud committed by individuals and co-offenders. The study responds directly to Zahra et al. (2005, p. 822) who argue that "*accounting researchers have increasingly studied financial statement fraud in recent years, and management researchers have examined a wider variety of white-collar crimes, but we are still left with an abundance of anecdotal and journalistic evidence*". An important contribution of this study is that it provides empirical evidence from the experiences of forensic accounting practitioners whose role is to investigate and identify how and why fraud occurs. In addition, the conceptual framework based on prior research across many disciplines developed for this study helped to guide the analysis of data from the field to answer our three research questions.

Whilst a substantial body of research has considered the role of governance, industry, societal and behavioural theory to investigate causes of fraud, in accounting literature, empirical research remains limited. In addition, we suggest that a problem as complex and prevalent as individual fraud and fraudulent co-offenders requires broader theoretical explanations than prior studies have presented, where their models are limited to one or sometimes two theories. This paper takes a more holistic approach by encompassing criminology, governance and fraudulent co-offending theories into the one model that, along with empirical evidence, addresses this gap and offers a strong theoretical contribution. Therefore, through the development and operationalisation of a conceptual framework coupled with empirical evidence, this paper has identified: first, the milieu of social, environmental and organisational factors and contexts that lead to fraud being committed; second, examined the causes of fraud distinguishing between individuals acting alone and fraudulent co-offenders; and third, identified the impact of corporate governance for contributing to and/or enabling fraud to continue undetected.

Prior research has tended to focus on individual fraudulent acts applying (inter alia) Cressey's fraud triangle or revised versions of his work, and has provided useful insights into how and why fraud occurs. What differentiates this study is the development and operationalisation of a framework that encompasses both fraudulent individuals and co-offenders, and, in addition, more in-depth explanations of why fraud occurs. Findings from the study also revealed additional constructs that lead to increases in fraudulent behaviour and these have been highlighted in the revised framework (Fig. 2).

They include addictions and the 'technoconomy' for GST and in the Governance section, IT Measures. Figure 2 presents the constructs in order of importance as they emerged from the analysis of findings. Reasons for their inclusion are provided throughout the discussion below, along with suggested propositions for future research.

General Strain Theory

In addressing the first research question of this study, we reveal that levels of strain at the micro-level result from (in order of importance): a desire for greater wealth, status and prestige; feelings of anger and frustration (anomie); and financial pressure (credit card debt, mortgage etc.), as major causes of fraud supporting GST. However, in addition, participants identified addiction to drugs, alcohol, sex or gambling as significant contributors to individual fraud—a finding that suggests addiction strain requires a separate category as 'financial pressure' does not highlight this contributor adequately. This was added to the refined model framework in Fig. 2 under general strain theory/coercion. Therefore, our findings support General Strain Theorists (Colvin 2000; Donegan and Ganon 2008; Colvin et al. 2002; Agnew et al. 2002) who suggest that causes of criminal behaviour stem from a sense of alienation arising from a number of micro-level contexts. Findings also support Zahra et al. (2005), Merton (1938) and Donegan and Ganon (2008) who suggest that the gap between an individual's present status and approved societal goals of wealth and success will lead to fraudulent actions: drug, gambling and alcohol addiction (sex addiction to a lesser extent); frustration, anxiety and fear of not meeting economic goals contribute to fraud (Merton 1938); and, intimidation, hostility from supervisors, loss of respect from peers or the loss of

