

**Unethical decision making: towards understanding the factors that influence a white  
collar criminal's decision to commit a crime**

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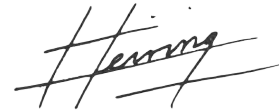
A research project submitted to the Gordon Institute of Business Science,  
University of Pretoria, in partial fulfilment of the requirements for the degree of  
Master of Business Administration.

11 November 2019

## DECLARATION

*I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.*

Signed: \_\_\_\_\_



Heinrich Meiring

11 November 2019

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From

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11 November 2019

Dear Sir/Mdam

**MOTIVATION: SUBMISSION OF MANUSCRIPT FOR CONSIDERATION FOR PURPOSES OF PUBLICATION**

Please find attached, under cover of this letter-

- A title page.
- Conflict of interest declarations by both authors.
- A blinded manuscript bearing the title:

Unethical decision making: towards understanding the factors that influence a white collar criminal's decision to commit a crime

The subject matter of this manuscript is unethical decision making in white collar crime. Given the pervasiveness of corporate malfeasance, and the great difficulty experienced in curbing it, it is vital that we better understand this phenomenon. That is the aim of this manuscript. The study set out to understand, from the horse's mouth, the factors that influence a white collar criminal in making the decision which eventually lead to his or her conviction. Persons incarcerated for white collar crimes were interviewed for this study.

The study sought to explicate the data gathered from the interviews by means of existing theory. In doing so, we compared a well-known model used in practice, the fraud triangle, with a recently synthesised ethical decision making model: the Integrated Ethical Decision Making Model. The development of Ethical Decision Making Models, as well as their eventual synthesis into the Integrated Ethical Decision Making model in 2016,

has largely taken place in your journal, the Journal of Business Ethics. For that reason, and from conception of the study, we were hopeful that your esteemed journal would publish the study.

As the study makes important contributions to the field, we thought it vital that we bring it to the correct audience' attention. Given that the Journal of Business Ethics is a three-star ranked journal by the Chartered Association of Business Schools, we believe this it is ideal for this purpose.

The manuscript, running 14 409 words from title to conclusion, is longer than the usual 12 000 word maximum stipulated in the journal's guidelines to authors. That being said, and despite the length of the manuscript, we respectfully request that an exception be made (as provided for in the guideline to authors) for the following reasons:

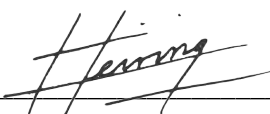
- The study was a qualitative study. As indicated in the author guidelines, the Journal has the discretion to allow publications longer than the ordinary maximum for qualitative studies.
- Given that the theory applied is new and the study explorative, the interviews had to be conducted in a very broad fashion so as to allow participants the greatest flexibility to provide data that would fall inside, as well as outside, the already-wide model which we thought might find application. Doing justice to such a large amount of data in its analysis was necessarily an extensive process.
- Although the integrated model applied in this study is only four years old, it is an integration of multiple older theories dating back at least five decades, which required extensive exposition in the literature review.

Lastly, we confirm the following:

- The manuscript has not been published before and is not under consideration for publication anywhere else.
- The paper has not been previously rejected or withdrawn after review by the Journal of Business Ethics.
- The publication of this paper has been approved by all co-authors.
- The publication has been approved by all responsible authorities, including by –
  - the University of Pretoria's Gordon Institute of Business Science, under which the manuscript was produced; and
  - the South African Department of Correctional Services, in whose Centres the interviewees took place.
- It was prepared by the first author in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. The second author acted as study supervisor.
- All authors contributed to the study conception and design. The first author attended to the material preparation, data collection and analysis, and the first author prepared the first draft of the manuscript. The first draft of the manuscript was written by the first author and all authors commented on earlier drafts of the manuscript. All authors read and approved the final manuscript.

Please do not hesitate to contact us if you have any questions or concerns.

Yours faithfully

 Signed

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(First Author)

(The corresponding author)

\_\_\_\_\_ Signed

Professor Gavin Price

(Second Author)

**Title:**

**Unethical decision making: towards understanding the factors that influence a white collar criminal's decision to commit a crime**

**Running head:**

**The factors that influence a white collar criminal's decision to commit a crime**

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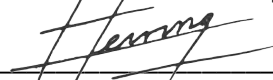
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## 2. THEORY AND LITERATURE REVIEW

### 2.1. FROM INTERNAL TO EXTERNAL CAUSES

By the late eighteenth century, a practice developed called physiognomy in terms of which an individual's character was assessed with reference to his or her physical appearance and, in the case of Cesare Lombroso and Earnest Hooten, assessing criminals through physiognomy (Soltes, 2016). Physiognomy later came to be considered pseudoscience and was superseded by the practice of characterising criminals by their psychological traits. Although physiognomy later became considered pseudoscience, the notion of regarding a person as inherently bad lived on in popular thinking; for instance, through an idiom like someone described as a "bad apple" (Schwartz, 2016).

In the white collar crime literature, the psychological trait of having low self-control enjoyed particular attention. Davidson, Dey, & Smith (2015) found that 11% of executives pursued by the Securities and Exchange Control Commission had serious criminal charges in their histories (Davidson et al., 2015; Soltes, 2016). However, if having a previous charge relating to low self-control offences were a reliable indicator of future corporate misconduct, one would expect the value to be higher than 11% (Soltes, 2016). A defence to this argument was that self-control was like a muscle which, perhaps strong through the majority of life, may later deteriorate if not used (Gino, Schweitzer, Mead, & Ariely, 2011; Soltes, 2016).

The connection between self-control and white-collar crime could only be stretched so far, and was criticised for being tautological (Geis, 2000). The Oxford English Dictionary (2019) defined a tautology as a "... *phrase or expression in which the same thing is said twice in different words.*". According to criminologist Gilbert Geis (2000), to say that crime is caused by low (or temporarily low) self-control is tantamount to saying that low self-control is caused by low self-control. For this reason, Geis (2000, p.43) described the relationship as follows: "*absence of self-control causes all crimes except those it does not cause*". Clearly, research must explore further than simply testing for lack of self-control.

Research into physical predictors of white collar crime was also conducted through brain scanning and twin studies. Brain scanning studies revealed that persons convicted of white collar crime had greater cognitive control (which is useful for setting and acting on goals) and tended to be driven more by abstract reward like money (Soltes, 2016). However, these characteristics may be quite normal for business people and may, in fact, be a prerequisite for their success in lawful

business activities. Moreover, research through monozygotic twins-studies into anti-social behaviour in crime in general (although not white collar crime in particular) indicated that 29% of separately reared twins engaged in deviant behaviour – indicating that there was some genetic influence (Grove et al., 1990; Soltes, 2016). However, the link has not been shown in white collar crime, probably because of the small population of persons that fit the profile of monozygotic twins, reared apart that have been convicted for this crime.

Research revealed that 3.5% of executives had psychopathic characteristics, compared to just 1% in the general population (Babiak, Neumann, & Hare, 2010; Soltes, 2016). However, the same study showed corporate psychopaths were rated better than non-psychopaths for charisma, presentation skill, communication skill, creativity and strategic thinking. As such, there appears to be a potential overlap between desirable and undesirable characteristics.

Further potential overlaps between characteristics of corporate malfeasance and characteristics of desirable leaders have been identified. Albrecht, Mauldin, & Newton (2018) found that accounting competence (coupled with certain incentives) increased the likelihood of material misstatements. Also, as is shown above, being senior, having been at the organisation for six years or more and having a university degree are all desirable characteristics, yet correspond to the characteristics of those convicted of white collar crime.

In the nineteenth century, a sociologist and provincial judge named Gabriel Tarde rejected the idea that a person was born with criminal characteristics and proposed, instead, that such behaviour was learnt from others – a theory which became known as differential association (Soltes, 2016). This theory became influential in the study of white collar crime, as it was adopted by Sutherland; however, the theory was criticised as being so general in nature that it verges on simply being a criminological restatement of social learning theory, allowing for little theorising and predictive value (Braithwaite, 1985). Moreover, the theory suffered from not explaining why so many people are exposed to criminal conduct, yet choose to act lawfully instead (Soltes, 2016). The theory also did not explain why executives and managers from good upbringing, with no negative criminal or disciplinary record, employed by firms with no history of maleficence, nevertheless commit white collar crime.

Donald Cressey wanted to dispense with circumstance as an explanation of white collar crime and introduced a three element theory: there needed to be a financial problem; the problem must have been capable of being solved in secret; and the solution must have been capable of being rationalised. The theory saw a resurgence

in the 1970s when, building on Cressey's work, the fraud triangle was proposed, consisting of three elements: an incentive or pressure to act; an opportunity to carry out the act; and the perpetrator must have had the attitude, or have been able to rationalize, the act in such a way that it justified the act (Albrecht et al., 2018; Hillison, Pacini, & Sinason, 1999; Kelly & Hartley, 2010). However, the fraud triangle does not explain why a person chooses to solve a problem criminally (with the severe possible repercussions) when legal options are available (Soltes, 2016). Moreover, research suggests that complex processes, rather than the simplistic elements of the fraud triangle (such as financial need), is what leads to a decision to act unethically (Suh, Sweeney, Linke, & Wall, 2018).

A decision to commit a crime is not just a decision about whether to break a law or not. Underlying crimes like bribery and fraud are moral values like honesty and trust. The decision is therefore also a decision to break an ethical code (Soltes, 2016). There is a dynamic relationship between ethics and law, such that something that might be unethical is not illegal, or something that is legal is not ethical (Petrick & Quinn, 2000).

In this study, we followed the definition of Jones (1991, p. 367):

An ethical decision is a decision that is both legally and morally acceptable to the larger community. Conversely, an unethical decision is a decision that is either illegal or morally unacceptable to the larger community.

We recognise, as did Jones (1991), that this definition is limited in its precision and is relativistic. Due to the methodology applied in this study (interviewing persons convicted by the justice system), engaging in the nuances of what constitutes an ethical decision is beyond the scope of this study.

Initiated by the author Kohlberg, considerable interest developed in the literature in cognitive moral development; the assumption behind which was that individuals can be taught ethical reasoning, resulting in the individual reaching higher stages of cognitive moral development (Jones, 1991; Soltes, 2016; Warren, Gaspar, & Laufer, 2014). However, the cognitive development model did not have sufficient explanatory power. For instance, notwithstanding that professional ethicists would assume the highest stage of such cognitive moral development, professional ethicists displayed either worse ethical behaviour, or no better ethical behaviour, than control groups (Schwitzgebel & Rust, 2014).

Studying ethical decision making (EDM) for individuals, Rest proposed a four

component model (Jones, 1991; Schwartz, 2016; Warren & Smith-Crowe, 2008). Conceiving of EDM as a process in terms of which a person must: (1) first recognise that an ethical issue exists, (2) make a judgment that is moral, (3) form a moral intent, then (4) act on the moral intent. A failure in any step would result in the decision maker making a decision that is not ethical. The model was refined by successive authors, including Jones (1991). This marked the first in a long line of authors who built towards a descriptive framework with the intent to explain how cognitive and affective processes influence EDM and behaviour (Schwartz, 2016; Warren & Smith-Crowe, 2008).

## **2.2. TOWARDS AN INTEGRATED EDM MODEL**

The authors Ferrell & Gresham (1985) and Hunt & Vitell (1986) (working in the field of marketing ethics) built on Rest's four component model by introducing the impact of environmental factors on moral judgment, such as social, cultural, economic and organizational factors, which set the scene for the four component model to begin (Jones, 1991). As part of their contingency model, Ferrel and Gresham also introduced individual factors that moderate EDM and organisational factors. Organisational factors included significant others (which could be related to Sutherland's differential association theory) and opportunity (which could be related to Cressey and Albrecht's opportunity element in the fraud triangle) (Jones, 1991). Opportunity, in particular, refers to ethical codes and policies, as well as incentives in the organisation.

Treviño (1986) built a general model, called the person-situation interactionist model (Jones, 1991; Warren & Smith-Crowe, 2008). Treviño introduced situational factors which moderated the person's EDM, and subsequent conduct. These included employment environment, organizational culture and employment characteristics.

Whereas Rest made provision for the decision maker to have to realise that an ethical dilemma is present in order for an ethical decision to be made, Ferrell & Gresham (1985) and Treviño (1986) did not (Jones, 1991). In Rest and Treviño's (1986) model, cognitive moral development is essential to the judgment step of the four component model. Hunt & Vitell (1986) used moral evaluation as the basis for the judgment step. Ferrell & Gresham (1985) omitted the judgment phase (Jones, 1991). Similarly, Rest and Hunt & Vitell (1986) included a phase for forming moral intent, but Ferrell & Gresham (1985) and Treviño (1986) did not (Jones, 1991). Although these models improved our knowledge of EDM, they did not comprehensively describe how the nature of the issue being faced affects the decision making process, particularly not in the context of white collar crime.

Jones (1991) amalgamated the work from the various authors that preceded him, including the factors and processes which they described, into a cohesive framework (Street, Douglas, Geiger, & Martinko, 2001).

The aforesaid authors laid the foundation for scores of published research articles since, improving the understanding of the individual, organisational and situational variables and how they moderate each stage of EDM (Schwartz, 2016). However, these have produced inconsistent and, sometimes, contradictory findings. Commentary to research methods and research instruments is dealt with in the methodology section below. EDM models departed on two separate theoretical tracks: the rationalist approaches and the non-rationalist approaches.

### **2.2.1. RATIONALIST AND INTUITIVIST APPROACHES**

Most empirical EDM researchers rely on a rationalist approach in terms of which the decision maker, experiencing a dilemma, sets about trying to solve it through reason, logic and deliberation (Haidt, 2001; Schwartz, 2016). The most prominent rationalist was Rest who focused on the moral judgment phase as moderated by the cognitive development and issue intensity constructs (Jones (1991; Schwartz (2016)). In Ferrell & Gresham's (1985) multistage contingency model, the individual's action is moderated through individual factors and organisational factors (discussed below). In Treviño's (1986) model, a person begins with their cognitive moral development state and this initial cognition is then moderated through individual factors, situational factors and organisational culture (Schwartz, 2016). Individual factors in Treviño's model include the how strongly the individual holds his or her belief, how much the individual depends on external referents (Suh et al., 2018), and the individual's belief as to how much they are in control over their own lives. Situational factors include work incentives and sanctions and personal costs, availability of resources and competition. Organisational culture includes the prevailing norms in the organisation, deference to authority and accountability for consequences.

The rationalists recognise that there are cognitive constraints and cognitive biases which limit the rationalist view (Schwartz, 2016). Whilst most of the rationalist approaches recognise that intuition also plays a role, none concede that intuition is determinative of moral decision making.

Non-rationalist / intuitionists posit that moral decision making arises first through intuitive and emotional processes, for which reasoning is then constructed ex post facto (Haidt, 2001; Schwartz, 2016). Kahneman (2003, 2011) described the intuitive decision making process as quick, involuntary, unconscious and emotionally

charged. Stated differently, the ethical judgment arises in the mind like a cognition and is retroactively rationalised. Haidt (2001, p. 814) illustrated the point with the cliché phrase “I don’t know, I can’t explain it, I just know it’s wrong”. According to Schwartz (2016), emotions in I-EDM include pro-social emotions, self-blame emotions and other-blame emotions, examples of which are empathy, guilt, and anger respectively (Schwartz, 2016).

Schwartz' (2016) view was that, apart from methodological issues, consistency in research findings may be improved by refining the model for EDM itself. O’Fallon & Butterfield (2005, p. 399): “If the field of descriptive ethics is to move forward to strengthen our understanding of the EDM process, it is imperative that future studies focus more attention on theory development.” The published research was criticised by Tenbrunsel & Smith-Crowe (2008) for being too uni-theoretical and Lehnert, Park, & Singh (2015) called for more development of Rest’s (1986) model. They encouraged researchers to rather develop a comprehensive framework. Responding to this call to action, Schwartz (2016) set about developing an integrated EDM (I-EDM) model which built on prevailing EDM models, whilst simultaneously attempting to plug gaps in those models and bridging contradictions in the findings of those models.

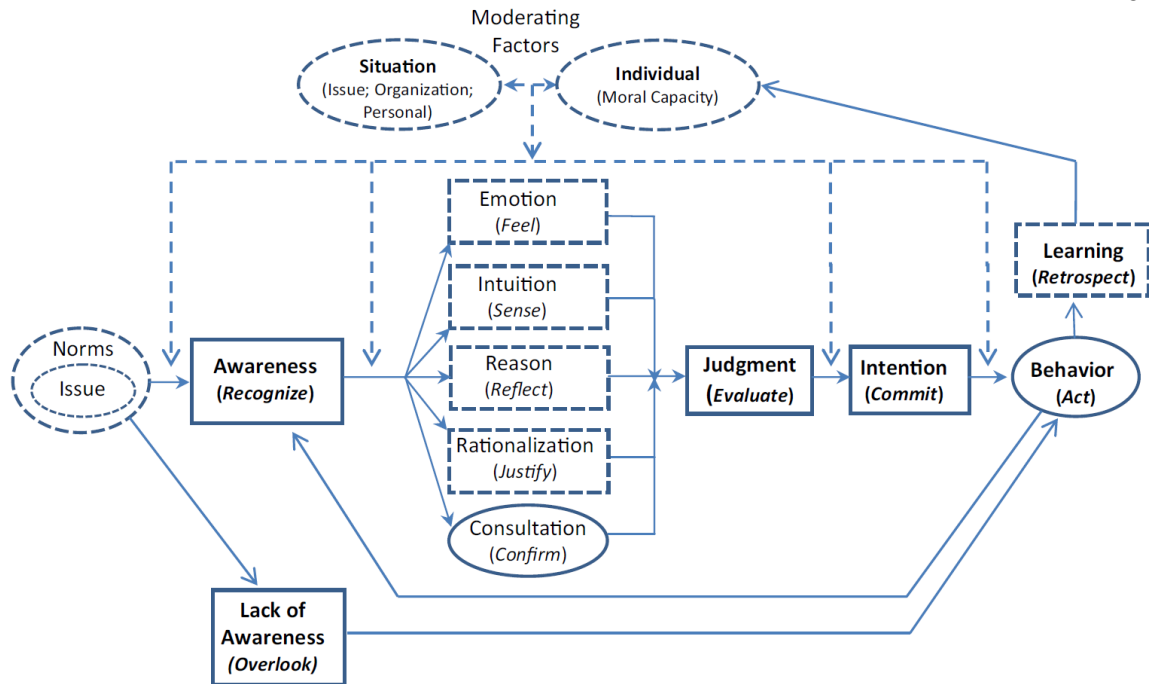
### **2.3. THE I-EDM MODEL**

Schwartz' (2016) I-EDM, illustrated in **Fig. 1**, is composed of a process element and a factor element. **Table 1** summarises which process element is moderated by which factor element in the I-EDM. Whilst it is true that many of the constructs may overlap, it is important to develop theory into a cohesive whole (Rest, Thoma, & Bebeau, 1999).

#### **2.3.1. PROCESS ELEMENTS**

##### ***Norms and issue***

The I-EDM finds application where an ethical dilemma is present, particularly with two norms at odds with one another and where the individual has volition (Jones, 1991; Schwartz, 2016). Schwartz (2016, p. 764) defined a norm as “those prevailing standards or expectations of behaviour held by members of a particular group or community”, and can exist in the societal sphere, organisational sphere and work group sphere.



**Fig. 1** Integrated Ethical Decision Making Model by Schwartz (2016)

**Table 1** I-EDM process elements as influenced by moderating factor elements

Process element	Key source	Moderated by factor element
Awareness	(Butterfield, Trevin, & Weaver, 2000; Tenbrunsel & Smith-Crowe, 2008)	Ethical Issue Importance, Issue Intensity, Organizational Infrastructure and Personal Context
Judgment (including Emotion, Intuition, Reason and Rationalization)	(Bandura, 1999; Dedeke, 2015; Greene, Sommerville, Nystrom, Darley, & Cohen, 2001; Haidt, 2001; Lawrence Kohlberg, 1973; Reynolds, 2006)	Ethical Issue (including Issue Intensity and Issue Complexity), Individual Moral Capacity, Moral Character Disposition, Organizational Ethical Infrastructure and Personal Context
Intention	(Rest, 1986)	Ethical Issue, Issue Intensity, Individual Moral Capacity, Integrity Capacity, Organizational Ethical Infrastructure and Personal Context
Behaviour	(Rest, 1986)	Ethical Issue, Issue Intensity, Individual Moral Capacity, Integrity Capacity, Organizational Ethical Infrastructure and Personal Context
Learning	(Reynolds, 2006)	



### ***Moral Awareness (recognition)***

Rest (1986) was the first to suggest that moral awareness is a prerequisite to making a decision that is ethical, without which judgment (the second step) is unlikely to be brought to bear (Butterfield, Trevin, & Weaver, 2000; Hunt & Vitell, 1986; Tenbrunsel & Smith-Crowe, 2008). Moral awareness is the first step where the person, noticing incoming information, encodes that information as an ethical issue requiring judgment, particularly where this would contradict an ethical standard (Butterfield et al., 2000; Tenbrunsel & Smith-Crowe, 2008). Rest (1986) did not restrict ethical awareness only to cases where an individual recognised that he or she is faced with an ethical issue, but included a broader category of recognition of the impact of the decision on others (Tenbrunsel & Smith-Crowe, 2008). Similarly, Butterfield et al., (2000, p. 982) defined it as “a person’s recognition that his/her potential decision or action could affect the interests, welfare or expectations of self or others in a fashion that may conflict with one or more ethical standards” (Butterfield et al., 2000, p. 982). Ethical issues do not always come with “red flags” that attract the decision maker’s attention, who may instead be operating on a script which does not trigger the decision as one requiring ethical judgment (Butterfield et al., 2000). Saliency, vividness (due to the issue’s novelty, emotional interest or relevance to personal goals) and accessibility (that is, easily accessible in memory) contribute to the probability of the individual being morally aware (Butterfield et al., 2000).

Results in the literature on the effect of gender, nationality, culture and ethical experience (through religious, ethical and professional experience and education) on the ethical awareness process element have been mixed (Tenbrunsel & Smith-Crowe, 2008). The individual’s values and ethical orientation (for instance, utilitarian, formalist, relativist or idealist) have been found to moderate ethical awareness (Tenbrunsel & Smith-Crowe, 2008). Ruedy & Schweitzer (2010) argue for the relationship between a lack of mindfulness and the ability to ignore or rationalise ideas that may pose a conflict of interest or bias.

Moral awareness as a process element is moderated by the factor elements of issue intensity (Butterfield et al., 2000; Jones, 1991; Schwartz, 2016), issue complexity (Jones, 1991; Schwartz, 2016; Street et al., 2001; Warren & Smith-Crowe, 2008), issue importance (Jones, 1991; Robin, Reidenbach, & Forrest, 1996; Schwartz, 2016), organisational ethical infrastructure (Jones, 1991; Schwartz, 2016; Tenbrunsel, Smith-Crowe, & Umphress, 2003), personal context (Albrecht et al., 2018; Butterfield et al., 2000; Jones, 1991; Schwartz, 2016), and moral character disposition (Jackson, Wood, & Zboja, 2013; Jones, 1991; Kohlberg, 1973; Schwartz,

2016).

***Lack of awareness (overlooking)***

Where the decision maker is aware that he or she is confronted with an ethical issue, they progress to the second step of I-EDM, being moral judgment. However, where such an awareness is lacking, he or she may move directly to action without first going through the judgment and intention stages (Butterfield et al., 2000; Jones, 1991; Rest, 1986; Tenbrunsel & Smith-Crowe, 2008). This may result in a decision and action which is either ethical or unethical, and based on non-ethical considerations (Street et al., 2001; Tenbrunsel & Smith-Crowe, 2008), including the impact of the decision on the person's own economic situation and career progression. Through the concept of bounded ethicality, the decision maker (who otherwise values ethicality) engages in unethical conduct due to a lack of awareness (Tenbrunsel & Smith-Crowe, 2008).

According to Bandura (1999), moral disengagement, is where a person convinces him or herself that ethics do not apply in the situation. The corollary to moral disengagement is mindfulness (Ruedy & Schweitzer, 2010). Small & Lew (2019) find mindfulness, which includes a mental presence with the intent of minimising harm, to be a strong predictor of moral responsibility.