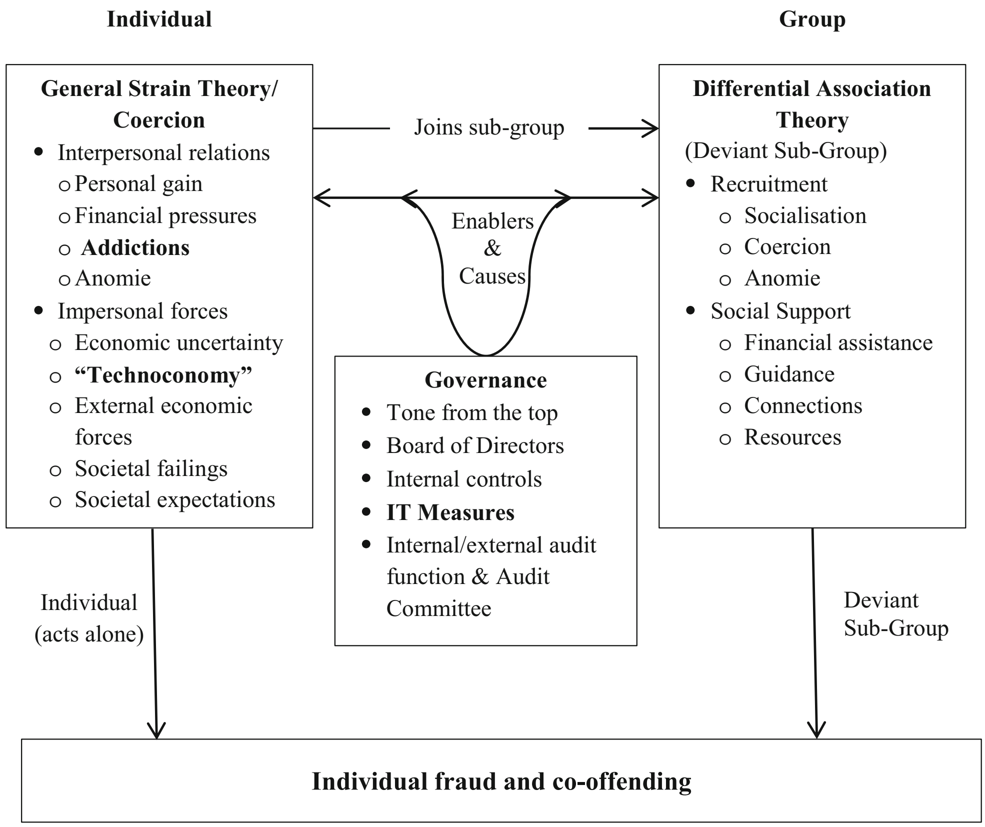

Fig. 2 Revised framework of individual fraud and co-offending—causes and enablers. ***Sources*** Findings from this study and Zahra et al. (2005), Cohen et al. (2010), Colvin et al. (2002), Agnew (1992), Donegan and Ganon (2008), Sutherland (1949), Brennan and McGrath (2007), Loebbecke et al. (1989), Beasley (1996)

something positive in their life can lead to fraudulent actions (Tibbetts et al. 2005; Eichenwald 2005; Simpson and Piquero 2002; Colvin 2000; Colvin et al. 2002).

In relation to the macro-level contexts, an additional factor emerging from this study as a significant contributor to fraud was the 'technoconomy'. Findings suggest that the ubiquitous nature of technology, coupled with increased technological savvy of employees at all levels of the organisation, had led to increased incidences of fraudulent misconduct. The 'technoconomy' was described by many participants as both a cause and enabler of fraudulent activities, which is not surprising given the technological developments and uptake of IT throughout the late twentieth and early twenty-first centuries. As a result of the analysis, this construct has been added to the revised conceptual framework (Fig. 2) to better represent the current issues facing the corporate world in their attempts to combat fraudulent misconduct.

We discovered that when individuals commit fraud, the underlying causes can be traced back to an event or events that have resulted in feelings of anomie and high levels of strain. Participants identified these events as being personal in nature (e.g. negative relationships within an organisation, drug and gambling addictions), or emanating from circumstances beyond their control (e.g. the economic climate, societal expectations of wealth and success, the general lowering of the moral fibre of society). These findings concur with Colvin (2000), Colvin et al. (2002) and Agnew et al. (2002) who suggest that regardless of where coercion stems, the result is feelings of anxiety, desperation and anger resulting in a person reaching a 'strain point' resulting in fraud.

An important finding that emerged is the potential relationship between micro- and macro-level and corporate governance constructs as drivers of fraud. At the macro-level, these constructs appear to relate to corporate governance issues, for example, the "technoconomy" as a cause of fraudulent activities, and a lack of corporate governance IT measures. Another relationship that emerged is at the micro-level regarding anomie (unfair treatment, feelings of frustration) and tone from the top. As identified in Dyer and Singh (1998) and Naryandas and Rangan (2004), inferences from these types of relationships being observed in the findings of the study may suggest the following propositions could be considered in future research:

P[1]: The "technoconomy", being a cause of fraudulent activities, will be further exacerbated by a lack of corporate governance IT measures.
P[2]: Feelings of frustration and unfair treatment are related to a lack of inappropriate tone from the top, causing increases in incidences of fraudulent behaviour at the individual and co-offender levels.