On the individual level, instead of dealing directly with uncomfortable reflection, a decision maker may cognitively transform the issue into a number of other issues that may present less of a psychological threat (Butterfield et al., 2000). By means of this mechanism, ethical awareness may be reduced by de-emphasising a factor like harm by instead referencing laws or industry practice. Moral disengagement occurs through the mechanisms of euphemistic language, false comparisons, justifications, victim blaming and a suppressed moral agency. Moral imagination is whether a person is able to conceive of solutions to a dilemma, as opposed to seeing only one norm (Schwartz, 2016).

On a situational level, information about an issue can be presented through what is called framing, each different method of framing resulting in a different interpretation (Butterfield et al., 2000; Dedeker, 2015; Tenbrunsel & Smith-Crowe, 2008). Ethical framing is discussed further in the context of the organizational ethical infrastructure factor element below. Whereas some authors disregard lack of ethical awareness as an exception to the rule, Tenbrunsel & Smith-Crowe (2008) argue that it is a vital part of EDM.

### ***Judgement element: Generally***

Ethical judgment is the process the individual undertakes, once aware that he or she is faced with an ethical issue, in order to arrive at the most proper course of action to pursue (Hannah, Avolio, & May, 2011; Rest, 1986). The judgment element has generally been analysed in terms of its emotional, intuition, reasoned and rationalisation components. It was Dedeker's (2015) cognitive-intuitionist model that laid the foundation for a theoretical integration of reason, on the one hand, with intuition and emotion, on the other (Schwartz, 2016). Procópio (2019) criticised the awareness/judgment split because the awareness step requires, before judgment comes into play, that the individual take account of possible consequences and others' perceptions. Below, some general remarks are made with regards to the judgment process element and, thereafter, we discuss the individual components more fully.

Studies on the relationship between gender and the judgment process element have had mixed results (Tenbrunsel & Smith-Crowe, 2008). Similarly, studies on the relationship between nationality and the judgment process element have also had mixed results (Haidt, Koller, & Dias, 1993; Tenbrunsel & Smith-Crowe, 2008). Insofar as ethical experience is concerned, religion has been shown to have a positive association; religion appears to be positively associated with judgment, whereas the association between judgment, on the one hand, and age, work and educational experience, on the other, are mixed (Tenbrunsel & Smith-Crowe, 2008). Educational experience appears to be negatively associated with the judgment process element. The individual's values and ethical orientation (for instance, utilitarian, formalist, relativist or idealist) is a core component of the judgment process element (Tenbrunsel & Smith-Crowe, 2008).

Regarding the interaction of situational factors with the judgment process element, issue intensity (discussed below) is positively associated with the judgment process element (Tenbrunsel & Smith-Crowe, 2008). Studies on the association between codes of ethics and the judgment process element have shown positive results (Tenbrunsel & Smith-Crowe, 2008).

### ***Judgement element: Emotion (feeling)***

According to Haidt et al. (1993), emotion is the first reaction to a moral dilemma and can take the shape of positive intuitive judgments (through empathy) or negative intuitive judgments (through disgust) (Schwartz, 2016). While Schwartz (2016) sees emotion as a component of judgment in I-EDM, researching in ethical-sense making, Diochon & Nizet (2019) see emotion as already playing a critical role at awareness

stage. Over and above affecting intuition, emotion also affects reasoning and rationalisation of an act which an individual might otherwise have considered abhorrent (Dedeke, 2015; Schwartz, 2016).

Haidt (2001) showed that persons are guided by emotion in reaching an ethical judgment, often without being able to explain why they came to that judgment (Warren & Smith-Crowe, 2008). Damasio (1994), similarly, posits that emotion functions in tandem with reasoning.

Greene, Sommerville, Nystrom, Darley, & Cohen (2001) used fMRI to show causal links between moral judgements and emotional states. Their study, using the trolley scenario, showed that participants in the pushing scenario had a greater emotional response and reached their decision quicker than those in the switch scenario. It has also been shown that embarrassment (experienced in the social context), as opposed to shame (experienced subjectively), plays a role in forming an ethical judgment (Warren & Smith-Crowe, 2008). Emotion is posited as not merely being a by-product of reason or the EDM process, but instead as being a necessary component of reasoning itself (Damasio, 1994; Warren & Smith-Crowe, 2008). It is not clear from the literature what role emotion plays in the decision making process of white collar criminals, nor does the fraud triangle assist in this question.

### ***Judgement element: Intuition (sensing)***

According to some (Dedeke, 2015; Haidt, 2001; Schwartz, 2016), ethical awareness leads to the formation of an undeliberated, *intuitive* ethical judgment, which may or may not be the decision open which the individual progresses to action. This intuitive judgment may or may not be followed by rationalisation process.

The social intuitionists suggest that moral judgment is primarily arrived at by reference to social intuitions and that reason does not play a great role (Haidt, 2001). It has been argued that the proliferation of the rationalist view of EDM is, itself, a product of research conducted using scenarios and vignettes, which necessarily engaged deliberation and therefore overemphasised the rational component.

Kahneman (2003, 2011) distinguishes the quick, involuntary, unconscious and emotionally charged intuitive decision making process from the slow deliberative conscious reasoning process. According to Haidt (2001), individuals quickly and intuitively arrive at their ethical judgments, but this is then followed by a slow and deliberative ex post facto reasoning process to justify the decision (Warren & Smith-Crowe, 2008). The aforesaid illustrates an interaction between three of the judgment

process elements: intuition, emotion, reasoning and rationalisation. Indeed, much of the literature on intuition concerns the role of emotion in the judgment element (Ferrell & Gresham, 1985; Tenbrunsel & Smith-Crowe, 2008). Decision making is not entirely sequential, but may in fact be the product of simultaneous processes (Reynolds, 2006). It may be that certain of the processing happens through fast intuitive judgment, whilst other processing occurs through slower deliberative reasoning. In any given case, it may be one or the other, or both (Tenbrunsel & Smith-Crowe, 2008). It is not clear from the literature what role intuition plays in the decision making process of white collar criminals, nor does the fraud triangle assist in this question.

***Judgement element: Reason (reflecting)***

Through the mental process of reasoning, the individual reflects on the competing ethical standards, as well as any conflict in the interests of role-players (Schwartz, 2016). Depending on individual moral character disposition (discussed later), this may include a perspective-taking process, in which an individual determines how he or she ought to feel by envisioning him or herself in the other's situation Warren & Smith-Crowe (2008).

Reasoning may also take place differently in light of feedback loops. For instance, an individual perceived to have broken the ethical code results in embarrassment for the individual, possibly resulting in a change of judgment the next time the individual is faced with the same decision (Warren & Smith-Crowe, 2008). It is not clear from the literature what role reason plays in the decision making process of white collar criminals, nor does the fraud triangle assist in this question.

***Judgement element: Rationalisation (justifying)***

Albrecht, Albrecht, Albrecht, & Zimbelman (2018) expressly referenced rationalisation as an element of the fraud triangle and, similarly, (Schwartz, 2016) included it as an element of the judgment process in I-EDM. Through rationalisation, individuals commit an act of self-deception in order to justify unethical acts so as to arrive at the conclusion that the decision does not violate his or her own ethical code (Schwartz, 2016). Performance orientation and assertiveness have been associated with willingness to justify an unethical decision (Parboteeah, James, & John, 2005). Belief harmonization is in act through which a person revises his or her own beliefs and preferences in such a way that he or she sees no cognitive dissonance between the unethical act and their own moral standards (Jackson et al., 2013; Schwartz, 2016). Using bribery as an example, although the act may be a departure from the

general “ethical code”, an individual may regard it as part of the “operational code”; that is to say, a belief that bribery is simply the way things are done (Braithwaite, 1985). According to (Schwartz, 2016), rationalisation can be explained by many possible theories, such as moral appropriation, the fudge factor theory and moral balance theories. These theories all speak to wishing to fit in with oneself, as well as with others. Mechanisms supporting rationalisation include denial (of responsibility for harm, of there being harm or of there being a victim), balancing of a ledger, discomfort avoidance and harm discounting (Albrecht, Albrecht, Albrecht, & Zimbelman, 2018; Heath, 2008; Schwartz, 2016; Soltes, 2016). Albrecht et al. (2018) also point out that unethical conduct is often rationalised by the individual convincing him or herself that he or she is only borrowing with the intention to make good later, with the proceeds being applied for a good purpose. All of these mechanisms help the individual avoid the discomfort of emotions like regret.

***Judgement element: Consultation (confirming or disconfirming)***

Moral consultation could take place where the decision maker decides to have regard to ethical codes (such as policies), or when the individual consults a third party for guidance (Haidt, 2001; Schwartz, 2016). Soltes (2016) refers to this as the “dissonant voice”, constituting a mechanism to divert the errant decision maker to the ethical decision. On the other hand, if the third party is also on the wrong ethical path, the unethical decision may be reinforced (Schwartz, 2016). It is not clear from the literature what role consultation plays in the decision making process of white collar criminals, nor does the fraud triangle assist in this question.

***Intention (committing)***

Hannah et al. (2011) describe this process element as moral motivation, being the process to gain commitment to a course of action, as well as the balancing of certain moral values over others. The distinction here is between coming to a conclusion about what is right or wrong, and deciding to act on that conclusion or not (Jones, 1991). Moral temptation is where an individual knows what they should do, but fail to do it due to failed will power (Tenbrunsel & Smith-Crowe, 2008).

Regarding the interaction of individual factors with the intention process element, mixed results emerge from studies on the effect of gender, work experience and educational experience on the intent process element (Tenbrunsel & Smith-Crowe, 2008). Studies have shown an association between nationality and the intention process element (Tenbrunsel & Smith-Crowe, 2008). The individual’s values and ethical orientation (for instance, utilitarian, formalist, relativist or idealist) are a core

component of the intention process element (Tenbrunsel & Smith-Crowe, 2008).

Regarding the interaction of situational factors with the intention process element, issue intensity (discussed below) is positively associated with ethical intention (Tenbrunsel & Smith-Crowe, 2008). Should the proximity element of issue intensity be low, an individual may not form the intent to act because they deem themselves not to be responsible (Jones, 1991). Similarly, people tend to carry through what they perceive to be the right decision when social consensus is high.

Regarding the effect of organizational ethical infrastructure (discussed below) on the intention process element, Tenbrunsel & Smith-Crowe (2008) found a positive association has been found with respect to ethical training. However, Ullah, Ahmad, Albar, & Kodwani (2019) found that ethical training programmes were associated with greater probability for unethical conduct. Studies on the association between codes of ethics and the intention process element have had mixed results (Tenbrunsel & Smith-Crowe, 2008). It is not clear from the literature what role intention plays in the decision making process of white collar criminals, nor does the fraud triangle assist in this question.

### ***Behaviour (acting)***

This step denotes the individual carrying through their intention into action, encountering (and sometimes overcoming) challenges; including fatigue, distractions and obstacles, encountered along the way (Jones, 1991; Rest, 1986). Hannah et al. (2011) include, under this element, persistence and perseverance in carrying through the decision into action. Procópio (2019) criticises this because of the hidden assumption that perseverance did not already play a role in the judgment stage.

Studies have shown an association between nationality and the intention process element (Tenbrunsel & Smith-Crowe, 2008). The individual's values and ethical orientation (for instance, utilitarian, formalist, relativist or idealist) are a core component of the behaviour step in EDM (Tenbrunsel & Smith-Crowe, 2008).

Regarding the interaction of situational factors with the behaviour process element, issue intensity (discussed below), is positively associated with ethical intention (Tenbrunsel & Smith-Crowe, 2008). Issue intensity may increase the likelihood of intention being carried over into action. For instance, in instances of high proximity, there is greater drive to overcome challenges (Jones, 1991). Regarding the effect of organizational ethical infrastructure (discussed below) on the behavioural process element, a positive association has not been found with respect to ethical training

and goal setting (Tenbrunsel & Smith-Crowe, 2008). Studies on the association between codes of ethics and the behaviour process element have had mixed results (Tenbrunsel & Smith-Crowe, 2008).

### ***Learning (retrospection)***

The act itself may hold a consequence that could be positive or negative, from which the decision maker may learn (Schwartz, 2016). A negative reinforcement may manifest as being caught out for an unethical act, experiencing embarrassment or being subjected to public shame (Braithwaite, 1985), thus somewhat reducing the prospect of it being repeated (or causing the act to be committed in a more sophisticated way next time). A positive reinforcement may be getting away with (and benefiting) from the unethical act, increasing the prospect of it being repeated. A feedback loop from a prior decision in which the individual did not have awareness may be the trigger for the individual to have awareness the next time that the decision is made. Another form of learning may manifest through, for instance, embarrassment at an act inadvertently committed, from which a person may learn (for example, through transgression) and shift their moral judgment (Warren & Smith-Crowe, 2008). It is not clear from the literature what role learning plays in the decision making process of white collar criminals, nor does the fraud triangle assist in this question.

### **2.3.2. FACTOR ELEMENTS**

In the I-EDM, moral character disposition and integrity capacity make up the individual factor element. The situational factor elements include personal factors, ethical issue factor (issue intensity, issue complexity and issue importance) and organizational ethical infrastructure. Each is discussed more fully below.

#### ***Individual moral capacity***

Moral capacity was defined by Schwartz (2016, p. 762) as "... one's level of moral maturity based on their ethical value system, stage of moral development and sense of moral identity." Individual moral capacity includes moral character disposition and integrity capacity. Moral capacity denotes the centrality of moral behaviour to a person's character; which is inclusive of Kohlberg's cognitive moral development, as well as the idea of "bad apples", among other similar constructs.

Hannah et al. (2011) divided moral capacity into moral maturation capacities, which moderate the awareness and judgment process elements, and moral conation capacities, which moderate the moral intention and behaviour process elements.



Hannah et al. (2011, p.667) indicated that moral maturation capacity is “the capacity to elaborate and effectively attend to, store, retrieve , process, and make meaning of morally relevant information”, and they included the constructs of moral complexity, meta-cognitive ability and moral identity. They also indicated that moral conation capacity is “the capacity to generate responsibility and motivation to take moral action in the face of adversity and persevere through challenges”, and they included the constructs of moral ownership, efficacy and courage.

With regard to moral complexity, Hannah et al. (2011) pointed out that individuals vary in the complexity of their cognitive representations of domains of ethical knowledge such that those with more complex representations are able to process information more thoroughly as they are better able to discriminate between categories and to identify commonalities and connections. They indicated that moral complexity moderates, in addition to the judgment process element, the awareness process element as persons with richer cognitive representations are better able to pick up on “moral cues”. With regard to its inclusion in Schwartz' (2016) I-EDM model, Hannah et al.'s (2011) moral complexity shows potential overlap with the moral development construct already reflected in the moral character disposition factor element.

With regard to the interaction of moral complexity and meta-cognitive ability, Hannah et al. (2011) used Street et al.'s (2001)'s analogy of fuel (moral complexity) and an engine (meta-cognitive ability), such that the fuel is useless unless it has an engine to process it. They postulated that greater overall intelligence and expertise leads to enhanced cognitive ability. With regard to its inclusion in Schwartz' (2016) I-EDM model, Hannah et al.'s (2011) meta-cognitive ability shows potential overlap with the issue complexity factor element already present in the I-EDM.

The individual's moral complexity capacity and meta-cognitive ability, is guided by his or her moral identity and includes traits (such as propensity to show care, compassion and generosity) and roles, goals, affect and narratives about themselves (Hannah et al., 2011). The authors suggested that the individual's moral identity, although possessing some core ethical beliefs, is a composite of sub-identities, each of which may be quite different, and are accessed depending on the social role in question, such as being a parent or a company spokesperson. They also argued that inconsistency among sub-identities results in low self-unity which leads, in particular situations, to adoption of other non-core values and reduced ethical action. In addition to influencing judgment and intention stages, core ethical beliefs are common across identities and increase awareness. With regard to its inclusion in

Schwartz' (2016) I-EDM model, Hannah et al.'s (2011) moral identity shows potential overlap with Jackson et al.'s (2013) self-concept construct already reflected in the moral character disposition factor element.

Moral ownership, being the first aspect of moral conation, was described by Hannah et al. (2011) as the extent to which the individual feels, in any given situation, a sense of responsibility for the consequences that flow from the actions taken by him- or herself, as well as for his or her organisation. Where moral ownership is low, individuals engage in moral disengagement through which they diffuse responsibility, blame others or discount harm and thereby rationalise their actions. As part of moral ownership, Hannah et al. (2011) pointed out that individuals vary in intentionality, forethought (the degree to which consequences are anticipated), self-reactiveness (the degree to which the individual self-motivates and self-regulates actions to achieve goals) and self-reflectiveness on the adequacy of the individual's own thoughts. With regard to its inclusion in Schwartz' (2016) I-EDM, Hannah et al.'s (2011) moral ownership shows potential overlap with Street et al.'s (2001) moral disengagement construct (already reflected in the issue complexity factor element) as well as Jackson et al.'s (2013) issue importance construct. Arguably, the moral ownership construct could also be included in the moral character disposition factor element as it relates to the individual's I-EDM characteristics, allowing for some situational variance.

Hannah et al. (2011) included moral-efficacy in moral conation and argued that both of its components, self-efficacy (that is, internal efficacy) and means-efficacy (that is, the resources available to support the decision) are necessary to explain moral conation. They indicated that moral efficacy is composed of moral efficacy magnitude (the extent of difficulty one expects to encounter) and moral efficacy strength (an assessment as to the probability of overcoming the difficulty). Although they were not cited by Hannah et al. (2011), self-efficacy potentially overlaps with Jackson et al.'s (2013) self-efficacy construct which, Schwartz (2016) included in the moral character disposition factor element. Moreover, the means-efficacy appears to be related to Tenbrunsel et al.'s (2003) organizational ethical infrastructure factor element, which is also not cited by Hannah et al. (2011). Nevertheless, Hannah et al. (2011) indicate that moral-efficacy is critical to the intention-behaviour connection.

Moral courage is included in moral conation as the individual's capacity or strength of will to overcome fear, for the sake of doing what is considered ethical (Hannah et al., 2011). Moral courage is a necessary but not sufficient condition to carrying intention through to action. The individual's moral courage is either supported or

undermined by his or her level of moral ownership and moral-efficacy. Moreover, moral courage may vary across sub-identities. With regard to its inclusion in Schwartz' (2016) I-EDM model, Hannah et al.'s (2011) moral courage shows potential overlap with Jackson et al.'s (2013) courage construct which Schwartz (2016) includes in the moral character disposition factor element. It is not clear from the literature what role individual moral capacity plays in the decision making process of white collar criminals, nor does the fraud triangle assist in this question.

### ***Moral character disposition***

Lawrence Kohlberg proposed that an individual could be at one of six stages of cognitive moral development (Hannah, Avolio, & May, 2011; Jackson et al., 2013; Kohlberg, Levine, & Hower, 1983; Kohlberg, 1973). In the first stage (punishment orientation), the individual is primarily oriented towards punishment avoidance and, the greater the punishment the worse the act is perceived to be. In the second stage (instrumental-relativist orientation), correct behaviour is defined as whatever serves the individual's self-interest, with limited regard for the interest of others. In the third stage (interpersonal concordance), individuals seek others' approbation. In the fourth stage (law and order orientation), what is ethical is extrinsically defined by what the law says, and obedience to the law is regarded as what everyone is supposed to do. In stage five (social contract orientation), the individual recognises that others may hold different, yet valid, opinions on what is right and that laws are social contracts rather than immutable truths. In the final stage (universal-ethical-principle-orientation), the individual's ethicality is intrinsically derived from abstract ethical principles, which may in certain instances require the individual to disobey external ethical dictates. In the sixth stage, second order role-taking plays an important role in which the individual imagines him or herself as occupying a randomly assigned role in the ethical dilemma, asking whether he or she would still hold the same view and act in accordance with it. Individuals may act at different stages depending on context (Jones, 1991). For instance, Treviño (1986) showed that an individual may operate at a lower stage in a business context as compared to a family context. Although Kohlberg's six stage model is subject to criticism (Kohlberg et al., 1983), it is widely supported (Jackson et al., 2013).

The connection between formal ethical training and moral conduct in organizations has had mixed results in studies, which has been attributed to business schools encouraging egocentric rather than society-centric values, and putting analytical deliberation above ethical deliberation (Ferrell & Gresham, 1985; Jackson et al., 2013). For instance, Ullah, Ahmad, Albar, & Kodwani (2019) found that ethical

training programmes were associated with greater probability for unethical conduct.

The current ethical value systems is composed of the individual's approaches to, and theories of, EDM and includes the degree to which morality is central to the individual's mindset (Jackson et al., 2013). This is influenced by the individual's perception of what is acceptable to society, as well as the individual's present ideals. It is also affected by an individual either being deontological or teleological in ethical approach. The authors also pointed out that a person may, through fragmentation, separate different aspects of their life such that he or she has a "faith self" and a "professional self" which ascribe to different ethical standards.

Ethical sensitivity is the personal characteristic which enables a person to recognise that they are faced with an ethical decision (Hunt & Vitell, 1986; Jackson et al., 2013), as well as the individual's motivation to consider ethical issues (Jackson et al., 2013). In light of the awareness process element in the I-EDM model, it may be repetitive to incorporate ethical sensitivity (defined as the tendency to be aware of ethical issues) as a factor element moderating the awareness process element. Perhaps more useful for the I-EDM model is the universe of moral concern construct, being person or persons whom the decision maker is inclined to include in his or her ethical consideration, which is closely tied to empathy (Jackson et al., 2013). It is also argued that, in order to avoid cognitive dissonance, individuals revise their needs, beliefs and preferences in order to achieve belief harmonization, so as to maintain their self-concept (Jackson et al., 2013).

Self-efficacy is how deeply held a person's belief is that he or she is able to achieve his or her goals through his or her own actions (Jackson et al., 2013). Jackson et al. (2013) linked self-efficacy to whether an individual has an internal or external locus of control. As discussed by Treviño, (1986), individuals with an internal locus of control are more consistent in the ethical cognition to action relationship than individuals with an external locus of control. Linked to self-efficacy is self-control (the capacity to, using internal mechanisms, make decisions and self-regulate behaviour), learned helplessness (learning, through uncontrollable experiences, that outcomes and not necessarily self-determined) and moral approbation (the need to seek social approval for perceived moral virtue) (Jackson et al., 2013).

A person's moral character is also determined by their short-term or long-term orientation, with individuals possessing a short-term orientation being at greater risk of moral dissolution (Jackson et al., 2013). Persons with short-term orientation seek immediate satisfaction, whereas persons with long-term orientation embrace delayed

gratification. It is not clear from the literature what role moral character disposition plays in the decision making process of white collar criminals, nor does the fraud triangle assist in this question.

Another element of moral capacity is moral responsibility, which is a feeling of being responsible to others, as well as for others (Small & Lew, 2019). Small & Lew (2019) find mindfulness, which includes a mental presence with the intent of minimising harm, to be a strong predictor of moral responsibility.

### ***Integrity capacity***

Petrack & Quinn (2000, p. 4) defined integrity capacity as:

The individual and/or collective capability for repeated process alignment of moral awareness, deliberation, character and conduct that demonstrates balanced judgment, enhances sustain moral development and promotes supportive systems of moral decision making”.

According to Jackson et al. (2013), this includes moral ownership, moral efficacy and moral courage. The same constructs were included by Hannah et al. (2011) under individual moral capacity. Under integrity capacity, Petrick & Quinn (2000) included process integrity capacity, which is the persistent application of the awareness-deliberation-conduct process. The process integrity capacity construct appears to have some potential overlap with the awareness, judgment, intention and action constructs in the I-EDM model. Although Schwartz (2016) held that integrity capacity moderates awareness as a factor element, Petrick & Quinn (2000) appeared to have considered it as simply part of the aware process element, as per Jones (1991).

The second element included by Petrick & Quinn (2000) under integrity capacity is judgment integrity capacity. According to Petrick & Quinn (2000), judgment integrity capacity involves being able to balance different, often competing, ethical theories and resources (including management and legal theories) in the analysis and resolution of ethical issues. Overemphasis on one theory or resources may lead to distorted outcomes, such when goals and output (rational goal theory) is emphasised over individuals and cohesion. Although Schwartz (2016) includes integrity capacity as a distinct moderating factor, it is not clear how one should distinguish Petrick & Quinn's (2000) judgment integrity capacity (such as balancing deontological and teleological theories) from the current ethical value system component of moral character disposition posited by Jackson et al. (2013). With regard to judgment integrity capacity, Petrick & Quinn's (2000) contribution to the I-EDM model was

perhaps to account for the capacity of a person to balance the various ethical theories already accounted for in moral character disposition. But the same capacity to balance may already be accounted for in Kohlberg's (1973) moral development stages. Similarly, the actual act of balancing is accounted for in the reasoning process element of the I-EDM model.

The third element of integrity capacity is development integrity capacity, which Petrick & Quinn (2000) related to Kohlberg's six stages of moral development. It is therefore not clear that developmental integrity capacity should be a distinct factor element in Schwartz' (2016) I-EDM model.

System integrity capacity, the last element of integrity capacity as defined by Petrick & Quinn (2000), is defined as:

The aligned implementation of organizational policies that institutionalize ongoing moral improvement within and between organization and enable extra-organizational contexts to provide a moral supportive framework.

There appears to be some potential overlap between Petrick & Quinn's (2000) organizational policies and moral supportive frameworks, and the formal and informal systems described by Tenbrunsel et al. (2003), and discussed below in the context of organizational ethical infrastructure factor element. These potential overlaps include moral leadership, ethical culture, codes of ethics, value statements, ethical communication systems, sanctions, incentives, ethics training, whistleblowing, and others. Insofar as Petrick & Quinn (2000) emphasise the institutionalisation of ethical conduct, Tenbrunsel et al. (2003) use the term embeddedness. It is therefore not clear that system integrity capacity should be a distinct factor element in Schwartz' (2016) integrated I-EDM model. It is not clear from the literature what role integrity capacity plays in the decision making process of white collar criminals, nor does the fraud triangle assist in this question.

### ***Personal context***

Personal context, which Schwartz (2016) also called ethical vulnerability, includes a person's drive for gain; perhaps due to high debt, limited career prospect, time pressure and financial loss. Albrecht et al. (2018) identified pressure as one of the elements of the fraud triangle. According to Albrecht et al. (2018), The first component of ethical vulnerability, financial pressures, includes unexpected financial needs, living beyond one's own means and greed. Albrecht et al. (2018) found that those who have served the organisation for a longer time, and those who are older,

are at greater risk of perpetrating financial misconduct. They explained this as linked to the fact that older, longer serving employees, have more financial pressure and have gained positions of trust. The financial pressure could also be the organisation's pressure, such as needing to meet financial expectations of shareholders. The second component of ethical vulnerability, vice, includes substance abuse, gambling and extramarital relationships. The third component, work related pressure, includes the individual's perceptions as to him or her having limited career prospects, being overlooked for promotion, being underpaid, under-recognised, and other frustrations with work. The final component, other pressures, includes family expectations and feeling the need to beat the system. The principle is that a person burdened with these difficulties is more vulnerable to making an unethical decision.

According to social identity theory, an individual's self-conception is bound to the groups to which the individual belongs, and being a respected member of a group can contribute to self-esteem, which speaks to the need to maintain social relationships and ego (Warren & Smith-Crowe, 2008). To the extent that the individual is aligned to the group, sanction would lead to group submission, particularly in the case of embarrassment due to inadvertent transgression. Conversely, where group alignment, or social identification, is low, self-promotion at the expense of social alignment is thought to be easier (Warren & Smith-Crowe, 2008).

In the case of the fraud triangle, the literature distinguishes between a "need" motive and a "greed" motive in perpetrating white collar crime (Muto & Price, 2014). The greed motive does not, however (by itself), explain instances of criminality on behalf of public organisations, such as interception of communications by security agencies and intentional exposure of soldiers to hazardous substances (Braithwaite, 1985). This concept of ethical vulnerability therefore potentially overlaps with the element of need or pressure as found in the fraud triangle. Although the importance of personal context is established in the fraud triangle, its interaction with the other constructs of I-EDM as factor element is unstudied in the context of white collar crime.

### ***Ethical issue: Generally***

Continuing in the tradition of Jones (1991), rather than just focusing on the individual with low or high moral capacity, the I-EDM model recognises that the issue itself may determine how the decision is made (Schwartz, 2016). Included in this category is

issue intensity, issue complexity, and issue importance.

***Ethical issue: Issue intensity***

The factor element of issue intensity, being a characteristic of the issue itself (as opposed to the decision-maker), moderates the individual's characterisation of the issue as an ethical one, as well as how much "moral imperative" the individual ascribed to the issue (Jones, 1991). Jones broke the issue intensity construct down into six dimensions. Jones' (1991) hypothesis was that issues which were strong on the six dimensions would have greater issue intensity, in that they are more salient, vivid and accessible. Each of the six dimensions are discussed below.

The first dimension, magnitude of consequence, denotes the amount of harm, or benefit, following from a decision (Butterfield et al., 2000; Jackson et al., 2013; Jones, 1991; Street et al., 2001). Magnitude of consequence denotes that the greater the intensity of the consequence of the issue to the decision maker, the greater its effect on the decision maker's recognition, formulation of moral intent and action in relation to the issue (Jones, 1991). Provided that a threshold of magnitude is met, magnitude of consequence enhances awareness because greater consequence enhances the salience and vividness of the issue, but also the subject's accessibility of, and emotional interest in, the issue (Jones, 1991; Tenbrunsel & Smith-Crowe, 2008).

The second dimension, social consensus, is the individual's perception of how much consensus there is in society as to whether the act is good or bad (Jackson et al., 2013; Jones, 1991). Whilst Jones (1991) sees this is an objective factor, Butterfield et al. (2000) points out that it is still dependant on the individual's perception of what society's consensus is. Regardless, ethical awareness is enhanced through social consensus as the individual is primed through perceived consensus to recognise a departure from the consensus, as well as an enhancement of accessibility through social discourse on the issue (Butterfield et al., 2000). However, this may act detrimentally to EDM where the social environment is ethically compromised (Suh et al., 2018).

The third dimension, probability of effect, is how likely the act is to take place, and whether the outcome of that act is likely to reflect the harm or benefit anticipated (Jackson et al., 2013; Jones, 1991; Street et al., 2001). The higher the likelihood of an effect materialising as a consequence of the issue, the greater its effect on the decision maker's recognition, formulation of moral intent and action in relation to the issue (Jones, 1991).



The fourth dimension, temporal immediacy, is how far removed the act is anticipated to be from its anticipated consequence (Jones, 1991; Street et al., 2001). Where the distance in time is great, issue immediacy and intensity is low.

The fifth dimension, proximity, is how physically, psychologically, culturally and socially close the decision maker feels to those experiencing the consequences of the decision (Butterfield et al., 2000; Jackson et al., 2013; Jones, 1991; Street et al., 2001). The greater the sense of nearness between the decision maker and those affected by the decision, the greater its effect on the decision maker's recognition, formulation of moral intent and action in relation to the issue. In the study of Butterfield et al. (2000), it was found that only a small percentage of subjects raised harm to a competitor as an issue of concern, indicating that lack of proximity impacted the I-EDM process. Issue intensity may also be affected by emotion, for instance, by increasing the sense of proximity (Yacout & Vitell, 2018).

According to Jones (1991, p. 377) the final dimension, concentration of effect "is an inverse function of the number of people affected by an act of a given magnitude". As such, the same effect when felt by a single person causes greater issue intensity compared to that effect being spread across multiple persons.

### ***Ethical issue: Issue complexity***

Schwartz (2016) included issue complexity as a situational factor element, which is how hard or easy an issue is to understand, possibly leading to ethical paralysis. Warren & Smith-Crowe (2008) set out how competing moral claims may hinder an ethical judgment, such as in scenarios where behaviour is not obviously right or wrong. Such ambiguity, they argued, results in a rule-belief misalignment between the individual's moral judgments and those of others, and that the individual simply does not realise that the moral rules which they generally espouse apply in that specific context. As such, issue complexity moderates the ethical awareness process element. In the more effortful judgment process, Warren & Smith-Crowe (2008) described how complicated facts – specifically, overweighting or some facts and underweighting other facts, including their probabilities, affect ethical judgment. In this way, it affects the judgment process element.

Warren & Smith-Crowe (2008) argue that low social identification (or group alignment) may result in a lack of information and, thus, more ambiguity. However, they also point out that alignment with one group may mean misalignment with another group (Warren & Smith-Crowe, 2008).

In circumstances where the issues facing the ethical decision maker are complex, he or she might not have his or her moral awareness triggered (Jones, 1991; Warren & Smith-Crowe, 2008). In order for it to be triggered, the decision maker must expend cognitive effort, which Street et al. (2001) argued is not accounted for in the issue intensity construct. When the level of issue-relevant thinking is high, the decision making process follows a central information processing route. However, when the level of issue-relevant thinking is low, a peripheral information processing route is followed, which route is particularly sensitive to cognitive heuristics (Street et al., 2001). The level of issue-relevant thinking is a spectrum, ranging from careful consideration (and central information processing) to lazy or low cognitive effort (and peripheral information processing). Jones (1991) argued for a connection between ethical intensity and cognitive effort in that issues with low intensity elicit low effort.

According to Street et al. (2001), whether a person engages in issue-relevant thinking is determined by their individual and situational motivational factors (Street et al., 2001). Individual characteristics include the individual's propensity to undertake intellectual activities. For instance, individuals tend more or less to disengage from the ethical dimensions of a decision (Tenbrunsel & Smith-Crowe, 2008).

Included in situational characteristics are the individual's existing knowledge of the issue and the level of distraction present (Street et al., 2001). Event concurrence conceptualization is also included in this construct and denotes the difficulty experienced by individuals, or the individual's tendency not to expend cognitive effort, in conceptualising events that have not occurred (Jones, 1991; Street et al., 2001). The authors define the concept of immediacy of processing with reference to the heuristics literature (specifically, humans' limited capacity for information processing) and posit that more cognitive effort is expended when less time constraints are present.

However, as they were positing a model as opposed to a construct within a model, there are potential overlaps between the model of Street et al. (2001) and the other models. For instance, Street et al. (2001) included Jones's (1991) issue intensity under situational characteristics for the motivational factor. The model also refers, without reference to Kohlberg (1973), to the individual's capacity to engage in the relevant thinking (or the need for cognition construct), which may be a potential overlap with the individual moral capacity construct used by Kohlberg (1973) and by Schwartz (2016) in his I-EDM model. The model of Street et al. (2001) also describes the need for closure (the individual's need to reach for the first available answer), which may simply be a parallel to the availability heuristic. The model of Street et al.

(2001) can therefore not be imported holus bolus into Schwartz' (2016) I-EDM. It is not clear from the literature what role issue complexity plays in the decision making process of white collar criminals, nor does the fraud triangle assist in this question, without some overlap.

### ***Ethical issue: Issue importance***

Schwartz (2016) also included issue importance as a factor element. According to Robin et al. (1996), this construct denotes the degree to which the individual regards the issue as relevant to him or herself. They distinguished it from Jones' (1991) issue intensity construct in that issue intensity is exogenous, whereas issue importance is endogenous in that it focuses on the individual's perceptions. That said, Butterfield et al. (2000) indicated that the exogenous factors are still experienced through individual perception. Robin et al. (1996) point out that, although the characteristics of an individual or situation are hard to change, perceptions can be influenced by managers through positive and negative incentives.

Robin et al. (1996) included, as components of issue importance, the individual's ethical sensitivity, moral development, and values. However, it is not clear how this should be distinguished from the construct of individual moral character disposition as discussed by Jackson et al. (2013) and Kohlberg (1973). Robin et al. (1996) also included, as components of issue importance, organizational values, but this may already be covered by Tenbrunsel et al., (2003) under the construct of organisational ethical infrastructure. Lastly, Robin et al. (1996) included, as components of issue importance, situational pressures, opportunity, relationships with superiors, peers and subordinates and physical environment, but these were already be covered by Albrecht, Albrecht, Albrecht, & Zimbleman's (2018) personal context. In drawing a parallel to the consumer involvement construct, Robin et al. (1996) posited that it is the relevance of the decision to the individual that impacts the decision; that is to say, the more the decision impacts the decision maker, the greater its importance.

Whilst the consumer involvement construct has a strong foundation in consumer literature and social psychology (Robin et al., 1996), it appears to have a large potential overlap with other constructs in the I-EDM model. Because Robin et al. (1996) appeared to deal with issue importance as a model, rather than as a process or factor element, its holus bolus inclusion into the I-EDM model is open to question.

On the other hand, if the construct were reduced to simply the impact of the closeness of the decision-maker to the outcome of the decision, the construct appears to be akin to bias, such as self-serving bias. In fact, there is very little

mention of biases in Schwartz' (2016) I-EDM model. Also, distilling the construct down to only relevance creates a potential overlap to Street et al.'s (2001) personal accountability and relevance constructs.

Robin et al. (1996) posit that a business ethics issue is practically encountered amidst competition, work pressures, customer pressures and incomplete information, and so must compete for attention (the first process factor discussed above). They continue that, even when it passes the attention step, it must compete for priority. As such, if issue importance is defined as a self-standing construct, it moderates awareness as a factor element (Schwartz, 2016). However, by including issue importance in the I-EDM model, a potential overlap is created with Rest's (1986) judgment process element in that this is the stage where the individual takes into account emotion, reason, intuition and rationalisation in order to arrive at a decision. It is not clear from the literature what role issue importance plays in the decision making process of white collar criminals, nor does the fraud triangle assist in this question.

### ***Organisation's ethical infrastructure***

Described by (Tenbrunsel et al., 2003; Treviño, Weaver, & Reynolds, 2006) as the organizational ethical climate, as well as formal and informal systems relating to ethics. Mechanisms to communicate, monitor and sanction are common to both formal and informal systems. They argued that a strong organisational ethical infrastructure leads to more ethical conduct.

Formal programmes are documented, standardized and visible inside or outside the organization and attempt to disseminate expectations and standards for ethical values (Albrecht et al., 2018; Tenbrunsel et al., 2003). Formal communication systems are official attempts to disseminate expectations and standards for ethical values, and include ethical codes, mission statements, performance standards and training programmes (Tenbrunsel et al., 2003). We include in this category Albrecht et al.'s (2018) appropriate hiring practices, clear organizational structures, and control procedures. The latter includes independent checks, a system of authorizations and segregation of duties. Ullah et al. (2019) showed the importance of strong corporate governance, particularly when the regulatory environment is poor.

Formal surveillance systems are official attempts at monitoring compliance with ethical values. We include in this category Albrecht et al.'s (2018) need for an effective accounting system (to prevent concealed acts) and an effective internal

audit department (to detect concealed actions). They also point out that asymmetric access to information creates opportunity for unethical conduct.

Formal sanctioning systems are official attempts at rewarding and punishing ethical compliance, and include promotions, demotions, salary increases, salary decreases and bonuses. This may include internal and external whistleblowing mechanisms (Latan, Chiappetta Jabbour, & Lopes de Sousa Jabbour, 2019). Albrecht et al.'s (2018) points out the importance of consistency in disciplining perpetrators. However, Tenbrunsel et al. (2003) pointed out that these formal programmes have had mixed results. In fact, Tenbrunsel & Messick (1999) found that formal systems designed to reinforce ethical conduct, are sometimes associated with increased unethical conduct; for instance, they found that weak formal sanctioning systems were associated with less co-operation than instances where no formal sanctioning systems were present. Tenbrunsel et al. (2003) considered formal systems to be a weak influencer of ethical conduct because, without alignment with informal systems and organizational ethical climate, formal systems amount to window dressing.

Informal systems are more subtle signals about what sort of conduct is either desirable or undesirable (Tenbrunsel et al., 2003). They are primarily only visible inside the organization, and not documented. They manifest as pressure by co-workers, patterns of promotions and dismissals or informal conversations about ethics. Informal communication systems are unofficial distribution of expectations and standards of ethical (or unethical) values, and include hallway conversations, being “shown the ropes” by a co-worker or through others leading by example (Albrecht et al., 2018; Tenbrunsel et al., 2003). According to Albrecht et al. (2018), individuals are sometimes recruited into unethical conduct, which they explained by means of French & Raven's (1959) five types of power.

Informal surveillance systems are unofficial attempts at monitoring compliance with ethical values, and include personal relationships and extra-organizational sources. We include in this category Albrecht et al.'s (2018) apathy, ignorance and incapacity.

Informal sanctioning systems are unofficial attempts at rewarding or punishing conduct, and include group pressure (such as to do the right thing, or, conversely, not to “snitch”), isolation, ostracism and even physical harm. Interestingly, Butterfield et al. (2000) showed that competitive business practices (a kind of informal system) enhanced ethical awareness, possibly because such a climate rendered an individual more ethically alert. Ethical awareness has also been shown to be enhanced by benevolent ethical climates and codes of ethics (Tenbrunsel & Smith-Crowe, 2008).

Organizational climate includes the climate of ethics, climate of respect and climate of procedural justice (Tenbrunsel & Messick, 1999). Organizational climate of ethics is the shared perception of the kinds of conduct that are rewarded and supported and thereby lead to group acceptance. Organizational climate of respect is the shared perception as to the extent to which other organizational members are held in regard, and includes reciprocal respect and respect for the organization. Organizational climate of procedural justice is the shared perception as to the extent to which organizational members are treated fairly in decision making, and includes reciprocated fair treatment.

According to Tenbrunsel et al. (2003), formal systems are weaker at predicting ethical conduct than informal systems (because formal systems are less entrenched than informal systems), and that informal systems are weaker at predicting ethical conduct than organization ethical climates (because informal systems are less rooted in organizational experience). They also argued that conduct is more likely to be ethical when ethical infrastructure is either strong or non-existent, rather than weak because weak ethical infrastructure triggers cost-benefit calculations rather than ethical decision frames.

The situational context to the issue determines the type of frame that the individual applies and the type of frame, in turn, determines whether the EDM process, or some a-moral decision making process is applied (Tenbrunsel & Smith-Crowe, 2008; Tenbrunsel et al., 2003). When an issue is viewed through an ethical frame, the decision maker is ethically aware, However, the decision maker is not ethically aware when the issue is viewed through other frames, such as the legal frame or the business frame.

The presence of a sanctioning system, regardless of strength, has been found to hinder the adoption of an ethical frame, particularly where decision makers adopt a business problem framing instead (Tenbrunsel & Messick, 1999; Tenbrunsel et al., 2003). Decision makers with a competitive frame evaluate how best to compete and assume others compete as well, whereas decision makers with cooperative frames evaluate how best to cooperate and assume others cooperate as well (Tenbrunsel et al., 2003). Moreover, Tenbrunsel & Messick (1999) found that the business frame is more calculated and deliberative than the ethical frame. Euphemistic language, another way of framing the discussion, tends to decrease ethical awareness (Bandura, 1999).

Schwartz (2016) also includes, within the concept of ethical infrastructure, the constructs of reference (which harkens to social learning theory) and opportunity.

Ferrell & Gresham (1985) found that unethical conduct increases in cases with increased perception of opportunity for personal gain. The concept of opportunity in I-EDM potentially overlaps with the element of opportunity as found in the fraud triangle (Jones, 1991). Under the opportunity element of the fraud triangle, Albrecht et al. (2018) included a lack of internal controls, difficulties in performance evaluation, inconsistent enforcement, asymmetric access to information, ignorance, indifference, and a lack of an audit trail.

Warren & Smith-Crowe (2008) see the emotional response of embarrassment as a social control that regulates behaviour in ambiguous situations. Although Schwartz (2016) cites Warren & Smith-Crowe (2008) in the context of the complexity factor element, it is arguably appropriate to include them in the construct of organisational ethical infrastructure because Warren & Smith-Crowe (2008) see embarrassment as a compliment to formal organisational controls. The latter authors cite various behavioural theories as incorporating some notion of sanction, whether economic or social, as an incentive or disincentive to behaviour. Although the importance of organisational ethical infrastructure is established in the fraud triangle, its interaction with the other constructs of I-EDM as factor element is unstudied in the context of white collar crime.

#### **2.4. LITERATURE REVIEW CONCLUSION**

A reading of the literature reveals how the study of white collar crime evolved from ingrained physical characteristics, to ingrained psychological characteristics, to social learning theory and, eventually, to cognitive moral development. In particular, the fraud triangle became the de facto model for analysing white collar crime. Once viewed as an ethical decision, white collar crime may be capable of being analysed through the lens of EDM models. In particular, the I-EDM model possibly holds prospect for high explanatory value.

However, it would not appear that unethical decision making by persons who committed white collar crime has been researched through the lens of I-EDM models. Certainly, no research has been published in recognised journals in terms of which white collar criminals are interviewed and analysed through the I-EDM model.

Due to its attempt to be maximally encompassing of other models of EDM, the I-EDM model appears to have potential overlap with models related to the study of white collar crime, such as the fraud triangle. The development of an integrated I-EDM model therefore poses an opportunity to study and explore, on the one hand, white collar crime through a new theoretical basis and, on the other hand, explore the

applicability of the theory to a new context.



#### 4. **RESEARCH METHODOLOGY AND DESIGN**

A complete methodological description is necessary in order to assess research findings (Randall & Gibson, 1990). Due to the fact that the I-EDM model has not been studied in the context of white collar crime, the study was exploratory in nature. Saunders & Lewis (2018) describe an exploratory study as a study about a topic not well understood by the researcher. Whilst this study provides tentative answers, future research will be required to provide dependable answers. The study took the form of semi-structured interviews with persons incarcerated for white collar crimes.

The objective was to better understand their decision making processes in order to reconcile such understanding with current theory, and make propositions for future research. This being an exploratory study, the purpose of the study was not to test current theory. Randall & Gibson (1990) also recommend that more studies in EDM should be conducted via in person interviews, and that studies focus on a subpopulation. The authors particularly encouraged exploratory studies through in-person interviews in order to understand the phenomena being studied. Qualitative studies avoid thinning out the data (Ahrens & Chapman, 2006). Suh et al. (2018) was a recent study using this method.

Edelhertz & Overcast (1982) and O'Connor (2000) have emphasised the importance of engaging directly with those serving sentences for white collar crimes. White collar criminals are themselves often the best source of information in the fight against white collar crime (Coffin, 2003; Muto & Price, 2014). Notwithstanding this, there has been little published research abiding that call (Benson, 1985; Free & Murphy, 2015).

We were not able to establish hypotheses for testing because the current theory is new and untested in the realm of white collar crime. This is only possible once future research moves beyond exploratory research (Randall & Gibson, 1990).

Contrary to the advice of many (Lehnert, Craft, Singh, & Park, 2016; Randall & Gibson, 1990), research in EDM has generally been positivist and quantitative which has resulted in an oversimplification of a complex phenomenon (Procópio, 2019). Lehnert et al. (2016) criticise the quantitative method applied to a qualitative subject. This very quantitative approach has been criticised for being too vague in the scenarios posed to interviewees, and for posing closed-ended questions, thereby depriving them of the ability to assess the context of the decision, which is, after all, foundational to EDM models (Hannah et al., 2011; Randall & Gibson, 1990). Such research also includes recognition techniques in which the questionnaire may well suggest an answer to the research subject which he or she would otherwise not have

considered un-prompted (Hannah et al., 2011). Moreover, the quantitative survey method generally yields very low response rates, compromising the data quality (Randall & Gibson, 1990; Saunders & Lewis, 2018). It must also be said that the aforesaid common research techniques in EDM research is never in the context of white collar crime.

Moreover, the quantitative survey method generally yields very low response rates, compromising the data quality (Randall & Gibson, 1990; Saunders & Lewis, 2018). Randall & Gibson (1990) speculate that the cause of low response rate is that business ethics, being a delicate topic to research, may elicit hesitation to participate in interview subjects. In the research, questionnaires sent to correctional facilities were unlikely to generate good data. It is also suggested that more research demonstrating correlations is unlikely to yield new insights (Tenbrunsel & Smith-Crowe, 2008).

So-called ordinary offences, such as assault, robbery, and vandalism allow for victims to be surveyed. However, in the case of white collar crime, the victims are generally not aware that they have been victimised (Braithwaite, 1985). Moreover, in the case of white collar crimes, it is sometimes theoretically difficult to define exactly who the victim is (Soltes, 2016).

Moreover, it is questionable whether experiments, vignettes or scenarios would be of any use when studying the decision making of white collar criminals in retrospect. This is because the purpose of the study was not to ascertain how a given person would react if faced with the hypothetical scenario. Rather, the purpose was to ascertain why the person made the decision which they actually made. Moreover, the hypothetical scenario or vignette would inevitably be limited as, for instance, it is doubtful that one could realistically simulate the actual pressure experienced in real life.