The following proposition could provide a broader approach to the remainder of the constructs associated with GST and corporate governance in future research:

P[3]: There is a direct relationship between the culture and ethics of a firm (stemming from the Board of Directors and senior management) and fraudulent behaviour by individuals and groups within an organisation.

A number of additional relationships could be tested in future research in the field, for example, inadequate segregation of duties and/or authorisation and the "technoconomy". We suggest that at the micro-level, there is potential for organisations to alleviate, or at the very least, assist with many of the problems faced by individuals through improved corporate governance and human resource management functions. However, at the macro-level, it is more difficult for organisations to overcome the pressures that impact so heavily on many individuals that may lead to fraud. As Donegan and Ganon (2008) posit, the "dog-eat-dog" society that we live in, coupled with attitudes that tie wealth and the attainment of social status to success, makes this a difficult problem to deal with at the organisational level. However, an awareness of the impact of these pressures from senior levels of management or at the board level could aid in the development of strategies to assist those who may be identified as suffering from strain due to macro-level structural and political environmental circumstances. This is particularly evident if a relationship between poor corporate culture and lack of ethics and the potential impact on individual perceptions (feelings of anomie/fear/frustration) can be demonstrated. In addition, when harsh economic times emerge (macro-level), boards and senior management may like to review their governance and IT security measures more thoroughly.

Differential Association Theory

Findings regarding the second research question revealed a number of examples of fraudulent co-offending, and highlight how organisational members were recruited and social support provided. In all sub-group cases, the motivation or underlying cause for compliance with the group was in the pursuit of financial reward. This finding may suggest that recruitment of members to a sub-group was dependent on individuals already having levels of financial strain, supporting Colvin et al. (2002) who argue that social support enables the recruitment of members by reducing their levels of strain through the provision of resources that allow them to cope.

Participants' experiences also highlight how sub-group members were provided with advice, guidance, connections and resources. Examples of social support were, in each case, from illegitimate sources, which aligns with Colvin et al. (2002) and Cloward and Ohlin (1960) who argue that support of this nature provides role models, allows members to gain knowledge and skills and provides connections for criminal activities. Acknowledging deviant sub-group behaviour provides valuable insights into recruitment activities and the role of social support, demonstrating how groups within an organisation adopt norms that embrace lying, stealing and other deviant behaviours (Hagan and McCarthy 1997). This was further illustrated by the participant who described how the removal of social support had resulted in a co-offenders' scheme falling apart.

Findings should signpost to organisations the need to ensure legitimate sources of social support are available throughout all levels of the organisation to reduce the likelihood of individuals turning to illegitimate sources and adopting deviant sub-group behaviours that may lead to fraud (Hagan and McCarthy 1997; Cullen and Wright 1997). Therefore, findings from this study support Differential Association Theory for identifying how deviant groups form, how new members are recruited and how social support ensures commitment from group members to remain aligned with the group. The following proposition on the role of corporate governance and the emergence of deviant sub-groups extends the findings from this study and could be considered in future research in this area:

P[4]: The forming of deviant sub-groups to commit fraudulent acts can be minimised if corporate governance initiatives such as strong corporate culture improved audit, and visibility and transparency are adopted.

Many forensic accounting specialists identified that deviant sub-groups (and individual-level) criminal activities often spanned a number of years, which is often symptomatic of a lack of governance and general ignorance on the likelihood of fraud occurring in their own organisations, and this is discussed next.

Corporate Governance Mechanisms

The focus of the final research question was to investigate whether inadequate organisational-level governance causes and/or enables fraud. Forensic accounting practitioners had strong views on lack of corporate governance, identifying several conditions that contributed to fraud. Emphasis was placed on how organisations allowed fraudulent activities to be executed and continue undetected, usually over a long period of time. We suggest that if strain and anomie is being experienced by individuals within an organisation, it is the governance practices, or lack thereof that opens the door for the execution of fraud, supporting the 'opportunity' component of Cressey's (1953) fraud triangle. Our findings also suggest that if deviant sub-groups form within an organisation for the purpose of committing fraud, those recruited into the group will be provided with social support, which can include education and guidance on how to work around systems and remain undetected should governance practices be inadequate.