According to Saunders & Lewis (2018), exploratory studies are well suited to semi-structured and unstructured interviews. Semi-structured interviews are more informal than the structured variety (Saunders & Lewis, 2018), and are guided by the topics to be covered. This exploratory study, conducted in the form of semi-structured interviews, allowed the researcher to gain a broad understanding of the decision making process which led to the act for which the interviewee was convicted for white collar crime. Saunders & Lewis (2018) indicate that, whilst the data gathering is initially broad, focus is narrowed as the research progresses. Given the historic and autobiographic nature of the topic for which interviews were requested to engage, the research was in the form of a narrative inquiry. This enabled a deeper

understanding of the organisational reality and the interviewee's experiences (Saunders & Lewis, 2018).

Saunders & Lewis (2018) describe interpretivism as the study of sociological phenomena in their natural environment. In the present study, the relevant decision was far in the past and so could not be studied first hand. However, through an interpretivism approach, the interviewee was able to share much of the unique context and complexity of the decision's environment. Moreover, the interviewer was conscious of his own values and how these might have affected the gathering of data, as well as the analysis of data, which was a particularly prescient concern when dealing with such sensitive matter. Interpretivism has recently been used to interview executives who engaged in corporate malfeasance (Suh et al., 2018).

According to Saunders & Lewis (2018), inductive reasoning (such as was adopted here) moves from specific observations to broader theory and an emphasis on research context. According to Saunders & Lewis (2018), ontological assumptions are the researcher's assumptions about reality. In this study, ontologically, the assumption was that it is not only the individual interviewee who is subject to critical analysis, but also how the greater organisational and social context may have created the decision. Saunders & Lewis (2018) describe epistemological assumptions as assumptions as to what constitutes valid knowledge. As is discussed in this chapter, asking interviewees why they made the decisions they made was likely to solicit subjective (as opposed to objective) responses made imperfect by inter alia post hoc rationalization and hindsight bias. According to Saunders & Lewis (2018), the axiological assumption emphasises the importance of values in a study. The axiological research assumption adopted in this study was one where value was placed on gathering data by personal, human contact as opposed to, say, an internet questionnaire.

As prescribed by Schwartz (2016) in developing the I-EDM model, the unit of analysis was the individual engaging (or failing to engage) in ethical (or unethical) decision making within or on behalf of an organization. Population and sampling considerations pertain to decisions concerning the identification of a group that would be useful for data gathering in line with the research purpose (Randall & Gibson, 1990). Historically, research in the field of EDM has taken place by convenience sampling, which reduces their generalisability (Randall & Gibson, 1990; Saunders & Lewis, 2018). In accordance with the study conducted by Muto & Price (2014) in which white collar criminals incarcerated at correctional facilities in Gauteng were interviewed, a purposive sampling technique was used. Purposive sampling is

common in qualitative studies where a narrow sample of interviewees who are most likely to be able to answer the questions is required (Saunders & Lewis, 2018).

### ***Methodological limitations***

The research was limited by the researcher's own bias, as well as observer-caused effects (Ahrens & Chapman, 2006). This was controlled for by interviewing more interviewees and the interviewer attempting to control his own behaviour in such a way as to limit observer-caused effects. Five interviewees denied having committed the act in question, however, their inclusion in the sample was justified by the fact that all were convicted by the criminal justice system, three were not appealing conviction and the remaining two conceded that the conduct may have been unethical (although not illegal). The data gathered could not be considered representative of the population because; by way of example, wealthier perpetrators could apply more resources into evading conviction and therefore would not make it into the sample (Braithwaite, 1985). Also, the more sophisticated the white collar criminal, the more he or she would be able to obfuscate his or her actions, further avoiding conviction and, thereby, inclusion in the sample (Braithwaite, 1985).

The research took into account only the version of the interviewee, without reference of others in the organisation. A future study may take the form of a case-study method in order to delve more deeply into the nuances which surely arise if multiple perspectives on the same incident is obtained. As the semi-structured interview allowed flexibility to the interviewee, the study also could not delve into every element of the theory.

Although confidentiality was continuously emphasised, interviewees may have self-reported in ways that they feel others would find appropriate, skewing the information (Randall & Gibson, 1990; Schwartz, 2016). Although the social desirability bias was reduced by attempting to create an open interview atmosphere (Muto & Price, 2014), interviewees may have over-reported what they believed to be desirable traits and underreported what they perceived to be undesirable traits (Randall & Gibson, 1990). Moreover, through the actor-observer-effect, interviewees may have overemphasised the importance of the situations in which they founding themselves, at the expense of honestly reflecting on the role played by the qualities of their own characters (Jones, 1991). Interviewees may have given contradictory or incomplete feedback due to a process of "cognitive transformation", in which the interviewee sought to protect him/herself from uncomfortable thoughts. Instead of dealing directly with uncomfortable reflection, the interviewee may have cognitively transformed the issue into a number of other issues that may have presented less of a psychological

threat (Butterfield et al., 2000).

The results of this study cannot be generalised, given that it is only based on 17 interviewees, nor can this study be regarded as sufficient proof of the theory. The study, being semi-structured and explorative, could not test whether the process elements work in exactly the way they do in I-EDM. The objective of this study, as a qualitative exploratory study, was not to test or prove the theory, but instead to arrive at new ideas and to reach a deeper level of understanding of what was observed (Boiral, Baron, & Gunnlaugson, 2014).

The rules of the correctional facility also imposed limitations on the study. As the interviewer was male, the correctional centre's rules allowed for interviews with male offenders to be in private; however, interviews with females were not, possibly skewing the results.

### ***The Interview process***

The present exploratory study interviewed 17 persons serving sentences for fraud in the Johannesburg Correctional Services Centre, using the semi-structured interview method.

First, ethical clearance was obtained from the University's Research and Ethics Committee. Thereafter, ethical clearance and permission to interview was obtained from the South African Department of Correctional Services. Once clearances and permissions were obtained, we worked with the correctional facility's designated social workers and psychologists in order to obtain access to the interviewees. With their help, invitations to participate in the research were circulated to those who were convicted of white collar crimes. A selection bias was present in that interviewees had to volunteer to be interviewed (Free & Murphy, 2015). Having volunteered for the research, appointments were made with each interviewee for the interview to take place in an area designated by the correctional centre's designated social workers and psychologists.

Before commencement of the interview, every interviewee signed a consent form in which the interviewee agreed that the interview was voluntary, confidential, anonymous and could be withdrawn from at any point without penalty (Aldieri, Kotsemir, & Vinci, 2018; Saunders & Lewis, 2018). The interviewees were also informed of the anticipated length of the interview, and all consented to the interview being recorded on an audio recorded device. Consent forms were available in English and Afrikaans, but all interviewees were comfortable in English.

Having signed the consent form, each interview commenced with the interviewer reading a standard interview guide to the interviewee, after which a copy of the standard interview guide was handed to the interviewee. The standard interview guide asked the interviewee to reflect back to the time of the decision, or decisions, which led to his or her conviction and discuss the factors that lead to him or her making the decision which lead to his or her conviction. Key themes suggested included any background, the interviewee's thinking at the time, the interviewee's personal context at the time, the interviewee's values at the time (as well as the values of those around him or her), any considerations taken into account by the interviewee at the time (including anything that he or she did not consider, but would have considered in retrospect), any discussions the interviewee had at the time, and feelings experienced by the interviewee at the time, and how he or she thought about the decision(s) after it was made. Interviewees were also asked how they deal with ethical questions generally and, more particularly, how they decide whether something is right or wrong.

We opted for the semi-structured method in order to allow interviewees to pursue unexpected paths and cues (Free & Murphy, 2015), and therefore encouraged interviewees not to feel restricted to the key themes. Interviewees were invited to freely reflect on their decision making process in the way that they felt most comfortable telling it (Herremans, Nazari, & Mahmoudian, 2016).

The interviews were audio-recorded, transcribed and compared to the audio recording to check for accuracy (Herremans et al., 2016). At the same time, the data was anonymised.

### ***Interview set***

Interviews were conducted from August to October 2019. All interviews were conducted by the first author. Interviews ranged from 36 minutes to 96 minutes. The characteristics of the participant sample are reflected in appendix **A** as **table 2**. The sample was diverse in that nine of the interviewees identified as female and eight as male. Seven identified as black, six identified as white and four identified as either Indian or mixed race. The majority of the respondents were middle aged, ranging in age from 31 to 61, which was consistent with prior research (Free & Murphy, 2015; Wheeler, Weisburd, Waring, & Bode, 1987). All participants were convicted of multiple charges (ranging from two incidents to 686 incidents) under the umbrella of fraud. The participants were also of a variety of educational experience (ranging from high school qualifications to Masters degrees) and length of service (ranging from 1 year to 25 years) in the organisation.

Only interviews 5 and 12 were convicted for an act not committed with the scope of an employment contract, although, in committing the offences, both interviewees 5 and 12 acted in collusion with individuals from an organization without which the offence could not have been committed. In fact, whilst not under an employment contract, interviewee 12 attested to being extensively involved in the organization within which the crimes were committed – having rendered the services an employee would. The remainder of the interviewees acted within the context of employment, the organizations having had employees in numbers ranging from single employees (where the interviewee was the owner of the organization) up to several thousand employees (where the interviewees ranged from very junior to very senior employees).

Of the total of 17 interviewees, only five interviewees (interviewees number 4, 8, 12, 15 and 16) denied criminal guilt in the interview for the acts for which they were convicted and sentenced. In what follows, reference to “the deniers” is a reference to interviewees 4, 8, 12, 15 and 16. Of the five deniers, only two were actually appealing their convictions. Although both of the interviewees who were appealing their convictions did not accept that their conduct met every element of the strict legal definition of the crimes in question, both did concede that their actions were ethically questionable. In addition, one of the two interviewees who denied guilt had actually pleaded guilty in any event. Moreover, whilst denying their guilt in respect of the crimes for which they were convicted, interviewees 4, 8, 15 and 16 disclosed unethical conduct in the context of their employment.

### ***Analysis process***

The transcriptions were loaded into the Atlas TI software package in order to allow for a flexible coding method. From there, the qualitative analysis followed an iterative, inductive method, which enabled the researchers to probe deeply into the data (Boiral et al., 2014; Castelló & Lozano, 2011).

First, the transcriptions were re-read twice in order to form a holistic understanding of the data (Patton, 2002), but not to find results. In the thematic analysis, an open coding process was adopted in which the empirical data was grouped and coded by distinct themes emerging from the data (Castelló & Lozano, 2011). Preliminary categories were constructed as they emerged from the data; however, these were revised during the iterative coding process, allowing for the emergence of new categories (Boiral et al., 2014). The process was iterative, moving back and forth between data coding and critical reflection, scanning for patterns and questioning themes whilst adding codes, changing codes, merging codes and supporting codes

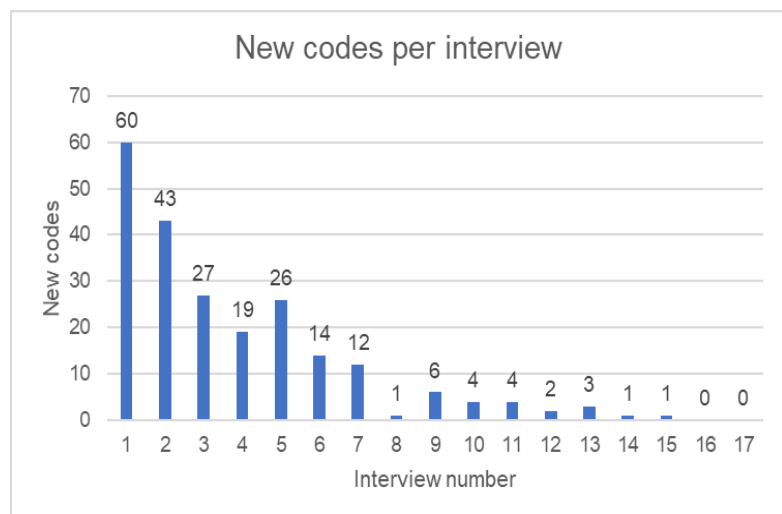
with evidence from the data (Ahrens & Chapman, 2006; Castelló & Lozano, 2011).

As patterns and relationships emerged, hypothetical categories were formed (Free & Murphy, 2015). Having coded the main categories, groups were created from similar concepts and categories in the data (Boiral et al., 2014). We delved deeper into discrepancies which emerged within groups and themes, as well as relationships between categories and groups so as to reveal previously unseen aspects of the themes, as well as any limitations (Free & Murphy, 2015). Quotations from the empirical data were recorded in the main body of this piece so as to enable the reader to assess our interpretations (Lähdesmäki & Suutari, 2012).

The categories emerged as aforesaid were then compared to the literature surrounding the fraud triangle and EDM, moving from general to local to general (Ahrens & Chapman, 2006; Eisenhardt, 1989; Free & Murphy, 2015; Urquhart et al., 2010). By means of this method, the theories as emergent from the data were linked to existing theory (Free & Murphy, 2015).

Ultimately, 227 codes were identified in Atlas TI. **Fig. 2** illustrates the appearance of new codes in the data.

Interviews 14 and 15 had only one new code each, and interviews 16 and 17 had none, indicating that saturation had been reached. A list of codes, including the number of occurrences each, as well as the word count each, is set out in appendix **B** as **table 3**.



**Fig. 2** Emergence of new codes per interview



**Table 2** Interview set, all convicted in the category fraud and forgery

ID	Age	Race	Sex	Highest Education	Designation at organization	Length of service in years	Number of employees in organization	Sentence in years	Appealing conviction	Appealing sentence	Incidents	Duration of interview in minutes
1	F1	White	W	Post-graduate degree	Owner	24	250	25	No	No	41	39
2	F2	Mixed	W	High School	Assistant financial director	11 to	70	10	No	No	135	59
3	F3	White	W	Higher diploma in accounting	Senior legal accountant	25	200	15	No	Yes	526	50
4	M1	Black	M	High School	ATM custodian	4	Thousands	15	No	Yes	5	98
5	M2	Black	M	Higher certificate in technology	Third party, cop-opted in	n/a	n/a	15	No	No	4	91
6	M3	Black	M	Masters degree in law	Owner	16	3	11	No	No	19	87
7	M4	Indian	M	High School	Managing Director	25	1 000	15	No	No	686	74
8	F4	Black	W	Higher certificate in banking	Assistant to private banker	9	Thousands	10	Yes	No	2	54
9	F5	Indian	W	Higher certificate in accounting	Assistant financial director	3 to	Hundreds	15	No	No	25	65
10	M5	Black	M	Degree in Accounting	Financial controller	7	Thousands	12	No	No	5	59
11	F6	White	W	Higher certificate in professional support	Creditors Manager	14	Thousands	15	No	No	54	56
12	F7	White	W	Higher certificate in dental nursing	Third party, cop-opted in	n/a	5	18	No	Yes	10	36

13	F8	61	White	W	High School	Credit controller	10	Thousands	7	No	No	90	54
14	F9	47	Mixed	W	Higher certificate in commerce	Credit controller	6	Thousands	15	No	Yes	137	59
15	M6	30	Black	M	High School	Owner	4	2	20	No	No	5	56
16	M7	31	Black	M	Honours Degree in Financial Planning	Financial planner	1	Thousands	15	Yes	Yes	5	76
17	M8	43	White	M	Matric	Owner	6	1	20	No	Yes	94	49

**Table 3** List of codes inductively arrived at, including number of instances and words

Code	Total Instances	Total Words
◦ #Contradiction Gr=23	23	1,822
◦ #Evaded/Deflected Gr=50	50	5,017
◦ #PointMissed Gr=20	20	1,712
◦ #QuotableQuote Gr=64	64	5,233
◦ Act: Accidental Gr=3	3	151
◦ Act: Acting without licence Gr=5	5	514
◦ Act: Conflict of interest Gr=5	5	371
◦ Act: Cooking the books Gr=9	9	896
◦ Act: Obfuscation Gr=20	20	2,110
◦ Attitude: Arrogance Gr=9	9	887
◦ Attitude: Everyone except me doesn't understand Gr=8	8	3,061
◦ Attitude: False sense of security Gr=4	4	283
◦ Attitude: High performance Gr=28	28	2,778
◦ Attitude: I was the victim of this Gr=8	8	1,124
◦ Attitude: Ignorance Gr=50	50	5,665
◦ Attitude: Making Excuses Gr=2	2	63
◦ Attitude: Pride Gr=12	12	1,563
◦ Attitude: Selfishness Gr=12	12	802
◦ Attitude: Witch hunt/Conspiracy Gr=37	37	11,448
◦ Awareness: Ethical question Gr=15	15	1,619
◦ Awareness: Unaware Gr=12	12	1,214
◦ Complexity: Confused Gr=2	2	189
◦ Complexity: Simple Gr=1	1	56
◦ Conseq Considered: Fired Gr=2	2	260
◦ Conseq Considered Gr=2	2	48
◦ Conseq Considered: Family Gr=7	7	477
◦ Conseq Considered: Getting caught Gr=12	12	880
◦ Conseq Considered: Pay back the money Gr=3	3	139
◦ Conseq Considered: Prison Gr=9	9	658
◦ Conseq Considered: Society Gr=1	1	209
◦ Conseq Un-Consid: Family Gr=12	12	596
◦ Conseq Un-Consid: Job loss Gr=8	8	358
◦ Conseq Un-Consid: Prison Gr=12	12	545
◦ Conseq Un-Consid: Society Gr=10	10	482
◦ Consultation: Affirmation Gr=4	4	425
◦ Consultation: Debated with family/friends Gr=14	14	1,068
◦ Consultation: Discussing control gaps Gr=4	4	888

Code	Total Instances	Total Words
◦ Consultation: Secrecy Gr=30	30	1,819
◦ Consultation: Spoke to therapist Gr=3	3	115
◦ Continuance: Accustomed to higher standard of living Gr=4	4	490
◦ Continuance: Already crossed the rubicon, stopping won't fix it Gr=15	15	1,102
◦ Continuance: Cannot stop Gr=17	17	1,723
◦ Continuance: Decreasing emotional response Gr=2	2	109
◦ Continuance: Decreasing feeling of guilt Gr=1	1	77
◦ Continuance: Easier to execute Gr=25	25	2,122
◦ Continuance: Escalating Value Gr=9	9	622
◦ Continuance: Habitual Gr=17	17	1,698
◦ Continuance: Harder to execute Gr=1	1	146
◦ Continuance: If I stop I'll be ratted out Gr=3	3	215
◦ Continuance: Increasing Stress Gr=21	21	1,631
◦ Continuance: Might as well enjoy it while it lasts Gr=11	11	1,463
◦ Continuance: Not sleeping Gr=3	3	141
◦ Continuance: Slippery slope Gr=21	21	1,558
◦ Continuance: Want to stop but can't Gr=9	9	751
◦ Controls: Bank verification with perpetrator Gr=6	6	364
◦ Controls: Below monetary threshold Gr=10	10	587
◦ Controls: Blank cheque Gr=3	3	213
◦ Controls: Collusion Gr=11	11	940
◦ Controls: Free Reign Gr=23	23	2,424
◦ Controls: Inconsistent enforcement Gr=18	18	1,656
◦ Controls: Lax Gr=12	12	723
◦ Controls: Lax due to handover Gr=5	5	1,001
◦ Controls: Lax due to laziness Gr=12	12	1,309
◦ Controls: Lax due to not fixing gaps Gr=13	13	2,077
◦ Controls: Lax due to supervisor absence Gr=5	5	678
◦ Controls: lax due to supervisor's workload Gr=1	1	31
◦ Controls: Lax due to trust Gr=25	25	2,399
◦ Controls: Lax due to underestimation Gr=2	2	238
◦ Controls: Segregation of duties Gr=6	6	664
◦ Controls: Strict Gr=2	2	75
◦ Discontinuance: Stress Gr=4	4	300
◦ Discontinuance: Fraud discovered Gr=13	13	619
◦ Discontinuance: Getting too deep Gr=1	1	21
◦ Discontinuance: Glad someone stopped me Gr=2	2	121

Code	Total Instances	Total Words
◦ Discontinuance: Lost motivation to continue Gr=5	5	373
◦ Discontinuance: Relieved at stopping Gr=1	1	56
◦ Discontinuance: Sufficiently benefited Gr=2	2	163
◦ Emotion: Anger Gr=14	14	976
◦ Emotion: Fear Gr=6	6	211
◦ Emotion: Greed Gr=12	12	1,037
◦ Emotion: Happy Gr=2	2	204
◦ Emotion: Post-act exhilaration Gr=14	14	1,129
◦ Emotion: Post-act guilt Gr=18	18	1,510
◦ Emotion: Spite Gr=8	8	478
◦ Emotion: Suppressing Gr=5	5	471
◦ Emotion: Take steps to avoid emotion Gr=8	8	564
◦ Ethical example: Industry Gr=9	9	1,030
◦ Ethical example: Organization Gr=15	15	1,433
◦ Ethical example: Social/political Gr=19	19	1,607
◦ Formal control: Harsh Judgment Gr=5	5	441
◦ General Ethics Gr=12	12	601
◦ General Ethics: Citing personal values Gr=20	20	2,425
◦ General Ethics: Considering alternatives Gr=1	1	63
◦ General Ethics: Debate Gr=2	2	129
◦ General ethics: Denial of wrongdoing Gr=22	22	7,543
◦ General Ethics: Ethical everywhere except here Gr=11	11	883
◦ General Ethics: Ethics irrelevant Gr=14	14	1,220
◦ General Ethics: Formal ethics education Gr=5	5	613
◦ General Ethics: I avoid thinking about it Gr=17	17	1,357
◦ General Ethics: I just know what's right or wrong Gr=8	8	872
◦ General Ethics: Shoplifting abhorrent Gr=17	17	751
◦ General Ethics: Unintentional disclosure of unrelated poor ethical choice Gr=28	28	3,257
◦ General Ethics: Upbringing Gr=18	18	1,655
◦ Harm: Abstract Gr=8	8	425
◦ Harm: Instalments vs Aggregate Gr=14	14	406
◦ Harm: It starts small Gr=7	7	424
◦ Intention: Knew its wrong but do it anyway Gr=13	13	1,051
◦ Judgement: Alternative considered Gr=8	8	248
◦ Judgement: Avoid thinking brush it aside Gr=41	41	3,481
◦ Judgement: Did not follow instinct Gr=0	0	0
◦ Judgement: Followed instinct Gr=26	26	2,423
◦ Judgement: Intentional distraction Gr=5	5	344

Code	Total Instances	Total Words
◦ Judgement: Internal conflict Gr=9	9	983
◦ Judgement: Legality - I knew its illegal Gr=21	21	1,477
◦ Judgement: Methodical Gr=5	5	305
◦ Judgement: Methodical in everything except ethics Gr=3	3	673
◦ Judgement: No calculation Gr=4	4	622
◦ Judgement: No cost benefit analysis Gr=3	3	269
◦ Judgement: No perspective taking Gr=1	1	57
◦ Judgement: No time to think Gr=16	16	1,708
◦ Judgement: Not my job to think about ethics Gr=19	19	2,373
◦ Judgement: Prayer Gr=2	2	166
◦ Judgement: Probability miscalculation Gr=29	29	1,900
◦ Judgement: Probability of getting caught Gr=8	8	796
◦ Judgement: Problem-Solution Framing Gr=4	4	328
◦ Judgement: The volume makes your careless Gr=1	1	67
◦ Judgement: Took the risk Gr=10	10	1,118
◦ Judgement: Weighing up Gr=3	3	155
◦ Organizational Culture of Ethics Gr=1	1	123
◦ Organizational Culture of Ethics: Ethics training Gr=4	4	217
◦ Organizational Culture of Ethics: Jargon Gr=4	4	313
◦ Organizational Culture of Ethics: No debate Gr=8	8	643
◦ Organizational Culture of Ethics: Observed unethical conduct Gr=10	10	920
◦ Organizational Culture of Ethics: Pretention to ethics Gr=7	7	661
◦ Personal Context: Charitibility Gr=25	25	1,924
◦ Personal Context: Competitiveness Gr=17	17	2,191
◦ Personal Context: Conflict avoidant Gr=4	4	407
◦ Personal Context: Connection to diamond trade Gr=14	14	1,629
◦ Personal Context: Connection to resistance movements Gr=3	3	391
◦ Personal Context: Drive to succeed Gr=30	30	3,535
◦ Personal Context: Exceptional work ethic Gr=12	12	1,283
◦ Personal Context: Financial pressure Gr=65	65	6,689
◦ Personal Context: Grew up poor Gr=10	10	779
◦ Personal Context: Knew how to work the system Gr=7	7	696
◦ Personal context: Lack of courage Gr=2	2	245
◦ Personal Context: Mental Disorder Gr=8	8	269
◦ Personal Context: Need for affirmation Gr=2	2	128
◦ Personal Context: Need for finer things in life Gr=3	3	201
◦ Personal Context: No pressure Gr=10	10	780
◦ Personal Context: Not a saver Gr=1	1	49

Code	Total Instances	Total Words
Personal Context: Relationship difficulty Gr=13	13	1,304
Personal Context: Self-imposed pressure Gr=6	6	792
Personal Context: Short term focus Gr=19	19	2,051
Personal Context: Supporting family Gr=58	58	5,794
Personal Context: Traumatic event Gr=6	6	616
Personal Context: Unexpected financial loss Gr=5	5	463
Personal Context: Unexpected medical pressure Gr=9	9	442
Personal Context: Vice - Shopping & Gambling Gr=12	12	732
Personal Context: Vice - Substance abuse Gr=10	10	504
Personal Context: Work interfering with studies Gr=4	4	371
Pre-decision hesitation Gr=21	21	1,300
Proceeds: Accumulated Gr=4	4	193
Proceeds: Early Retirement Gr=2	2	147
Proceeds: Improve lifestyle Gr=22	22	2,080
Proceeds: Lifestyle maintenance Gr=4	4	627
Proceeds: Need to leave a legacy Gr=1	1	78
Proceeds: Organization itself benefitted Gr=0	0	0
Proceeds: Rapidly spent Gr=27	27	2,181
Proceeds: Start/build a business Gr=4	4	339
Proceeds: Towards others Gr=33	33	2,594
Rationalisation: Comparing apples with oranges Gr=2	2	161
Rationalisation: Damned if you do, damned if you don't Gr=7	7	671
Rationalisation: Drop in the ocean Gr=12	12	919
Rationalisation: Everyone else is doing it Gr=12	12	1,277
Rationalisation: I deserve this Gr=19	19	1,915
Rationalisation: I know what's best or others Gr=11	11	1,175
Rationalisation: If I don't, someone else will Gr=3	3	396
Rationalisation: I'll show you! Gr=11	11	1,163
Rationalisation: Insurers will pay Gr=2	2	96
Rationalisation: It's for a good cause Gr=32	32	3,527
Rationalisation: It's just this once to get me off my feet Gr=9	9	990
Rationalisation: It's ok if I do it because my motives are pure Gr=31	31	3,172
Rationalisation: Leaving the gate open - they should be taught a lesson Gr=13	13	1,398
Rationalisation: Make it up with hard work Gr=22	22	2,111
Rationalisation: Pay back if caught Gr=32	32	2,879
Rationalisation: Reverse karma - I passed up other opportunities for wrongdoing Gr=13	13	2,392
Rationalisation: Robin Hood Gr=4	4	451
Rationalisation: The rebel - It's ethical to break the law Gr=12	12	1,035
Rationalisation: This is the last time Gr=9	9	1,220

Code	Total Instances	Total Words
Rationalisation: Victim of Circumstance Gr=25	25	2,367
Rationalisation: Victimless Crime Gr=3	3	382
Reflection: Avoid thinking about it Gr=2	2	154
Reflection: Nothing bad happened Gr=13	13	1,053
Victim Considered: Colleagues Gr=3	3	279
Victim Considered: Family Gr=2	2	112
Victim Considered: Organization Gr=5	5	367
Victim Considered: Self Gr=4	4	374
Victim Considered: Shareholders Gr=0	0	0
Victim Considered: Society Gr=2	2	110
Victim Un-Consid: Colleagues Gr=17	17	1,070
Victim Un-Consid: Company Gr=15	15	1,324
Victim Un-Consid: Family Gr=16	16	1,537
Victim Un-Consid: Insurers Gr=13	13	689
Victim Un-Consid: Senior Management Gr=21	21	1,632
Victim Un-Consid: Stakeholders Gr=22	22	1,583
Work conditions: Anti-social Gr=9	9	800
Work conditions: Arrogance in organization Gr=2	2	151
Work conditions: Distrust Gr=5	5	509
Work conditions: Dog eat dog Gr=12	12	1,318
Work conditions: Fatigue Gr=4	4	348
Work conditions: Good career prospect Gr=9	9	825
Work conditions: Good relations generally Gr=6	6	415
Work conditions: Hierarchy/Obedience Gr=13	13	1,300
Work conditions: Loved my job, but miserable at work Gr=2	2	211
Work conditions: No empathy for my circumstance Gr=11	11	1,358
Work conditions: No Family Time Gr=4	4	181
Work conditions: Organization doing well Gr=4	4	440
Work conditions: Others stole my credit Gr=1	1	163
Work conditions: Out of depth Gr=1	1	45
Work conditions: Overloaded Gr=19	19	1,569
Work conditions: Performance culture Gr=16	16	1,707
Work conditions: Profit above all else Gr=3	3	424
Work conditions: Racial incident Gr=0	0	0
Work conditions: Racial Tension Gr=20	20	2,061
Work conditions: Strained relations with supervisor Gr=1	1	104
Work conditions: Underpaid for what I do Gr=20	20	2,376
Work conditions: Verbal abuse Gr=3	3	255
<b>Totals</b>	<b>2,534</b>	<b>245,906</b>

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# Stakeholder Relationships, Engagement, and Sustainability Reporting

Irene M. Herremans<sup>1</sup> · Jamal A. Nazari<sup>2</sup> · Fereshteh Mahmoudian<sup>1,2</sup>

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**Abstract** The concept of sustainability was developed in response to stakeholder demands. One of the key mechanisms for engaging stakeholders is sustainability disclosure, often in the form of a report. Yet, how reporting is used to engage stakeholders is understudied. Using resource dependence and stakeholder theories, we investigate how companies within the same industry address different dependencies on stakeholders for economic, natural environment, and social resources and thus engage stakeholders accordingly. To achieve this objective, we conducted our research using qualitative research methods. Our findings suggest that the resource dependencies on different stakeholders lead to development of different stakeholder relationships and thus appropriate resources within the company to execute engagement strategies that are informing, responding, or involving. Our research explains why diversity exists in sustainability disclosure by studying how it is used to engage stakeholders. We find that five sustainability reporting characteristics are associated with the company's stakeholder engagement strategy: directness of communication, clarity of stakeholder identity, deliberateness of collecting feedback, broadness of stakeholder inclusiveness, and utilization of stakeholder engagement

for learning. Our study develops the literature by providing insight into companies' choices of stakeholder engagement strategy thus explaining diversity in sustainability reporting based on the characteristics and relationships with specific stakeholders.

**Keywords** Resource dependence · Stakeholder engagement · Stakeholder relationships · Sustainability reporting

## Introduction

A broad array of stakeholders are continually demanding companies to provide transparent disclosure on multiple dimensions of economic, social, and environmental performance (Logsdon and Lewellyn 2000; Rasche and Esser 2006), commonly known as sustainability reporting. The strategic responses by companies to stakeholders' requests to provide sustainability disclosure remain varied (Hess 2008; Sweeney and Coughlan 2008). Morsing and Schultz (2006) suggested that a company's method of communicating its activities is partly determined by the strategic direction the company takes toward its stakeholders. A number of studies in the management literature have examined diversity in companies' strategic reactions to pressures for sustainable operations that have come from various groups of stakeholders (González-Benito and González-Benito 2010; Murillo-Luna et al. 2008). However, the extent to which a company's strategic approach toward stakeholders leads to diversity in sustainability reporting remains understudied.

We carry out our research on diversity in sustainability reporting in response to various stakeholder pressures by addressing three related objectives. Our first objective is to

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examine the types of stakeholder relationships that companies develop within the same industry. Companies create different relationships with their stakeholders, and stakeholders use disclosure to evaluate the probability of continuing that relationship. Financial stakeholders want sufficient environmental and social information to know that the company will have access to critical economic resources (Barringer and Harrison 2000). In contrast to this narrow, primarily economic definition of disclosure, other stakeholders use disclosure to evaluate their relationships with the company by using all three dimensions of sustainability (economic, social, and environmental). Disclosure to these stakeholders would likely have very different characteristics and be used in different engagement processes. As well, a company desiring to learn from its stakeholders would ask for feedback or carry out dialog with stakeholders to understand their expectations (Bowen et al. 2010; Grunig and Hunt 1984; Morsing and Schultz 2006). At the highest level of engagement, companies will empower stakeholders through discussion forums, alliances, and joint decision-making (Cooper and Owen 2007) to meet stakeholders' expectations and change organizational behaviors if necessary based on its disclosure (Hess 2008).

Our second objective is to investigate how a company uses sustainability reporting to engage its stakeholders. An important source for determining if a stakeholder will continue a relationship with a company is through sustainability disclosure, often in report form (Hess 2007; Scherer and Palazzo 2011). The extant sustainability reporting literature provides insight into the characteristics of companies providing disclosures (e.g., Bewley and Li 2000; Clarkson et al. 2008; Herremans et al. 1993), the characteristics and evolution of sustainability reporting (KPMG 2008), and whether sustainability disclosures can be relied on for decision-making (e.g., Hooghiemstra 2000). However, linking a company's disclosure to its method of engagement with stakeholders, in light of different relationships, is yet to be investigated. Given the dearth of research on this specific question, we built our conceptual framework on stakeholder engagement from Bowen et al. (2010) and on communication processes from Morsing and Schultz (2006). Both of these works described various engagement processes with stakeholders; however, neither work narrowed their analyses to using a sustainability report to initiate or continue communication but rather investigated general means of engagement. Furthermore, these works did not provide motives for, or investigate, the relational aspect of stakeholder engagement.

Our third objective is to investigate the connection between stakeholder engagement strategy and sustainability reporting characteristics. Grunig and Hunt (1984), Morsing and Schultz (2006), and Bowen et al. (2010) provided

insight into different types of stakeholder engagement processes. Bansal and Kistruck (2006) studied stakeholders' responses to various reporting tactics. Although a wide range in reporting characteristics exists (e.g., KPMG 2011; PWC 2011), previous studies have not linked the diversity in reporting to different stakeholder engagement processes and if these processes influence the features of the sustainability reporting.

Our study advances the literature by linking resource dependence and stakeholder theories (Frooman 1999; Mitchell et al. 1997) to provide insight into companies' choices of stakeholder engagement strategy thus explaining diversity in sustainability reporting based on the characteristics and relationships with specific stakeholders. Through archival data and interviews with one trade association representative and 11 companies within the same industry, we examine how resource dependency on different stakeholders affects the choice of stakeholder engagement strategy. Interviews with 13 industry stakeholder groups with a diverse set of relevant relationships with these companies adds depth to our study.

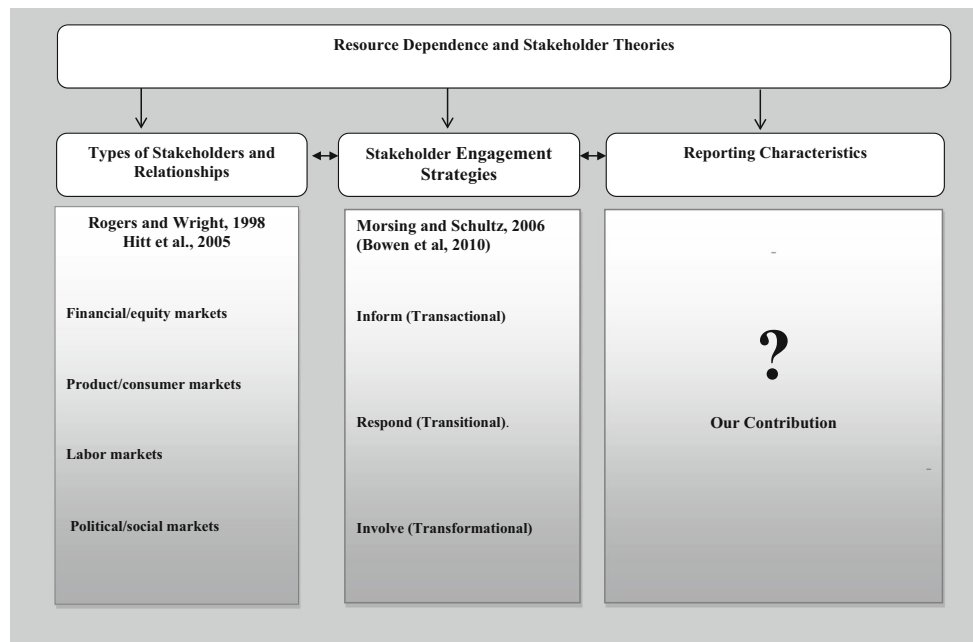
This paper is structured into the following sections: first, using resource dependence and stakeholder theories, we develop our conceptual framework for stakeholder engagement strategy via the sustainability report. Next, we explain the industry context and our detailed research methodology. Finally, we discuss the results and provide conclusions.

## Conceptual Framework

We build and develop our conceptual framework on resource dependence and stakeholder theories. Resource dependence theory focuses on a company's relationship with critical resource providers (Pfeffer and Salancik 2003). Stakeholder theory helps to understand how a company's internal resource allocation decisions are linked to stakeholders' demands that are crucial to the company's success (Freeman 1984). As argued by Agle et al. (1999), managers' perception about stakeholders' salience is dependent on who provides critical resources to the firm. Therefore, it is the importance and influence of the stakeholders that connect resource dependence and stakeholder theories and thus affect the engagement with those stakeholders (Fig. 1).

## Resource Dependence Theory

Resource dependence theory studies an organization's behavior in the attainment of resources (Pfeffer and Salancik 1978) outside its immediate ownership. Thus, it



**Fig. 1** Conceptual framework

investigates how the process of gaining ownership or control of external resources necessary to carry on the business affects the strategy, structure of the organization, and development of internal resources and alliances to reduce uncertainty to access these external resources. The power held by stakeholders constrains access and is a critical variable that is directly linked to resource dependence (Ulrich and Barney 1984).

Pfeffer and Salancik (1978) suggested that to reduce uncertainty related to this dependency companies develop internal capabilities through the board of directors and create joint ventures and other inter-organizational relationships with external stakeholders. Past studies have focused on board structure and composition through characteristics, such as board size, inside/outside directors, and their link to external dependency and strategy (Hillman et al. 2009; Pearce and Zahra 1992). Other researchers interested in the board's role in improved environmental performance have investigated characteristics such as age, gender, background, educational level, experience (Post et al. 2011), and board functions (e.g., a board committee dedicated to sustainability issues; Clarkson et al. 2008).

However, another stream of research investigates the dynamic aspect of boards by perceiving them as channels through which information flows. These channels are grounded in the relationships that the board members have or create with other boards, communities, and external stakeholders. Board members can possess capabilities and knowledge or have access to preferential information and resources to reduce uncertainty (Provan et al. 1980). They

can offer legitimacy to the company's operations or activities (Pfeffer and Salancik 1978). Powerful community members and external board members can aid in improving social performance (Johnson and Greening 1999). Based on the different relationships that board members can possess, Hillman et al. (2000) classified board directors as "insiders" "business experts," "support specialists," and "community influentials," suggesting that each type of expertise would bring different value to the company. Delving further into the link between resource dependence and stakeholders through relationships, we learn that companies enter alliances to gain power over stakeholders thus reducing uncertainty associated with attaining critical resources (Provan et al. 1980) or to aid in an understanding of stakeholders' expectations (Rehbein et al. 2013). To reduce resource dependence uncertainty, it is essential to understand both stakeholders' characteristics and their relationships with a company.

### Stakeholder Theory

Stakeholder theory posits two views: moral and strategic (Frooman 1999). The moral view suggests that those impacted by an organization's operations have a right to be informed and to demand certain standards of performance (Freeman 1984; Mitchell et al. 1997), indicating a balancing of interests and benefits. Williams and Adams (2013) applied the moral view to investigate employee disclosures from a stakeholder perspective. In contrast, the strategic view tends to underscore the benefits to the

organization in terms of its ability to fulfill its objectives (Freeman 1984). Greenwood (2007) further delineates the strategic view into the managerialist and social control/construction. The managerialist view, similar to Freeman's (1984) strategic view, recognizes that the stakeholders can provide benefits to the organization in such ways as legitimization and social license to operate, risk management, and learning (Sillanpaa 1998). The social control/construction emerges from the critical theories and suggests a dominance of the organization over the stakeholders in an immoral or unethical manner (Livesey and Kearins 2002). Therefore, stakeholders can be managed in various ways depending on the organizational value in expected outcomes (Logsdon and Lewellyn 2000; Rasche and Esser 2006). Consequently, companies develop diverse types of relationships with their stakeholders.

## Types of and Relationships with Stakeholders

### *Types*

Some studies focus on identifying the key demographic characteristics of stakeholders such as interest, size, and legitimacy to map the company-stakeholder connection. For example, Freeman (1984) distinguished between primary and secondary stakeholder groups. Primary stakeholders engage in transactions with the organization, which are essential for survival. Secondary stakeholders are affected or influenced by the organization's transactions and vice versa but might not engage in actual transactions with the organization.

Considering the stakeholder connections with the organization and moving closer to the relational aspect of stakeholders, Mitchell et al. (1997) suggested that stakeholders who are characterized by power, urgency, or legitimacy may receive special attention by organizations. Based on arguments of justice and equity, those groups with legitimate demands or claims (Mitchell et al. 1997), such as institutional investors or communities that are impacted by a company's operations, are entitled to know how they are impacted. However, these groups, if sufficiently powerful, can also influence the organization to change its behavior (Frooman 1999). Powerful stakeholders can harm the organization's access to critical resources or capital markets or its ability to sell its products. Utilizing Mitchell et al.'s (1997) stakeholder salience model, Weber and Marley (2012) found insignificant regional differences in targeted stakeholders in sustainability reports, but Habisch et al. (2010) found that different stakeholder dialog occurred in different countries. Industry-specific analyses might shed light on the differences in results in these studies.

Rogers and Wright (1998) identified four stakeholder groups based on the types of pressures that are exerted on companies through their relationships: capital market stakeholders (mainly debt and equity holders), product market or consumer stakeholders (mainly those associated with primary business operations), internal organizational or labor stakeholders (such as current and potential employees), and political and social markets (in terms of compliance to society's demands and expectations). Similarly, Hitt et al. (2005) recognized the first three groups. As well, Rogers and Wright (1998) suggested that these four groups need a means to evaluate the organization, implicitly suggesting that information should be made available to make decisions regarding how the organization's performance fits with their interests, thus increasing the need for sustainability reporting (Hess 2007). Based on the framework of Rogers and Wright (1998) and Hitt et al. (2005), the three groups of external stakeholders would use the sustainability report to evaluate the organization in terms of acceptability in the financial/equity market, the product/consumer market, or the political/social market. However, the labor market (an internal organizational stakeholder) would, in part, use the evaluations from these other three markets (external stakeholder markets) to better link corporate sustainability initiatives through a self-evaluation to determine the extent that external stakeholders' needs are being met. Other internal stakeholders will use the report to evaluate if they want to begin or continue employment with the company.

### *Relationships*

Other studies delve deeper into the relational aspect and examine the stakeholder connections (Frooman 2010; Frooman and Murrell 2005) from a dynamic perspective including the context within which the company operates. This relational perspective integrates the degree of dependency of the stakeholder on the company. In other words, the choice made by stakeholders to influence companies is more a function of company-stakeholder relationships than the demographics of stakeholders and will more fully explain the type of stakeholder engagement of the company (Frooman and Murrell 2005).

Building on the theme of stakeholder relationships, Onkila (2011) suggested that different management tools are required for various types of stakeholder relationships. Those relationships could be power-based, collaborative, conflicting, or one-sided, and each type of relationship entails different attributes, actors, and interests. In power-based or one-sided relationships, the relationships with stakeholders are based on the power of corporations over stakeholders or the power of stakeholders over the corporation. In this type of relationship, corporations respond to

stakeholders that have the power to expect, demand, and evaluate certain actions. In conflicting relationships, corporations address those stakeholders whose interests are considered to be “legitimate.” In this type of relationship, the corporation assesses the legitimacy of all stakeholders’ interests and only takes into account those that are considered to have legitimate demands. In collaborative relationships, corporations and stakeholders have strong interactions, and all the stakeholders in the society who may have interests in social actions are taken into account. The relationships under this category are based on honesty and trust.

Hess (2008) argued that the ultimate goal in using sustainability reporting as a mechanism to dialog with stakeholders should be to change corporate social performance. Delving into the whys of stakeholder relationships, Brower and Mahajan (2013) found that companies that are sensitive to demands from a variety of stakeholders and are facing greater exposure (such as consumer goods companies) tend to incorporate breadth into their corporate social performance.

Greenwood (2007, p. 318) defined stakeholder engagement as “practices that the organization undertakes to involve stakeholders.” Given that companies perceive value and disclosure transparency differently, it is logical that they would then engage stakeholders using different approaches. As argued by Maon et al. (2009), sustainability, since its emergence, has been developed in response to stakeholder demands. Consequently, stakeholder and strategy identification to have a dialog with them are fundamental for sustainable operations.

### Stakeholder Engagement Strategies

Stakeholder dialog can be achieved via different forms (Golob and Podnar 2014). The primary approach for organizations to communicate performance is through a sustainability report (Hess 2007; Morsing and Schultz 2006). Morsing and Schultz (2006) built on Grunig and Hunt’s (1984) public relations model to suggest that organizations develop three distinct strategies: informing, responding, and involving. Bowen et al. (2010) reviewed similar strategies for engaging communities, referring to them as transactional, transitional, and transformational. In a transactional, one-way communication process the organization “informs” the target audience. This strategy is controlled by top management without an intent to learn or change from the transaction but rather to ensure that the stakeholder recipient understands and is aware of the company’s actions to build general goodwill. If this descriptive stakeholder engagement framework is integrated with the need to access critical resources at least cost (resource dependence), we can better understand why

companies use this strategy. Companies engage with stakeholders to minimize their production and transaction costs by reducing uncertainty (Beamish and Banks 1987; Dyer 1997; Thorelli 1986; Williamson 1985, 1991). Sustainability reporting can be used to influence the decision of those stakeholders that exert control over resources.

Morsing and Schultz’s (2006) “response” to stakeholders is similar to Bowen et al.’s (2010) transitional community engagement, and both are based on two-way communication. However, the flow is asymmetrical, suggesting that more information is transferred from the organization to the stakeholder than vice versa. Strong lines of communication, often not face-to-face, exist from the organization to the stakeholders. If engagement is face-to-face, the organization conveys the information and the stakeholder responds, provides feedback, or asks questions at specific, designated times rather than engaging in an ongoing conversation to develop a more intimate communication. A transitional or “response” communication process occurs when the organization sees opportunities through its sustainability reporting to increase its competitiveness or market power (i.e., business value), resulting in a broader, proactive strategy rather than defending access to resources. Van Huijstee and Glasbergen (2008) suggested that with a stakeholder management approach the organization’s main objective is to search for business opportunities or prevent damage.

Morsing and Schultz’s (2006) “involve” and Bowen et al.’s (2010) transformational community engagement are also two-way communication processes. However, the transformational communication is more intense and ongoing, resulting in a dialog (Schouten and Remmé 2006). Meetings are often face-to-face, involving joint decision-making or joint management of a project. Stakeholders may suggest corporate actions (Morsing and Schultz 2006) and the process can result in capacity building. Dialog often results in ideas and increased knowledge for all parties regarding continuous improvement (van Huijstee and Glasbergen 2008). Transformational engagement (Bowen et al. 2010) leads to involvement (Morris et al. 2006; Morsing and Schultz 2006) and thus to an opportunity for learning from stakeholders (Barringer and Harrison 2000). Transformation requires symmetrical communication lines both from the company to the stakeholders and vice versa, a dynamic communication. Learning must take place to generate transformations that meet stakeholder expectations. Companies with a desired learning outcome “recognize the value of new knowledge, assimilate it, and apply it in a business setting” (Barringer and Harrison 2000, p. 370). When communication lines are two way, the company develops capabilities to transform and evolve.

While both Morsing and Schultz (2006) and Bowen et al. (2010) explained various engagement processes with

stakeholders, neither work focused on how various engagement strategies can be implemented using sustainability reporting. These researchers also stopped short of predicting when organizations will choose one engagement strategy over the others.