The most common governance issues that contributed to fraud were tone from the top and, as an enabler, a weak internal control environment and lack of IT security measures. Firstly, we discovered that tone from the top can create feelings of anomie, as well as provide opportunities and enable fraud to continue due to a lack of professional scepticism, inadequate vigilance, poor culture and attitudes that "it won't happen to us". This finding concurs with Patelli and Padrini (2015), Chen et al. (2006), Zahra et al. (2005), Bruisnsma and Wemmenhove (2009), Brennan and McGrath (2007) and Loebbecke et al. (1989) and many others who suggest that anything less than positive management attitudes to fraud prevention, separation between management and the governance body, an appropriate culture, and awareness of fraud and risk management processes will lead to fraud.

The internal control environment also emerged as a significant fraud enabler, particularly in relation to separation of duties, access controls and authorisation issues—a finding that supports Goh (2009), Bell and Carcello (2000) and Brennan and McGrath (2007). This was particularly evident when individuals acted alone, suggesting that inadequate separation of duties greatly enabled a person seeking to improve their status or relieve feelings of anomie to steal from their organisation. In addition, a specific governance measure that participants identified as a major fraud enabler was a lack of IT control measures (Ponduri et al. 2014). This is not surprising given the earlier reported finding that the 'technoconomy' and technological savvy of employees is a cause of fraudulent activities. The majority of participants emphasised the need for organisations to revise and better manage IT risk and IT control measures, and consequently, IT Measures were added as a construct to the framework under 'Governance' in Fig. 2.

Of the remaining governance constructs, all were identified as contributing to or enabling fraud and—whether individual or group-based—allowing criminal activities to continue undetected for at least 12 months and sometimes up to 5 years or more. The role of internal and external audit processes and the proper functioning of the audit committee were recognised, although to a lesser degree, as contributing to the length of time it took to detect fraud, supporting findings from Ramos (2003), Law (2011), Cohen et al. (2010), Chapple et al. (2009), Coram et al. (2008) and Brennan and McGrath (2007). The role of the board in enabling fraud was also evident, particularly in relation to the lack of monitoring of management actions, board independence, the general culture of the organisation and attitudes to fraud policy and risk management, confirming views from Zahra et al. (2005) and Brennan and McGrath (2007) that the composition and leadership demonstrated by the board may significantly influence the actions of management. Therefore, the final proposition for future research emanating from this study identifying the strong relationship between corporate governance and incidences of fraud is:

> P^5: To minimise incidences of fraud and institute earlier detection of fraudulent activities at the individual and group level, a strong commitment to corporate governance across the entire organisation is needed.

Conclusion

We often read in academic literature, industry publications and the media that it is simply greed or a desire for a better lifestyle that leads to fraud (e.g. see KPMG 2013). However, as this study demonstrates, causes are much more complex and explanations on why mostly law-abiding accountants, senior executives and lower-level employees turn to lying, stealing and harming others financially have been provided. The interpersonal and impersonal relations that contributed to strain and anomie were a common thread and highlight the need for organisations to provide socially supportive environments from the top down. Colvin et al. (2002) suggest that a socially supportive workplace environment and the reduction of coercive forces (bullying, harassment, intimidation and unrealistic demands) will help to offset pressures and reduce fraud. We suggest that, in addition, an organisational awareness of how problems such as gambling addiction can lead to strain, particularly during difficult economic times, and the sensitive handling of those experiencing strain as a result may also help to overcome incidences of fraudulent activity. Furthermore, organisations and board members need to recognise that fraud can happen in the most vigilant, socially aware organisations and be perpetrated by long-standing and trusted employees. Findings reveal that reviewing and continually improving governance practices and acknowledging the technological age and associated risks are key to reducing incidences of fraud and detecting criminal activities that may already exist.