### Reporting Characteristics

There are few recent studies in the literature with interest in finding how stakeholders and different stakeholder engagement strategies might impact sustainability reports (Manetti 2011; Manetti and Toccafondi 2012; Onkila et al. 2014; Prado-Lorenzo et al. 2009). By using sustainability reports as a means of data collection, these studies focus on how stakeholders are identified, managed, and engaged. For example, applying content analyses on archival data from a sample of Global Reporting Initiative (GRI)-based reports, Manetti (2011) observed a variety of stakeholder engagement and management practices. Using content analyses on a sample of Spanish firms, Prado-Lorenzo et al. (2009) studied the impact of a select group of stakeholders on quality of sustainability reports and found that government had a significant impact on the reports. Along a similar vein, Onkila et al. (2014) did an analysis on three cases of sustainability reports by Finnish firms and showed how interaction with stakeholders can be demonstrated in sustainability reports.

Even though the above literature looks at characteristics of and engagement with stakeholders through analyses of sustainability reports, to our knowledge no study has investigated the impact of different stakeholders and stakeholder engagement strategies on the sustainability reporting process. For example, we need to learn how companies directly communicate with stakeholders, how clearly the stakeholders are identified or included in the reporting process, how feedback is collected from stakeholders, and how organizational learning takes place from the stakeholder engagement and reporting process.

### Case Overview: The Oil and Gas Industry in Canada

Our sample consists of companies with operations in Canada, stratified to include all major oil and gas companies. Since 1999, the provincial regulatory agency (The Energy Resource and Conservation Board or ERCB)<sup>1</sup> has required public consultation or “participant involvement”.

<sup>1</sup> The ERCB regulated energy activities in Alberta, Canada, the province in which most of the energy production on land takes place. The ERCB was just recently re-organized as the Alberta Energy Regulator (AER).

“Participant involvement” is a condition for receiving licensing approval for all new, and modifications of existing, energy developments (ERCB Directive 056, 2011). These requirements set the minimum level of involvement with stakeholders. Even though our research did not focus specifically on “participant involvement” programs, the fact that consultation is required indicates that the industry is suitable for this study.

Limiting our study to this industry helps to control for differing characteristics among industries, such as institutional pressures, traditions or customs in reporting, and types of stakeholders, thus narrowing our phenomenon of interest and its context (Yin 2003). Because its core product is location specific, the industry is highly dependent on its stakeholders for access to raw materials. Critical resource providers, often communities, can constrain or facilitate access due to environmental or social concerns. However, the communities and the industry are inter-dependent, as both communities and the industry can benefit from economic and social development activities. Dissatisfied stakeholders can request a hearing through the regulatory system. Production and transaction costs can be reduced by decreasing the time spent in regulatory hearings. Property holders exert power over resources and have been successful in preventing or halting operations when they are concerned about environmental, health, and safety effects of the proposed operations.

Around the 1990s, property owners began to question the net benefit of companies’ economic benefits versus their environmental and social impacts. Raw materials became increasingly scarce, and companies slowly began to move exploration to less remote and more sensitive areas. This industry became progressively more resource dependent on acceptance by the broader communities for critical raw materials. Consequently, companies needed to develop internal capabilities to manage relationships with stakeholders who were critical resource providers.

To answer the call from its stakeholders for more transparency about performance, in 1999 the industry began its own voluntary performance improvement and reporting initiative, called the Stewardship Program. This initiative was organized by the industry’s trade association, the Canadian Association of Petroleum Producers or CAPP. Because many companies were not ready to provide such open and transparent information, the program was designed to bring companies along slowly by reporting only industry-wide aggregated environmental and safety indicators. In 2004, after sufficient preparation time, these aggregated indicators became mandatory for industry association membership.

Although this was the first experience of reporting for many companies in the industry, other companies had long reporting histories (over 15 years) and received many

reporting awards. All companies that published their own individual reports, separate from the Stewardship Report, used the GRI Guidelines, which promotes a higher quality of reporting (Clarkson et al. 2008; Stratos, Inc. 2003, 2005) but not all were in full accordance with GRI. Because of this range of communication avenues and different characteristics in companies' sustainability reporting and their reporting histories, it is likely that companies have different motivations and strategic choices and therefore use sustainability reporting in different ways to engage with their stakeholders.

## Methods

To address our research objectives, we used a multiple-case, replication design in a field study setting (Yin 2003) to investigate the characteristics of sustainability reporting associated with how companies engage stakeholders within a single industry. We used multiple sources to gather data for our research: archival, observation, and interviews. Each of these is discussed below.

## Interviews

To ensure rigor in our data collection process and the selection of appropriate companies for our case studies, we used an Expert Committee to help in identifying companies and stakeholder groups to interview and which specific person within the company would be most knowledgeable about the topic. Therefore, we sought out individuals with expertise in energy and sustainability reporting. The Expert Committee consisted of four persons: a past energy industry expert currently holding an administrative position at the university, an information systems expert with experience in the areas of sustainability reporting, an expert on GRI, the most-widely used guidelines for sustainability reporting, and an academic with consulting and teaching experience on the topic of energy and sustainability.

Our Committee identified all companies that provided some form of stand-alone environment or social reporting document. All were interviewed, which resulted in a sample size of eight. In addition to these reporting companies, the Expert Committee identified three additional companies that were not currently preparing a stand-alone report but were considering it. These last three companies provided selected information on their websites and in their annual reports. All interviewed companies reported to the Stewardship Program as required by the industry. The 11 companies had a range of reporting experience, size, and geographic dispersion of operations. After conducting interviews with individual companies, we interviewed a representative from the industry's association to understand

better the range of motives for reporting for all companies in the industry and their relationships to the industry's stakeholders. The industry representative worked with all companies to motivate better reporting and performance under the Stewardship Program; therefore, the representative understood varying motives in the individual companies, especially those that only report aggregated data to the Stewardship Program to be included in the Report for the industry as a whole. Our Expert Committee also reviewed our interview questions to ensure that they focused on themes relating to how the sustainability reporting was used to engage stakeholders and how the engagement process influenced the characteristics of the reporting.

After training on interviewing techniques, two graduate research assistants conducted the 12 industry interviews. Both had considerable experience in studying and consulting on the topic of sustainability, reporting, and the energy industry. Upon receiving confirmation of an interview time, the assistant sent the interviewee a list of open-ended questions for reflection before the actual interview. The questions were used as a guide only as interviewees spoke freely on the topic of sustainability reporting and performance and how they engaged with stakeholders in the process. Most interviews were approximately 2 h. Although position titles varied across companies, the following are representative: Manager, Sustainable Development; CEO, Co-Founder, Chairman; Non-government Organization (NGO) and Stakeholder Relations Manager, Social Performance, Sustainable Development Manager; Vice Chair of the Social Responsibility Working Group; Senior Manager, Corporate Responsibility, and Government Affairs. Interviews were recorded, transcribed, and then reviewed (several times) before developing themes from the interviews.

Finally, to validate and help interpret the findings derived from the company interviews, we conducted 13 interviews with industry stakeholders, resulting in 25 interviews in total. Consistent with Rogers and Wright (1998), we investigated the possibility of interviewing four different groups: (1) conventional financial/capital markets for which the defensive organization perceives its primary stakeholders as those that can create obstacles to access natural resources, (2) that part of the financial/capital markets that places higher societal demands (environmental and social) on the organization's financial return, such as institutional investors, pension plans, and social investment organizations, (3) internal stakeholders (employees), and (4) social/political markets for which the proactive organization perceives as bringing indirect value, thus including those indirectly affected by the company's operations. Given the nature of our industry (primarily business–business), we did not investigate product markets, and we separate capital markets into two categories along

with labor and socio-political. Specific titles are not provided for the industry's stakeholders as they would be readily identified. Instead, the stakeholders who were interviewed were selected because of their specific, diverse relationships with the companies.

To ensure that we covered a wide range of relationships with the reporting companies, the following categories of industry stakeholders and numbers in each category were included in our study: regulators (2), financial analysts (2), industry watchdogs (1), auditors of sustainability reports (2), stakeholders engaged in stakeholder assurance panels (2), consultants who aided companies in either writing or evaluating sustainability reports, performance or both (2), and non-profit organizations whose missions are to promote ethical and transparent business practices (2). To confirm that the stakeholder interviewees were knowledgeable about the subject matter, they answered a few preliminary questions regarding their involvement in sustainability reporting within the industry. As the interview continued, their responses often mentioned unsolicited "best practices" along with company names, thus confirming the ability to distinguish characteristics among companies and variability in reporting characteristics within the industry.

### Archival

After identifying the companies to be included in our sample and after our interviews, demographic data were gathered for each company. The company's website, annual report, stand-alone sustainability report, and securities documents were reviewed for the extent of each company's sustainability disclosures. Although archival data gathering was not limited to the board of directors and partnerships, based on prior literature we specifically investigated what resources our sample companies developed in these areas. The archival data helped to confirm the findings of the interview data and the company's involvement in certain stakeholder engagement activities.

### Observations

One of the researchers had observed the progression of the industry members' reporting and their different forms of stakeholder engagement over a period of ten years. This researcher spoke at various types of meetings at which companies discussed their reporting and how they used the reporting to engage stakeholders. As a member of board of directors for the industry's communications foundation for several years, this researcher had an opportunity to gain insight into the industry's communication context and strategy. At the board meetings companies discussed how they engaged their stakeholders not only as individual

companies but also as an industry. As a member of judging panels for performance and reporting awards, this researcher gained knowledge of different engagement methods as reported in the documents reviewed for these award competitions. The awards were granted not only by the industry association but also by various institutions attempting to improve the relevancy and quality of sustainability reports and transparency through the process of stakeholder engagements. Finally, two of the researchers participated in stakeholder panels, which were used as avenues for recommendations for continuous improvement both on performance and reporting. This experience provided the researchers with the capability to further validate the findings regarding approaches used by companies to engage stakeholders.

Our Expert Committee members, having many years of combined experience with the industry and its membership, were a source of informal information and observations about each company and the industry, providing a deeper understanding of the company's motives for reporting and how each engaged its stakeholders.

### Data Analysis

We followed Miles and Huberman (1994), Weber (1990) and Neuendorf (2002) to develop a process for identifying themes and implementing a rigorous coding scheme. Initially, for the first couple of company interviews, we manually broke the narrative into sentences and paragraphs related to a particular theme (Weber 1990). This process gave us greater insight into the specific themes in each interview (Holsti 1969). Through this process of theme identification, we moved back and forth from the interviews to the company's sustainability disclosures, noticing that the reports had different reporting characteristics. We then attempted to search for the association between the reporting characteristics and different stakeholder engagement processes identified in the interviews. Ultimately, we identified three engagement processes which we refer to as informing, responding, and involving (Morsing and Schultz 2006) and which relate to Bowen et al.'s (2010) transactional, transitional, and transformational engagement strategies. These three stages then lead us to ask what type of engagement with stakeholders exists in each category and why a report would have different characteristics based on a certain type of engagement (Barringer and Harrison 2000).

The result was a preliminary coding matrix that represented types of engagement with stakeholders and characteristics of reporting. As the interviewees were allowed to speak freely, some of the interview data were irrelevant; therefore, one researcher selected the pertinent content to code, and a second researcher confirmed that all relevant data were included in the content to be coded.



Using our own matrix as a guide, we coded the first three company interviews in a training session. These three companies were in quite different stages of reporting. The two researchers discussed the similarities and dissimilarities identified through the coding process, and the matrix was adjusted to ensure greater consistency for the remaining interviews. After all interviews were coded, the inter-rater reliability based on percentage of agreement was 88 %.

Then, two researchers independently classified each company as informing, responding, or involving, with 100 % agreement. Stakeholder interviews were used to confirm these classifications through their mention of the types of engagement with various companies. To delve deeper into the resource dependency on different stakeholders and internal capabilities that each company developed to reduce uncertainty in each classification, archival data provided the specific company characteristics, relationships, and reporting characteristics associated with each classification.

## Discussion of Findings

We propose that the type of communication created is motivated by the relational characteristics of the company's stakeholders, which influences the engagement strategy and in turn the characteristics of the reporting. The stakeholder then uses the disclosures to evaluate if the relationship should continue. These distinct relationships and their related evaluations are confirmed by representative quotes from our stakeholder interviews.

### Financial Community and Social License

[We] look at the reports and say: Ok, what are they saying? These [environmental and social activities] can have operational impact. Can they [the company] get on the land to actually execute their plans? They certainly have a stock market impact, and they can have a legal impact.

The environmental technical specialists will examine those. So we would have someone with an economic perspective look at those, and we would have someone from a land use planning perspective or a water recycling perspective or whatever technical aspect in which we are particularly interested review the report. So those people do review those reports...

### Financial/Capital Market with Higher Societal Demands

There are watchdogs out there like Amnesty International taking big steps in corporate responsible

investing. So they are scrutinizing companies too....there is a lot of pressure on the companies to comply now.

[The company is doing] a lot of business in South America in Colombia. They are under a lot of pressure from ethical type investors on how they are behaving there. So, they actually do address [these operations] in great length in their reports.

### Employees

I think that (reporting) promotes better employees and with better employees you get better results.

Employees use the reports. [They are] very useful tools to attract or to retain new and old employees.

### Social/Political Markets

We facilitate a review... we meet two or three times and discuss the draft of the report, and what has been done, the commitments [the company] has made and compare the reports to those and to the 11 GRI principles, and its [the company's] performance. Then, we [with the stakeholders] develop an assurance statement together.

[The report] also helps with the relationship with the government. We can see what [the company] is doing and how it measures up against the regulations.

[We work with companies to] find out what they did well in the report based on the matrix developed from the best practices and emerging trends and what they did not do well and provide a gap analysis in terms of how they can improve for their next report.

Our analysis of company data revealed three different approaches that our sample companies used to engage stakeholders via the sustainability reporting based on their relationships and desired outcomes. These engagement processes are better observed on a continuum from less involvement to more involvement rather than as discrete units and are referred to as informing, responding, and involving (Morsing and Schultz 2006). They are similar to Bowen et al.'s (2010) transactional, transitional, and transformational. Within these three processes and from our content analyses we identified five characteristics that distinguish various levels or rigors of sustainability reporting depending on the company's engagement with its stakeholders: (1) directness of communication, (2) clarity in stakeholder identification, (3) deliberateness of collecting feedback, (4) broadness of stakeholder inclusiveness, and (5) utilization of stakeholder engagement for learning.

Each of these characteristics will be discussed more thoroughly in the next sections; first for engagement and then for reporting characteristics. At the same time, we link our findings back to the literature (Fig. 2).

**Relationships, Stakeholder Engagement Process, and Sustainability Reporting Characteristics**

*Informing Stakeholder Engagement Strategy*

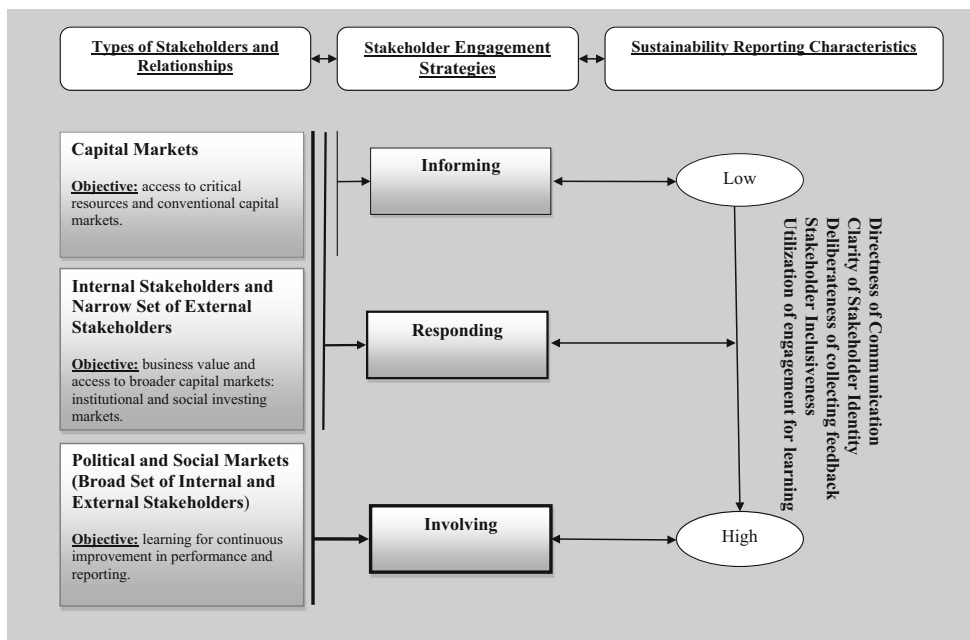
Companies that depend on key stakeholders for access to critical raw materials engage with them primarily for instrumental reasons. If successful, the outcome is efficiency in the form of reduced transaction costs, flexibility of operations, and reduced uncertainty (Barringer and Harrison 2000; Harrison and St. John 1996). Companies using the informing strategy have a narrow strategic choice regarding stakeholders and develop relationships with stakeholders and communities only to the extent necessary to acquire raw materials. Regarding resource dependency, one company explained: “In terms of primary audience, we look to the community in which we operate.” The community can raise objections and insist on a hearing to access resources, which ultimately could result in the company not receiving permission to explore.

Given time and money constraints, these informing companies rely on their trade association to aid in reducing uncertainty regarding access to resources (mineral rights) on property owners’ lands and near communities. Consequently, direct communication is limited. “CAPP allows the

industry to deploy the very skilled professionals at CAPP to work our current meaningful issues which impact all of us. I think they provide us a central place with which to deal with regulatory change and regulatory issues that might arise.” The trade association acts as a buffer, preventing stakeholders from interfering with organizational operations, keeping them at a distance (Van den Bosch and Van Riel 1998); therefore, individual companies do not need to clarify their stances on sustainability issues and thus “We have not articulated sustainability specifically for our company.”

Because of the role of the trade association, individual companies rarely have identified or have developed internal capabilities to work directly with specific stakeholders; therefore, they generally identify them by category rather than by specific name. “When you talk to CAPP you are not talking to different companies but to the industry. In this way we see CAPP as a stakeholder group collective.” Another company indicated that “we sort of depend on CAPP to identify the stakeholders that are important to be able to develop the reporting framework.”

CAPP provides them with a means of engagement that they feel they could not accomplish individually, due to capacity constraints. These companies do not feel that they have the expertise to deal with stakeholders directly nor does the benefit exceed the cost of doing so. Therefore, companies that perceive their dependency as primarily economic will develop relationships with stakeholders with legitimate and urgent claims who affect access to natural resource acquisition and therefore choose an informing engagement strategy with their stakeholders.



**Fig. 2** Findings: relationships, engagement process, and characteristics of sustainability reporting

### *Informing Reporting Characteristics*

The trade association collects feedback through the publication of its Stewardship Report, which provides aggregated environment and safety metrics (with few social metrics), for all industry members. This document mainly informs stakeholders of the industries' activities to suggest that the industry is meeting stakeholder expectations. Weak lines of communication, if any, come from the stakeholders to the informing companies indirectly through the trade association. Companies rarely provide social and environmental disclosure directly to mainstream capital markets as they feel it is not in their interest or would find the information useful. Therefore, communication is indirect and rarely face-to-face.

With such *indirectness in communication*, very little *clarity of identification of specific stakeholders* takes place in reporting by the individual company. Rather the trade association monitors issues, such as climate change and health effects, to manage these for all industry members, as illustrated.

They (CAPP) have lines of communication with a lot of those groups and they have been very effective in helping us deal with problems and challenges that might arise in dealing with routine processes.

It is nice to have CAPP folks who are experienced and familiar and have been active in bringing the changes and giving us feedback, trying to ensure that whatever is done is done in a balanced way.

*Deliberateness of feedback* is filtered through the trade association and is not done through the individual companies. For this reason, informing companies speak of stakeholder groups in general rather than specific classes of stakeholders. One company explained:

For a company of our size to do a report and seek stakeholder input independently, we wouldn't be able to.

It's almost too big of an effort for our resources to act independently and seek diversified stakeholder input on all of these issues and have our own advisory group. And that's what I think is the value of CAPP's work, that's the beauty of that.

Given this indirect method of communication and limited resources and capabilities, the stakeholders who are targeted by reporting will be *narrow in scope*, primarily including those who might create obstacles to accessing lands which hold natural resources.

Informing companies, for the most part, do not *utilize stakeholder groups for learning* as they do not engage them for feedback on performance or reporting improvement.

Rather the companies feel that their performance is satisfactory and does not need changing, but stakeholders need to be informed about the industry's already acceptable performance, as evidenced in this quote: "I think that is useful for people who want to learn about the industry and the various stakeholder groups will quite often seek out CAPP for some of the activities as opposed to corporations." Internally, the responsibility of reporting to the Stewardship Program is centered in one or two individuals or is outsourced. Therefore, there is little opportunity to spread any learning through internal networks as to how to improve performance throughout the organization.

In summary, an informing stakeholder engagement strategy will result in the following five reporting characteristics: (1) indirectness of communication, (2) lack of clarity of stakeholder identity, (3) little collection of direct feedback, (4) a narrow stakeholder inclusiveness, and (5) therefore little if any utilization of stakeholder engagement for learning.

### *Responding Stakeholder Engagement Strategy*

Companies are motivated frequently by societal pressures and conforming to a broader set of society's norms (Harrison and St. John 1996) through institutional pressures. However, their engagement processes are designed with a focus to manage stakeholders who add more extensive business value than simply a direct reduction of transaction costs, although efficiency and flexibility are still important. Responding companies develop relationships with a broader set of stakeholder groups consistent with broader dependencies, especially those that provide greater access to financial capital. "We want to report on issues that we feel are useful to our business." Inter-organizational relationships have the goal of increased competitiveness or market power (i.e., business value) such as maintaining stock in a number of investment vehicles which allow greater access to capital. One company explained: "There are a handful of social investment organizations, like the Dow Jones Sustainability Index, FTSE4Good, Innovest, the Carbon Disclosure Project, and Social Index. Those are important to us as well." Some responding companies were motivated by shareholders' resolutions to perform more sustainability and to disclose more detail on performance.

Although the company is still resource dependent on the same stakeholder groups as informing companies (access to capital resources), the scope for responding companies is much broader. "In terms of the primary audience we look to the community in which we operate, our investors, and our employees." Whereas, informing companies rely on just one or two individuals within their companies to fulfill Stewardship requirements, responding companies have developed and articulated their sustainability definition and try to

convey this definition both to external stakeholders and internal employees through the joint efforts of several departments, developing both internal and external networks.

They also communicate directly with stakeholder groups and engage with them rather than relying on their trade association alone. “We have a pretty good connection with the communities in terms of what’s important to them.” Responding companies have begun to dedicate resources within their companies to communicate and engage stakeholders with primarily one-way communication but some two-way communication to determine their expectations. Therefore, companies who perceive their dependencies as economic and narrow environmental and social will build relationships primarily with internal stakeholders, investors with social and environmental demands, and the communities in which they operate who have legitimate and urgent claims along with the power to carry through on their claims. Consequently, they choose a responding engagement process with its stakeholders who add business value.

#### *Responding Reporting Characteristics*

Responding companies use their own stand-alone sustainability report, rather than the Stewardship Program industry report, as a primary tool for meeting directly (face-to-face) with a number of stakeholder groups, government contacts, and potential business partners. They have identified and *clarified specific stakeholder groups* that are important to them, although narrower in scope (*less inclusive*) than involving companies. One company explained: “This is sort of our introduction when we are sitting down with people that we will eventually do business with or hope to do business with.” Other companies also exhibited clarity in stakeholder identification.

Our most important stakeholders are our employees and our immediately engaged stakeholders such as the landowners, and the communities in which we’re operating.

In terms of the primary audience we look to the community in which we operate, our investors and our employees. So we would have many stakeholders for the document. So if you think about how we get feedback from that right now, we have a pretty good connection with the communities in terms of what’s important to them.

Regarding *deliberateness of collecting feedback*, we found that responding community engagement can be characterized with strong lines of communication from the responding company to the stakeholder groups, but not vice versa. This allows the responding company to maintain strong control on the process of engagement but provides

less opportunity for utilization of the feedback for learning purposes or organizational change through engagement. Even though responding companies communicate directly with their stakeholders, most communication methods are not tightly structured nor have clearly defined outcomes. Companies encourage feedback in a number of ways. Data are collected through the website and cards that go in the report. Comments are not directly or aggressively solicited. Rather than having a *deliberate proactive feedback* process that seeks information, responding companies wait for feedback to come to the company. One company explained: “We generally feel that no news is good news. If we don’t hear from people on a particular subject area then we feel that we are really doing a good job in it. If we hear about some areas, human rights, environment, community development, then we’ll tailor out report to those subject areas.” Often, they “gauge reaction from a very few stakeholder groups and determine what they want to know and hear about our company,” thus limiting the *inclusiveness* by limiting the scope of stakeholders to which they respond beyond that of informing but less than that of involving companies.

Regarding *utilization of learning* through engagement, responding companies expand the responsibility for the report to a number of departments within the company rather than one person within the company or a contractor. This allows dispersion of the knowledge throughout the company because of the involvement of more employees, not only those who have direct responsibility for report preparation but also to those who supply the data from various field operations. The following quotations illustrate how learning is partially diffused through the company’s internal network.

I have joint responsibility with our health, safety, and environment and with government affairs.

Overall we have 15-75 people provide input into this report. We have managers from various functional areas; our executives review it along with our team members.

Some responding companies are looking to develop a more formal stakeholder review process in the future; others are satisfied in communicating within their scope of immediate stakeholder groups. The following two quotes are representative of companies that wish to evolve to the next stage of involving.

Honestly, we are not as good at it (feedback from stakeholders) as we should be. We have at various levels very good interaction with our government stakeholders, with our partners, with the communities where we operate; we are very active. But we aren’t

as strong as some companies in setting up a framework for soliciting feedback.

We have kind of embraced it [stakeholder engagement] in some ways but not whole heartedly, and we want to work more collaboratively with stakeholders.

In summary, a responding engagement strategy process will give rise to the following five reporting characteristics: (1) limited directness of communication with (2) few clearly defined primary stakeholders, (3) little direct and some indirect collection of feedback from stakeholders, (4) a medium inclusiveness of stakeholders, and (5) therefore some utilization of stakeholder engagement for learning.

#### *Involving Stakeholder Engagement Strategy*

Involving companies are motivated by the aforementioned concerns of access to external raw materials and institutional investor pressures; however, involving companies also perceive their dependencies as opportunities to learn. “We want others to know what our values are.” “We want to live up to our values.” “We want to challenge our values.” They recognize that the communities in which they operate are affected by their activities and therefore communities have a right to ask companies for transparency (Harrison and St. John 1996; Rasche and Esser 2006).

I think our industry has a lot of interesting baggage that has come from the past, So we want to be a different kind of energy producer in the future. I don't think in the 50s or 60s that we were accountable for environmental performance. Today, we hold our people accountable.

This relationship with selected stakeholders involves a “communicating with” rather than a “communicating to” them (Crane and Livesey 2003). Wishing to learn from their stakeholders (Barringer and Harrison 2000), involving companies include a broader group of stakeholders in the decision-making process. These companies are engaged in joint decision-making regarding areas of improvement of both performance and reporting; therefore, their feedback collection is deliberate. They have strong communication lines both from the company to the stakeholders and vice versa as new knowledge is developed, assimilated, and applied (Barringer and Harrison 2000; Bowen et al. 2010; Grunig and Hunt 1984; Morsing and Schultz 2006) and actually engage them in decision-making. Two-way communication lines increase the company's capacity for learning with intent to change and evolve. Therefore, companies who perceive their dependencies as economic, broad environmental, and social will develop relationships both with powerful primary and secondary stakeholders

who have legitimate and urgent claims and the power to carry through on their claims and will choose an involving engagement strategy process with its stakeholders. Involving companies will engage with stakeholders with less power but who provide an opportunity for learning.

#### *Involving Reporting Characteristics*

Companies that engage in strong organization-society relationships regarding their stand-alone sustainability report use *clearly defined stakeholder groups* to understand better what the company needs to do to meet stakeholder expectations (Barringer and Harrison 2000). In our sample of companies, the most common form of stakeholder engagement *directly* involving the report was stakeholders' involvement through proactive and continuous feedback during report preparation or once the report was prepared. Continuous feedback through strong two-way communication lines both to and from stakeholders helped primarily for ensuring that the report contained the topics on which the stakeholders wanted information. Two companies identified their stakeholders by name and engaged them for *deliberate feedback* before the report was in its final draft.

We also have a select group of our stakeholders 4, 5 or 6 of individuals who know our business quite well, who I have asked to come in and review earlier documents of our reports, and do a comparison. For example, [they tell us] what we could do that could improve that report and reports in the following years.

We do what I personally call qualitative assurance where you get opinions of stakeholders and you embed those opinions into the way you report. We have done that to some extent over the years.

Companies' reports contained dual assurances provided by an external auditor as well as a stakeholder panel. This is a process that is used to assure that the performance indicators in the report are not only accurate but that the performance indicators are at an acceptable level based on stakeholder feedback. Most involving companies ask an external auditor to verify that their reporting is accurate and to provide an assurance statement in the report, similar to but generally not as rigorous as the auditor's report for financial statements. Because of the nature of sustainability reporting and its unique and diverse audiences, most of whom are not technicians, they are unable to determine, for example, if the level of oil spills or greenhouse gas emissions is low enough. Therefore, a group of stakeholders is engaged to compare the company's policies and other documents with its performance as reported in the sustainability report to suggest areas for improvement. These

recommendations often appear in the report with management's response as to how they will deal with them. Thus, these stakeholder groups are truly engaged in joint decision-making with the company. Involving companies provide examples of how they *utilize this information from the engagement process for learning*.

We use the feedback from our stakeholders and the feedback from our previous report. We have smart people to help us to do a gap analysis from one report to the next; so it's not the brainchild of one person. It's the brainchild of hundreds.

I think the appropriate role is that stakeholders should have input and even be part of the decision-making process.

We are able to do everything that they [our stakeholder assurance group] recommend, I mean that's the process right there.

Involving companies also provided examples of how they work *directly with certain stakeholder groups*. Aboriginal groups are especially important and must be consulted frequently when operations are on or near their lands.

We have Aboriginal affairs policy; we have a stakeholders' relations policy, so all of those are already in place. We have business opportunities for Aboriginal communities, and we participate in their "National Achievement Awards." So we do a lot with our Aboriginal communities.

Although involving companies work closely and intensely with a small number of stakeholders in joint decision-making for mutual benefit, they also recognize the necessity of identifying a broad scope of stakeholders with whom they engage in other ways and therefore practice *inclusiveness*.

We have investigated doing a full-fledged stakeholder mapping process and with that not only identifying who our international stakeholders are but also going out and asking people through third parties what they think about our company, what they think are our most significant issues, challenges, opportunities, etc.

Stakeholder panels used for dual assurance are often composed of a *broad scope* of stakeholders and therefore *inclusive*. One representative stakeholder panel included stakeholders from the following areas: academe, Aboriginal communities, shareholder, institutional investor, NGOs, industry, consumer, and employee. These panels are often used to provide feedback on two areas: (1) adherence of the report to GRI characteristics and (2) materiality analysis of most important issues to include to the

report. The materiality analysis helps to ensure that the company includes all topics of high interest to the stakeholders and of greatest performance impact to the company.

As well as utilizing learning from stakeholder panels both for improvement of reporting and performance, learning is diffused throughout the organization. Although primary responsibility is housed in one or two departments, many employees are engaged to incorporate stakeholder feedback into every-day operations. The following quotations illustrate how the report becomes a learning document within the company's internal network.

Hundreds of people read the report before it goes to print.

A big part of our work, besides publishing a report, is doing the work internally to make sure we get everyone agreeing with what we are publishing.

It falls under everyone's area; everyone can impact that (the report).

In summary, an involving engagement strategy process will result in the five following reporting characteristics: (1) directness of communication with (2) a broad clearly defined set of primary and secondary stakeholders, (3) collection of direct feedback, (4) inclusive of a broad scope of stakeholders, and (5) therefore, in-depth utilization of stakeholder engagement for learning.

### **Company Characteristics, Relationships, and Internal Capabilities**

To further differentiate which companies pursue informing, responding, and involving engagements with stakeholders, we investigated characteristics of our companies and the capabilities developed internally to lessen the uncertainty associated with their relationships with stakeholders. Regarding resources and capabilities, we specifically analyzed board channels as conduits for information and company partnerships/alliances with stakeholders (Hillman et al. 2000; Provan et al. 1980; Rehbein et al. 2013) (Tables 1, 2).

Consistent with prior studies, we found size, internationalization (González-Benito and González-Benito 2010), and institutional ownership percentage (Rehbein et al. 2013) to be among the differentiating factors. Informing companies, smaller in size, have less exposure (operating in North America rather than internationally) and therefore, fewer direct critical demands from stakeholders. Legitimate and urgent claims (Mitchell et al. 1997) go through proper channels: CAPP, regulatory agencies, or securities commissions; however, these stakeholders had little power to act as a unified group because their institutional ownership was less than 50 %. These companies

**Table 1** Characteristics and internal capabilities of interview companies

Company characteristics				Internal resources/capabilities						
Company #	Exposure: countries with operations	Size: total revenue (1 = Largest)	Size: number of employees	Means of sustainability reporting W = website AR = annual report SAR = stand-alone report	Years of reporting experience	Reporting awards	Years on Dow Jones Sustainability Index	Primary reporting responsibility	Associations with NGOs D = donations M = membership CD = community development P = NGO-led partnership LP = joint learning partnership	Stakeholder panel for report feedback
1	1	11	0–499	W, AR	0	None	0	One employee	D	No
2	2	10	500–999	W, AR	0	None	0	One employee	D, P	No
3	1	9	0–499	W, AR	0	None	0	A consultant	D	No
4	2	4	1000+	W, AR, SAR	1–4	Some	1–4	Separate department	D, P	No
5	1	3	1000+	W, AR, SAR	1–4	None	1–4	One or two departments	D, CD, P	No
6	14	7	1000+	W, AR, SAR	5–9	Some	5–9	One or two departments	D, M, CD, P	No
7	2	6	1000+	W, AR, SAR	5–9	None	1–4	One or two departments	D, M, P	No
8	100	2	1000+	W, AR, SAR	10+	Some	5–9	One or two departments	D, M, CD, P	No
9	6	5	1000+	W, AR, SAR	5–9	Many	10+	Cross-sectional team	D, M, CD, P, LP	Yes
10	6	8	1000+	W, AR, SAR	5–9	Many	10+	Cross-sectional team	D, M, CD, P, LP	Yes
11	90	1	1000+	W, AR, SAR	10+	Many	10+	Cross-sectional team	D, M, CD, P, LP	Yes

Two raters separately classified the companies and they both agreed that the first three companies fell into informing, the next five under responding, and the last three companies under involving category. However, we have chosen to show them on a continuum as opposed to discrete categories because we feel that the continuum is more representative of the standing

**Table 2** Ownership and governance of interview companies

Company #	Board committee	Board responsibility for reporting	Institutional investors	Board size	#(%) Insiders	#(%) Business experts	#(%) Support specialists	#(%) Community influentials
1	None	None	Lowest %	9	2(22)	6(67)	1(11)	0(0)
2	HE&S	None	<50 %	9	5(56)	3(33)	1(11)	0(0)
3	HE&S	None	<50 %	9	3(33)	4(45)	2(22)	0(0)
4	HE&S	None	>50 %	11	2(18)	6(55)	2(18)	1(11)
5	HE&S	None	>50 %	10	2(20)	5(50)	2(20)	1(10)
6	HE&S and corporate responsibility	None	>50 %	12	2(17)	7(58)	3(25)	0(0)
7	HE&S and social responsibility	Yes	>50 %	9	2(22)	5(56)	2(22)	0(0)
8	Safety, ethics, environment and assurance	None	>50 %	14	3(21)	5(36)	3(21)	3(21)
9	HE&S and sustainable development	Yes	>50 %	12	2(17)	5(42)	2(17)	3(25)
10	HE&S and social responsibility	Yes	>50 %	13	2(15)	6(46)	2(15)	3(23)
11	HE&S security, environmental and social performance	Yes	Highest %	12	2(17)	4(33)	3(25)	3(25)

had not developed any resources or capabilities internally to reduce uncertainty (Pfeffer and Salancik 1978) but looked to their trade association for assistance. If an informing company had a special board committee, its duties were narrowly defined to deal with compliance of health, environment, and safety (HE&S) issues. Boards consisted mainly of business experts with few support specialists (law, banking, insurance, public relations specialists; communication channels to suppliers/government; access to financial capital) and no community influential (non-business perspectives; knowledge about and influence with powerful community groups; Hillman et al. 2000). Regarding affiliations with stakeholder or community groups (Provan et al. 1980; Rehbein et al. 2013), these companies disclosed donations and volunteering (inputs) on their websites but held few memberships and had no strong partnerships or alliances (outputs or outcomes) with NGOs.

Informing companies, in general, fall in the middle ranks of size. These companies had exposure through operations in more and varied locations, and their shareholders came from a greater number of countries. Their stakeholders were more organized as the percentage of institutional investors was greater than 50 %. Three of the five companies in this category had considerable media exposure for specific environmental or social activities, which threatened their social licenses to operate. Subsequently, they began to expand and strengthen their stakeholder engagement processes and their reporting. At least two of the companies received requests through shareholder resolutions to change performance and enhance reporting. Therefore, these companies engaged in dialog directly with these shareholders (Hess 2007). Some of the companies had operations near large communities, especially Aboriginal, rather than wells on owners' isolated lands; therefore, community engagement became essential. Their board members provided the

capabilities necessary to carry out these responsibilities through a separate board committee with a title and duties that were broader than HE&S (except for one), but only one company's board duties included a review of the sustainability report. To build capacity, responding companies had more support specialists and community influentials on their boards than informing companies (Hillman et al. 2000). They also carried memberships with (inputs), participated in, and were signatories to several NGO-led initiatives (outputs). Responding companies had tenure on the Dow Jones Sustainability Index (DJSI) of 1–9 years, and a few companies had won sustainability reporting awards. Stakeholders of these companies had not only legitimate and urgent claims but also the power to carry through on these claims (Mitchell et al. 1997).

Involving companies tend to be large multinational companies. These companies had the highest exposure through operations in more and varied locations and nearly half of their shareholder investment came outside of North America. Their percentage of institutional investors was similar to responding companies. All had operations near large communities, especially aboriginal. Their board members were the most diverse and all had a separate board committee with broad responsibilities for performance and reporting. All committees reviewed the sustainability report and monitored progress against the company's own values, beliefs, policy statements, and international codes to which they were signatories. To expand their abilities to address diverse issues, involving companies had more community influentials on their boards (Hillman et al. 2000) and had memberships in many NGOs. In addition to donations and memberships, they developed partnerships that had specific timelines for accomplishing defined objectives (outcomes; Provan et al. 1980; Rehbein et al. 2013). They were willing to work with, and learn from, stakeholders having



legitimate and urgent claims, with or without power (Mitchell et al. 1997). Involving companies had tenures on the DJSI of more than 10 years and all had won many sustainability reporting awards.

## Conclusion, Limitations, and Future Research

This research uses resource dependence and stakeholder theories to explicate resource dependencies on different stakeholders, relationships, engagement processes, and sustainability reporting characteristics. The type of processes that companies developed via their sustainability report is related to their dependency perceptions and stakeholder characteristics and relationships. Motivations for engaging stakeholders and developing relationships include to access conventional capital markets, for acceptance in social investing markets, to meet political or social expectations and needs, or for organizational learning (Hitt et al. 2005; Rogers and Wright 1998). Our companies also developed different capabilities internally (board channels to the community and NGO partnerships) to reduce resource dependence uncertainty through their relationships with stakeholders.

We provide further insight as to the meanings of inform/transactional, respond/transitional, and involve/transformational engagement processes (Bowen et al. 2010; Grunig and Hunt 1984; Morsing and Schultz 2006) in terms of sustainability reporting in a specific industry. Therefore, we add to the theoretical knowledge regarding engagement motives and practices and develop the relational aspect of stakeholder engagement via the sustainability report. These three engagement and reporting processes are distinguished by five characteristics: their directness of communication, clarity of stakeholder identity, deliberateness of collecting feedback, inclusiveness of stakeholders, and utilization of stakeholder engagement for learning.

The findings from our research provide fertile ground for future researchers to explore internal capabilities necessary to develop relationships with stakeholders and learning via sustainability reporting. Future investigation can be undertaken to understand the processes that companies undertake to answer to stakeholder resolutions. The type of joint decision-making that involving companies and stakeholders undertake for sustainability reporting improvement needs further investigation. The idea that sustainability reporting is a tool for organizational learning and change opens another research opportunity related to transparent sharing of knowledge and how sustainability reporting can be more useful for decision-making.

Our study focused on how sustainability reporting was used to engage stakeholders and how stakeholder engagement in turn impacted the characteristics of sustainability reporting. Onkila's (2011) study focused on stakeholder

relationships and engagement found in sustainability rhetoric. Future research should build on these two studies to investigate stakeholder engagement processes both through sustainability rhetoric and sustainability reporting. Our case study is limited to one industry and therefore not generalizable. A larger sample can support generalizability. Further research should also be done to investigate if the same relationships occur in other industries and other contexts.

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# Environmental Leadership and Consciousness Development: A Case Study Among Canadian SMEs

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**Abstract** The objective of this paper is to explore how the various stages of consciousness development of top managers can influence, in practical terms, their abilities in and commitment to environmental leadership in different types of SMEs. A case study based on 63 interviews carried out in 15 industrial SMEs showed that the organizations that displayed the most environmental management practices were mostly run by managers at a post-conventional stage of consciousness development. Conversely, the SMEs that displayed less sustainable environmental management practices were all run by managers at conventional stages of development. Drawing upon diverse examples of environmental leadership, this paper analyzes the reasons why the stages of post-conventional consciousness development of top managers seem to foster corporate greening in SMEs. The study also sheds light on the key values and abilities associated with both environmental leadership and the upper-stages of consciousness development, which include a broader and systemic perspective, long-range focus, integration of conflicting goals, collaboration with stakeholders, complexity management, collaborative learning, among others.

**Keywords** Environmental leadership · Sustainability · Consciousness development · Values · SMEs · Corporate greening

## Introduction

Corporate greening depends to a large extent on the commitment and leadership of top managers who are in a position to implement policies and practices that can improve environmental performance. For SMEs, environmental leadership is becoming more essential given that the companies' size and limited resources often make it difficult to implement well-organized initiatives that effectively address sustainability issues. The SMEs' general lack of knowledge of environmental impact and its traditional culture of resistance to both self-regulation and government interventionism also undermine their responsiveness to external pressures (Revell and Blackburn 2007; Revell et al. 2010). From this perspective, the environmental commitment of SMEs is often quite limited and cannot adequately develop without the support of top managers. Although environmental leadership roles, motivations and values have been widely studied in the literature (Egri and Herman 2000; Dechant et al. 1994; Flannery and May 1994; Anderson and Bateman 2000; Bansal 2003), the respective meaning systems and abilities underlying this leadership remain underexplored. As a result, research in this area tends to be focused on what environmental leaders do, rather than address the underlying meaning system and abilities that inform their actions. Environmental leadership is thus generally associated with various managerial practices: implementation of an environmental management system, promotion of a proactive strategy, stakeholder management, reporting practices, etc. (Jose and Lee 2007;

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Maak and Pless 2006; Maak 2007; Kashmanian et al. 2010; Fowler and Hope 2007; Bansal 2003). Within the literature, the analysis of these practices tends to project a rather simplistic monolithic view of environmental leaders who instrumentally endorse a green vision of various managerial initiatives. Nevertheless, such an environmental commitment cannot be dissociated from the underlying worldviews, abilities and psychological predispositions of managers (Brown 2011; Boiral et al. 2009). These fundamental psychological aspects are related to the consciousness development of individuals, that is to say the meaning-system that determines the personal worldviews, deep motivations and abilities to take complexity into account (Harung et al. 2009; Cook-Greuter 2000, 2004; Pfaffenberger et al. 2011; Bartunek et al. 1983).

Various studies have shown that a manager's stage of consciousness development has a significant impact on his or her ability to handle complex issues, conduct change and successfully promote innovation (Rooke and Torbert 1998, 2005; Fisher and Torbert 1991; Harung et al. 2009). Generally speaking, post-conventional managers are able to take a broader and more flexible view of reality than their conventional counterparts. A few recent studies have also hypothesized that the emergence of post-conventional stages of consciousness development among managers can significantly foster their environmental leadership (Rogers 2012; Boiral et al. 2009; van Marrewijk 2003; van Marrewijk and Hardjono 2003). This hypothesis provides a promising explanation of the environmental commitment of SMEs whose green initiatives are largely discretionary and depend on the owner–manager's personal leadership, values, and abilities. Nevertheless, research in this area has remained largely speculative and based on theoretical assumptions that have yet to be empirically validated.

The main objective of this paper is to explore how the various stages of consciousness development of top managers can influence, in practical terms, their abilities and commitment to environmental leadership in different types of SMEs. More specifically, this study explores, through a case study of 15 SMEs, the particular ways that conventional and post-conventional stages of consciousness development influence how top managers perceive and manage environmental issues. The comparison between green and passive SMEs sheds new light on how top managers' meaning systems and their associated capacities influence their approach to environmental leadership. As such, this study explores certain psychological dimensions of environmental leadership that have been overlooked in the literature. It also re-examines various issues of environmental management from a new developmental perspective that highlights the role of managers' meaning systems and their abilities to successfully meet basic sustainability challenges: stakeholder management,

reconciliation of economic and environmental goals, anticipation of external pressures, etc.

The remainder of the paper is structured as follows. First, the literature on environmental leadership is considered from the perspective of consciousness development theories. Second, the methodology of the empirical study is presented. Third, the main results of the case study are analyzed from two main perspectives: the stages of consciousness development underlying environmental commitment, and the abilities that differentiate green leaders from their passive counterparts. Finally, the conclusion discusses the main implications of the study, its limitations and various avenues for future research.

### The Developmental Perspective of Environmental Leadership

Although environmental leadership is generally considered as a prerequisite to corporate greening (Egri and Herman 2000; Flannery and May 1994; Boiral et al. 2009), few empirical studies have focused on the way managers' meaning systems and abilities can influence sustainability commitments, notably in the case of SMEs.

#### Environmental Leadership and Corporate Greening

Defined as “the ability to influence individuals and mobilize organizations to realize a vision of long-term ecological sustainability” (Egri and Herman 2000, p. 2), environmental leadership has driven the greening of many organizations. These include companies considered as international models of sustainability such as Patagonia, Body Shop, and Interface (Kearins and Collins 2012; Fowler and Hope 2007; Stubbs and Cocklin 2008). Whatever the organization's size and environmental commitment, the top managers' leadership clearly plays a key role in corporate greening (Kearins and Collins 2012; Egri and Herman 2000). Studies on this issue have essentially focused on four areas: environmental practices and responsibilities, motivations, economic impacts and values.

First, the role of environmental leadership has been associated with the implementation of various environmental practices and top managers' responsibilities in promoting change. The successful implementation of environmental practices (i.e., the implementation of a sustainability policy, pollution prevention actions, promotion of industrial ecology, training programs, etc.) presupposes an active commitment from top managers (Kearins and Collins 2012; Revell and Blackburn 2007; Revell et al. 2010). Second, studies on the motivations behind environmental leadership and corporate greening have shown the importance of the

search for social legitimacy and response to stakeholder expectations. The environmental commitment of managers is therefore often driven by institutional pressures that prompt the implementation of structures and practices considered as legitimate by stakeholders (Hoffman 1999; Boiral 2007). The managerial perceptions of these pressures determine how proactive the strategies to reduce environmental impacts through sustainability and resource allocation will be (Buysse and Verbeke 2003; Sharma 2000). Third, environmental leadership has been associated with various organizational benefits: reduction of pollution control, improvement of the corporate image, better employee motivation, higher productivity, etc. (Ambec and Lanoie 2008; Roy et al. 2001). Fourth, certain studies have focused on the values underlying environmental leadership and strategies for sustainability (Egri and Herman 2000; van Marrewijk and Hardjono 2003; Crossman 2011; Bansal 2003). Environmental leaders are for that reason supposed to move from the dominant social paradigm (DSP), characterized by overconfidence in industrial advancement, economic growth, and technological progress, to a new environmental paradigm (NEP), characterized by an emphasis on environmental protection and recognition of the limitations of industrial growth due to natural resources depletion (Shafer 2006; Egri and Herman 2000; Boiral et al. 2009).

Although the literature on environmental leadership has shed light on the importance, motivations and possible impacts of manager involvement in corporate greening, the nature and scope of this involvement remains underexplored. First, the literature analysis of environmental leadership is most often conducted from a theoretical perspective. For example, most studies on NEP and the so called ecocentric values that are supposed to drive corporate environmental commitment (Shafer 2006; Egri and Herman 2000; Crossman 2011) remain non-specific and seem quite disconnected from the concrete sustainability challenges faced by managers in their daily work activities. Moreover, environmental leadership and its practical manifestations inside organizations have rarely been studied and generally from a quite instrumental viewpoint: integration of stakeholder expectations, promotion of proactive measures, implementation of an environmental management system, etc. More research is therefore needed to understand the way top managers interpret and manage environmental issues in practical terms, especially inside SMEs.