As with all research, there are limitations in this study. Firstly, an understanding of the micro- and macro-level circumstances that lead to strain would be more deeply understood by interviewing the fraud perpetrators. This would provide greater insights into the level of strain experienced that lead to fraudulent activities. Secondly, literature suggests that the individual characteristics of a person suffering from strain or anomie will determine whether they will turn to crime to relieve those pressures (Zahra et al. 2005), and Holtfreter (2005) suggests that identifying these characteristics will inform studies on causes of criminal behaviour. However, due to privacy issues, we were unable to interview offenders to resolve these limitations. Nevertheless, participants interviewed in this study were experienced, skilled and knowledgeable forensic accounting investigators and were directly involved in the investigation, had interviewed fraudsters described in this study and were able to provide valuable insights into the causes and enablers of individual fraud and co-offending. It is hoped that future studies can overcome this limitation by including fraudsters and thereby identifying individual characteristics and adding these to the framework. The third limitation is that only Australian forensic accounting practitioners were interviewed. However, we suggest that their experiences would be representative of other practitioners regardless of country of origin. Finally, a potential research method limitation is researcher bias during the content analysis. We minimised this by having three different researchers involved in the content analysis and by cross checking the themes and patterns that emerged from the analysis of the data.

Theoretical Implications

The academic contributions of this study include the extension of previous work on causes of fraud by Zahra et al. (2005), Cohen et al. (2010) and Colvin et al. (2002) providing empirical evidence from the field. We also develop, operationalise and refine a framework based on empirical evidence that provides an approach for future studies seeking to further examine and understand causes of individual and group fraud. We also developed propositions demonstrating relationships between GST, differential association theory and corporate governance constructs, particularly in relation to causes of fraud. This study therefore provides a much broader, interdisciplinary approach using empirical evidence to inform the reader on causes and enablers of fraud, thereby heeding the call by Stone and Miller (2012) and Zahra et al. (2005) to address this gap.

Practical Implications

For practitioners, the contribution is that this study moves well beyond Cressey's fraud triangle, which is currently the industry standard for explaining how and why fraud occurs. We identify a broader and more detailed range of contexts and constructs related to 'strain' and 'anomie' and insights into how sub-groups form and fraudulent co-offending results—a common fraudulent occurrence that the fraud triangle does not address. It is hoped that this study will encourage a more holistic, and perhaps, humanistic approach to fraud prevention by the Board of Directors and/or senior management when examining causes of fraud at the individual and group level. We also demonstrate the direct relationship between corporate governance and causes/enablers of fraud. The study may also prove useful when organisations are considering risk management strategies in their fraud prevention programs, particularly in relation to information technology security and use.

Future Research

Future research that includes interviewing fraudsters—individual and co-offenders—would provide a rich dataset and allow for the inclusion of individual characteristics in relation to strain, anomie, recruitment and social support. The inclusion of individual characteristics has the potential to develop the framework further if additional factors that participants in this study were not aware of can be identified. In addition, we suggest future studies incorporate a range of sectors as this would help in identifying the effect of corporate governance measures across various industry types and how they impact on fraudulent behaviour. The testing of suggested propositions in the field identified in the discussion section of the paper will also aid in the development of a more comprehensive model and demonstrate important relationships between criminological explanations of what causes fraud and how [lack of] corporate governance contributes to the problem.

Finally, it is strongly argued in behavioural science literature that coercive efforts to get tough on crime do not work and are often counterproductive. Instead, workplace environments and cultures that are less coercive and more socially supportive are the key to relieving strain, lessening feelings of anomie and, ultimately, reducing incidences of fraud.

Appendix

Semi-Structured Interview Protocol

Introductory Statement

We are interested in the types of cases that forensic service professionals undertake as part of their role. In addition, it will help in raising public awareness (academics and professionals) on the types of fraud cases you are required to work on, and, importantly, the causes and enablers of fraudulent activities.

Question 1 From your experience, what are the main reasons given by individuals for committing fraud?
Question 2 Can you please describe any cases you investigated where more than one person colluded with others to undertake fraudulent activities?
Question 3 Are you able to identify any governance issues that contributed to fraud occurring or provided opportunities for fraud to occur in cases you investigated?
Question 4 What are the major control measures that you have found are lacking in organisations?
Question 5 Have you found that organisations, even though they are aware of fraud risk, do little about it or are steps taken to mitigate the risk?
Question 6 What are your top five recommendations to a firm in trying to mitigate fraud occurring in the future?
Question 7 Without identifying the client(s), can you please describe in detail two cases you have investigated outlining the type of fraud committed, reasons given by perpetrators for committing fraud, and the governance constructs that were lacking in the organisation at the time the crimes were committed.

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