Second, research on environmental leadership tends to project an idealized image of green leaders who are often made out to be the new heroes of sustainability. The focus on success stories in corporate greening has also contributed to exemplifying environmental leaders, considered as models to be emulated by other managers (Stubbs and Cocklin 2008; Kearins and Collins 2012; Fowler and Hope 2007). Nevertheless, most top managers can hardly be considered

environmental leaders, especially in SMEs where sustainability issues are rarely seen as a priority (Revell and Blackburn 2007; Revell et al. 2010). Generally speaking, the way environmental issues are perceived and managed within firms that are considered to be passive or reluctant to promote green initiatives has remained underexplored. How do managers of these passive firms interpret environmental issues? What are the main differences between environmental leaders and their counterparts from passive organizations in terms of leadership abilities, meaning systems and worldviews? These important questions need to be more clearly addressed.

Third, specific abilities underlying environmental leadership have been overlooked in the literature (Sweet et al. 2003; van Kleef and Roome 2007; Fernández et al. 2006) or examined from a rather general perspective (Rogers 2012; Boiral et al. 2009). For example, according to Egri and Herman (2000), environmental leaders tend to be more ecocentric and to put more emphasis on interpersonal, technical, and conceptual skills. Nevertheless, these skills remain quite unspecific and seem disconnected from concrete environmental challenges. Because environmental issues are characterized by their complexity, interdisciplinary challenges and institutional pressures, it is reasonable to assume that they require the development of more specific and complex abilities (Fernández et al. 2006; Boiral et al. 2009; Metcalf and Benn 2013). For example, strategies for climate change must take into account regulatory pressures, social expectations, implementation of new technologies for reducing greenhouse-gas-emissions, economic impacts of measures in this area, etc. Whatever the managers' espoused values, these strategies also require that they be able to effectively manage complexity, uncertainty and change. The same remark applies to other environmental challenges such as the implementation of a successful environmental management system, integration of stakeholder expectations, anticipation of external pressures, promotion of industrial ecology, etc. According to Metcalf and Benn (2013, p. 369), the complexity of sustainability issues requires "leaders of extraordinary abilities" to manage such complexity, something that can hardly be taken for granted inside organizations and certainly requires more investigation.

Although the literature has been almost silent on the meaning systems and specific abilities needed for environmental leadership, recent research based on developmental approaches could help to shed new light on this issue.

## Consciousness Development and Environmental Leadership

The developmental perspective represents an emerging approach to exploring maturational differences in the way individuals make sense, experience and act upon reality through the lens of various stages of consciousness

(Bartunek et al. 1983; Cook-Greuter 2004; Harung et al. 2009; Pfaffenberger et al. 2011; Rooke and Torbert 2005). Comparable to personal epistemologies or worldviews, these stages of consciousness—also called stages of Ego development—are generally defined as meaning-making systems that are simultaneously cognitive, affective, and operative (Cook-Greuter 1999; Wilber 2000). Primarily cognitive, a stage of consciousness incorporates into a coherent whole, different levels of meaning-making structures developed or assimilated throughout one's life in order to adapt to the challenges of one's environment or to fulfill certain potentials. Each stage also determines the ontological experience linked to the worldview with which one identifies, namely one's emotional stakes (ex: new fears) and ability to monitor emotional experiences as well as what one understands as the purpose of life; that is, the values and needs acted upon as well as the goals one is moving toward (Cook-Greuter 1999). So, as a new stage of consciousness is reached, one embraces a new set of needs and values and has to develop a new repertoire of strategies and abilities to act upon them effectively.

According to Cook-Greuter (2004, p. 4), developmental theories are based on various assumptions:

Growth occurs in a logical sequence of stages or expanding world views from birth to adulthood. The movement is often likened to an ever widening spiral. Overall, world views evolve from simple to complex, from static to dynamic, and from ego-centric to socio-centric to world-centric. Later stages are reached only by journeying through the earlier stages. Once a stage has been traversed, it remains a part of the individual's response repertoire, even when more complex, later stages are adopted. Each later stage includes and transcends the previous ones. (...) Each later stage in the sequence is more differentiated, integrated, flexible and capable of optimally functioning in a rapidly changing and complexifying world. People's stage of development influences what they notice or can become aware of, and therefore, what they can describe, articulate, influence, and change.

Consciousness development stages gravitate around three main levels: pre-conventional, conventional, and post-conventional (Cook-Greuter 2000; Graham 1995; Harung et al. 2009). Pre-conventional stages comprise <5 % of the adult population and are characterized by opportunist, impulsive, and self-protective behaviors. Conventional stages comprise nearly 80 % of the adult population and are characterized by the adaptation to social rules, values, and conventions. Post-conventional stages comprise approximately 15 % of the adult population and are marked by the capacity of individuals to question and improve creatively existing rules, better manage complex

issues, interact easily with various stakeholders and deal with problems more proactively than their conventional counterparts (Pfaffenberger et al. 2011; Cook-Greuter 2004; Rooke and Torbert 2005).

Research into the managerial applications of developmental approaches has mostly focused on the way different stages can influence the leadership style, competency, and performance of managers (Rooke and Torbert 1998; Fisher and Torbert 1991; Joiner and Josephs 2007). Empirical studies on this issue are consistent with the main assumptions of developmental theories. In general, post-conventional managers appear to be more flexible, innovative and successful than their conventional counterparts (Baron and Cayer 2011; Rooke and Torbert 2005; Harung et al. 2009). Their ability to manage complexity, reappraise conventions and deal with different stakeholders makes it easier to implement change, promote new ideas and develop collaborations. Post-conventional stages have also been associated with a higher organizational as well as individual performance, and greater capacity to adapt one's style of leadership to different types of situations (Joiner and Josephs 2007; Rooke and Torbert 2005).

Little theoretical research has attempted to use developmental theories to analyze, from a new and more comprehensive perspective, the environmental issues faced by organizations. Marrewijk has proposed to re-examine definitions and debates over corporate social responsibility and corporate sustainability through the lens of developmental theories, notably the theory of Spiral Dynamics (van Marrewijk 2003; van Marrewijk and Hardjono 2003). Popularized by Beck and Cowan (1996), this developmental theory emphasizes the core values system associated with different stages of consciousness, which come with specific needs and abilities. According to van Marrewijk (2003), corporate social responsibility and corporate sustainability can be interpreted through five main value systems: compliance-driven, profit-driven, caring, synergistic, and holistic. As value systems grow towards holistic, concerns become based on a systemic, long-range and inclusive vision of corporate sustainability. Such an orientation is made possible when the individuals' life conditions and abilities satisfy their needs for survival, security, affiliation, mastery and, to some degree, self-actualization (van Marrewijk 2003). The Spiral Dynamics value system appears to offer a preliminary bridging of the gap between developmental theories and environmental issues, offering a partial response to the call for more spiritual, inspirational and universal values to promote both environmental and transformational leadership (Crossman 2011; Egri and Herman 2000; Chen and Chang 2012; Du et al. 2012). Nevertheless, the theory primarily focuses on the general evolution of human values rather than the concrete and particular environmental challenges faced by

SMEs. The concept of ecological selves recently proposed by Rogers (2012) also links environmental leadership to consciousness development. According to Rogers, sustainability issues can be managed through eight main ecological selves, each based on a specific stage of consciousness development: eco-guardian, eco-warrior, eco-manager, eco-strategist, eco-radical, eco-holist, eco-integralist, and eco-sage. Still, the description of these ecological selves remains somewhat elliptic and to differing degrees disconnected from the literature on environmental management as well as on the managerial applications of developmental theories.

Boiral et al. (2009) examined this connection between the two extensive literatures of environmental management and the managers' stages of consciousness development (see Table 1). Investigated in and across in-depth empirical studies, the literature on managers' stages of consciousness development are based on established typologies developed by Torbert (Rooke and Torbert 2005), Beck and Cowan (1996), and Kegan (1994; Kegan and Lahey 2009). As such, the particular characteristics of stages of consciousness development associated with managerial activities are grounded in considerable empirical data that cannot be reduced to a single study or model. Moreover, these characteristics are not only based on general values but also on abilities, strengths, and weakness (Rooke and Torbert 2005). These stages can be connected to the main challenges of environmental leadership (see Table 1).

Generally speaking, the developmental perspectives of corporate sustainability have helped bring legitimacy to the underexplored interior, psychological dimensions of environmental leadership. An understanding of managers' work in this area can hardly be reduced to the traditional extrinsic factors described in the literature: external pressures, economic benefits, search for legitimacy, etc. (Bansal and Roth 2000; Anderson and Bateman 2000; Dechant, et al. 1994; Flannery and May 1994). Whatever their importance, the way these factors are interpreted and managed largely depends on managers' worldviews, values and meaning-making frameworks, which in turn are shaped by the particular stage of their consciousness development. From this perspective, the emergent literature on the developmental approach of corporate greening advocates a critical examination of the idealized and monolithic view of environmental leadership, which cannot be reduced to a single set of values for corporate sustainability but must be properly understood in the context of diverse meaning systems (van Marrewijk 2003; van Marrewijk and Hardjono 2003). The few studies conducted on the relationships between environmental leadership and stages of consciousness development have nonetheless shed light on the abilities associated with these meaning systems and their possible impact on corporate greening (Rogers 2012; Boiral et al. 2009).

Nevertheless, this emerging literature remains largely theoretical, and the way the managers' stage of consciousness can translate into environmental leadership inside organizations must be empirically explored to be better understood. In his recent doctoral thesis, Brown (2011) analyzed how post-conventional managers from business, government, and civil society engage in environmental initiatives. Their management commitments appeared consistent with the basic assumptions about advanced post-conventional leaders (Joiner and Josephs 2007; Rooke and Torbert 2005; Pfaffenberger et al. 2011): global perspective, greater vision, support of individuals and systems to promote new ideas, etc. Nevertheless, the advanced stages of consciousness studied by Brown (Strategists, Alchemists, Ironists) represents <5 % of the entire population of managers and can thus hardly be representative of environmental leaders as a whole. Moreover, this study focused on excavating the broader meaning system of advanced post-conventional leaders rather than addressing the practical implications of advanced consciousness development for environmental management.

Although the developmental perspective appears to represent a promising avenue for research on environmental leadership, in the quasi-absence of empirical study, its relevance remains questionable. Two main sets of questions need to be answered to demonstrate the relevance of this developmental perspective. First, the relationships between managers' environmental commitment and particular stage of consciousness development should be studied from various organizational as well as developmental situations. What are the specific concrete implications of each respective stage of consciousness development for environmental leaders? Do green SMEs tend to be predominantly operated by post-conventional managers? Conversely, to what extent are passive or resistant SMEs run by conventional or pre-conventional managers? Second, there is a need to analyze the particular environmental values and abilities associated with each stage of consciousness development (see Table 1). Although there may be difficulty in empirically demonstrating certain implications for each stage of environmental leadership, key differences between conventional and post-conventional leaders could be addressed through such questions as: to what extent can the abilities required for promoting environmental leadership be empirically related to the particular characteristics of post-conventional stages? Conversely, in what ways do leaders from passive SMEs lack these capacities?

This study attempts to empirically explore two complementary sets of issues:

- The stages of consciousness development underlying SMEs' environmental commitment;



**Table 1** Stages of consciousness development and environmental leadership (adapted from Boiral et al. 2009, pp. 488–489)

	Stage and frequency (Rooke and Torbert 2005)	Possible implications for environmental leadership
Pre-conventional	Opportunist (5 % of managers): self-interested conduct, egocentricity, mistrust, opportunism	Little sensitivity to environmental issues except when they represent a threat or foreseeable gain for the manager; resistance to pressure from stakeholders, who are viewed as detrimental to one's interests; view of the environment as a collection of resources to exploit; sporadic and short-term measures
Conventional	Diplomat (12 % of managers): focus on group norms, search for social approval, conflict avoidance	Support for environmental questions in order to keep up appearances or to follow a trend in established social conventions; attempt to soothe tensions related to environmental issues within the organization and in relations with stakeholders
	Expert (38 % of managers): focus on rationality and personal expertise to improve efficiency	Consideration for environmental issues from a technical, specialized perspective; reinforcement of expertise of environmental services; search for scientific certitude before acting; preference for proven technical approaches
	Achiever (30 % of managers): goal oriented, focus on pragmatism and group performance	Integration of environmental issues into organizational objectives and procedures; development of environmental committees integrating different services; response to market concerns about ecological issues; concern for improving performance
Post-conventional	Individualist (10 % of managers): critical distance, creative thinking, acceptance of different viewpoints	Inclination to develop original and creative environmental solutions and to question preconceived notions; development of a participative approach requiring greater employee involvement; more systemic and broader vision of issues
	Strategist (4 % of managers): individual and organizational transformation, systemic worldview	Inclination to propose a pro-environmental vision and culture for the organization, more in-depth transformation of in-house habits and values; development of a more proactive approach conducive to anticipating long-term trends; marked interest for global environmental issues; integration of economic, social and environmental aspects
	Alchemist (1 % of managers): comprehensive transformation of organization and society; integration of material, spiritual and societal issues	Re-centering of the organization's mission and vocation toward a more social and environmental outlook; activist managerial commitment; involvement in various organizations and events promoting harmonious societal development; support for global humanitarian causes

- The environmental values and abilities that depend on the top managers' stages of consciousness development.

## Methods

As stated, this paper explores how environmental leadership and the ability to manage sustainability issues inside SMEs are shaped by the stages of conscious development of top managers. Because environmental leadership can hardly be measured precisely and consciousness development is embedded in complex meaning systems, this study is based on a qualitative and inductive approach. The intent here is not to measure correlations between variables, but rather to investigate how environmental issues are interpreted and managed inside SMEs. The focus on SMEs instead of on large organizations is justified by the key role

of the owner–manager in the promotion of environmental issues (Revell and Blackburn 2007; Revell et al. 2010). The top manager's meaning-making system and consciousness development is therefore expected to directly influence the environmental commitment of the whole organization.

## Case Selection

The case study method was chosen in order to delve deeper into environmental leadership and practices in this area. Case studies are particularly well suited to studying complex phenomena from different angles and comparing various organizational situations (Yin 1981, 2003; Eisenhardt 1989). This method also made it possible to collect a large variety of data, which was necessary to analyze the complex relationships between environmental leadership and consciousness development: data on environmental

initiatives, interviews with middle-managers and employees, top manager perceptions of sustainability issues, internal documents, stages of consciousness development analysis, etc. Although the external validity of case studies is limited, the objective of this method is not to generalize specific results but rather to explore new ideas and develop new theories from an inductive approach (Yin 2003; Bansal and Roth 2000; Boiral 2007). In order to compare differences between the level of environmental commitment of top managers and their stage of consciousness development, the study was based on two groups of SMEs whose selection criteria are exposed below:

- Green SMEs in which the top manager was actively committed to promoting environmental initiatives inside his organization;
- Passive SMEs in which the top manager was not actively committed to or particularly concerned by environmental issues.

All in all, six green SMEs and nine passive SMEs were studied. With regard to the selection criteria, the SMEs studied belonged to the Canadian manufacturing sector. The case studies in the manufacturing sector made it possible to observe how substantial environmental issues were handled by green versus passive top managers. Moreover, all SMEs were exposed to similar regulatory pressures and faced various environmental impacts. All the cases studied had less than 300 employees, which corresponds to the limit often used to define SMEs (Loecher 2000). The case study method does not require a random or representative sample of the population (Bansal and Roth 2000). Green SMEs were selected by cross-checking different kinds of information from various sources: winners of environmental contests, references from environmental agencies, articles in newspapers, investigations carried-out in previous studies, etc. Preliminary interviews with top managers made it possible to evaluate the strength of their commitment to environmental issues and willingness to participate in the study. This evaluation was based on specific questions concerning the environmental objectives and programs implemented by their organization. The top managers were also questioned about the extent and nature of their personal commitment to sustainability. Responses obtained during these preliminary interviews were consistent with the information on green SMEs collected from the external sources available. Most respondents released very detailed and specific information on the greening of their organization, demonstrating their knowledge and personal commitment in this area. All the green SMEs selected to participate in the study were considered environmental leaders in their respective industries. Passive SMEs were first selected by cross-checking information against the same type of criteria: studies from environmental agencies

(prosecutions, severe pollution problems, etc.), articles in newspapers concerning industrial pollution, investigations carried-out in previous studies, etc. Nevertheless, this selection process was very difficult because SMEs facing severe environmental problems were reluctant to participate in the study. However, the researchers' contacts with the local business community and industrial associations made it possible to select passive SMEs. These SMEs were not necessarily confronted with major pollution problems, nor were their top managers unconcerned about environmental issues. Instead, they appeared to be quite representative of the wait-and-see, passive attitude characterizing the environmental commitment of most SMEs (Revell and Blackburn 2007; Revell et al. 2010). Contrary to green SMEs, preliminary interviews with these top managers on environmental issues did not provide specific information on objectives and programs in this area. In fact, most managers openly admitted their lack of environmental knowledge and commitment and were unable to describe substantial actions in this area implemented by their organization.

Overall, useful environmental data was more difficult to collect inside passive SMEs. Contrary to most green SMEs, it was not possible to interview respondents other than the top manager and other managers (see Table 2). Furthermore, those interviews were shorter than inside green SMEs where the respondents had extensive reflections about their environmental practices. This lack of information led us to study a few more cases to gain more insight into prevalent environmental issues inside passive SMEs. Nevertheless, it became clear that fewer and fewer new ideas on the environmental management of passive versus green SMEs emerged from the field as cases were added.

According to Perry's (1998) research on the case study methodology, there is no consensus in the literature on the number of cases and interviews to be included in a case study, but 15 cases and 50 interviews can be considered as a maximum. The main issue here is not only the redundancy of information or theoretical saturation (Strauss and Corbin 1990) but also to keep the amount of information manageable, notably when interviews must be transcribed and codified. Based on 15 cases and 63 interviews (see Table 2), the field data collected for this study was more than sufficient for us to address the main objective of the research.

Table 2 summarizes the profile of the studied cases and main information concerning data collection.

#### Data Collection

Data collection was mainly carried out in 2010–2011. Two graduate research assistants in collaboration with the main

**Table 2** Cases studied and interviews conducted

Cases	Manufacturing activity	Number of employees	Environmental commitment	Interviews performed			
				Top manager	Other managers	Employees	Total
1	Beer	100	Very high	2	3	0	5
2	Building structures	200	Very high	2	2	1	5
3	Kitchen furniture	150	High	3	2	2	7
4	Outdoor lighting	240	High	2	2	1	5
5	Kitchen paddles	10	High	2	0	2	4
6	Milk products	275	High	2	3	0	5
7	Furniture	225	Very low	1	2	0	3
8	Machinery products	20	Very low	1	2	0	3
9	Sheet metal	30	Low	2	3	0	5
10	Wood packaging	15	Low	2	1	0	3
11	Steel beams	33	Very low	2	2	0	4
12	Kitchen furniture	16	Low	1	2	0	3
13	Industrial equipment	60	Low	1	2	0	3
14	Electronics	100	Average	2	2	0	4
15	Furniture	75	Very low	2	2	0	4
			Total	27	30	6	63

researchers of this study conducted most of this data collection. Data collection was conducted in five main steps: collection of relevant documents, in-depth interviews with top managers, complementary interviews with other managers and employees, completion of the leader development profile (LDP), and debriefing interviews with top managers.

First, external documentation employed to select cases (interviews with managers published in business newspapers, environmental statements, legal documentation, etc.) were used as much as possible to provide a preliminary overview of each SME's environmental commitment. When available, internal documents were also used. Documents collected made it possible to ask more specific questions during interviews to compare the data collected in the field with more formal information and to investigate environmental issues from different angles. This triangulation process, based on the integration and comparison of various data sources, tends to improve internal validity (Eisenhardt 1989). For example, the environmental commitment of case 1 was covered by various articles in newspapers in which this SME was presented as a model of sustainability. Information from these articles, including quite detailed interviews with the top manager, was compared with the data collected in the field, which proved to be consistent with external sources. Nevertheless, although it was possible to compare formal documents on sustainability issues of green SMEs with data from interviews, such comparisons were impossible with passive SMEs due to the quasi-absence of external and internal documents available on this issue.

Second, an initial in-depth interview with the top manager (generally the company owner–manager) was undertaken in order to clarify his/her vision of environmental issues, practices, values promoted inside the organization, etc. This semi-directive interview was based on four main issues: initiatives for sustainability, environmental practices and integration of complexity, leadership and values, motivations and performance. This first interview with the top manager lasted approximately 1 h. On site visits were often undertaken after or before the top manager interview. This visit made it possible to have a better understanding of certain environmental challenges faced by SMEs.

Third, interviews were conducted with other managers and/or employees of each SME. These interviews were intended to delve deeper into the environmental leadership exhibited by top managers and to better understand organizational initiatives in this area. This semi-directive interview was quite similar to that used for top managers. These interviews lasted on average 30–45 min and were mostly conducted among managers involved in environmental initiatives (in proactive SMEs) or in a position to do so (in passive SMEs): environmental director, quality manager, VP marketing, etc. When possible, employees were also interviewed in order to obtain a different view on environmental management initiatives. Nevertheless, interviews with employees could not be conducted in every case (see Table 2), especially in passive SMEs where very few potential respondents were both available and knowledgeable.

Fourth, each top manager completed the LDP. The LDP was developed by Cook-Greuter (1999, 2004) in collaboration with Torbert (Fisher and Torbert 1991; Rooke and

Torbert 1998, 2005) to accurately assess conventional and post-conventional stages of consciousness development in leaders. The instrument is an adaptation of the Washington University Sentence Completion Test (Loevinger, Wessler and Redmore 1970), which is one of the most widely used and best validated in the field of developmental personality assessment (Manners and Durkin 2001). The LDP is a language-based instrument based on 36 sentence completion items. Using an algorithmic formula, the scores for the 36 items are aggregated into a single score reflecting the principal stage of development at which the person operates. The LDP scoring protocol has undergone seven reliability tests over the past 20 years. Between 2005 and 2008, Cook-Greuter and other trained raters achieved a high Cronbach's  $\alpha$  value of 0.91 for internal consistency between aggregated scores for 891 distinct profiles, leaving little doubt about the reliability of the scoring protocol (Torbert and Livne-Tarandach 2009). Once the LDP test was filled out by the top managers of our study, a certified rater determined each manager's stage based on how the sentences were completed. Cook-Greuter and associates, who have an extensive experience in this area, used the answers to the LDP test to assess the respondents' stage of consciousness development. These results were later compared to the level of SMEs environmental commitment. In order to avoid possible bias in the interpretation of the LDP, no indications on the objective of the study or the type of respondents were communicated to Cook-Greuter and associates. Moreover, managers completed the test after the main field study inside SMEs. The LDP test was passed independently from the case study data collection and interpreted by experts with no direct or indirect connection with this research project.

Fifth, in most cases, a debriefing interview was conducted with the top manager. This interview, which generally lasted 30–45 min, was scheduled after the field study and had two main objectives. The initial objective was to convey the results of the LDP test and provide all the necessary information to understand what it meant. The next objective was to clarify certain issues raised during the case study. That being said, three of the top managers from the passive SMEs were not interested in this second interview or were not available for it.

In order to facilitate data analysis, the interviews with top managers, managers, and employees were audio recorded.

### Data Analysis

Data analysis was based on the general evaluation of the level of the SMEs environmental commitment and the more in-depth process of data categorization and analysis proposed by grounded theory (Strauss and Corbin 1990; Glaser and Strauss 1967).

The SMEs' overall environmental commitment was independently evaluated on a five-level scale (from very low to very high) by the two research assistant involved in the data collection and by the main researcher of this study. For the following reasons, this evaluation of SMEs' environmental commitment was not influenced by the results of the LDP test on consciousness development:

- The researchers involved in the data collection and evaluation of SMEs environmental commitment were not informed of the LDP results at that time. LDP results were released months after the cases studies due to the delay in answering the questionnaire by managers and time required to analyze its results;
- In order to clearly separate environmental issues from the evaluation of consciousness development, the administration of LDP test (explanations of the test to respondents, follow up and contact with certified raters) was conducted by one of the researchers who was not involved in the evaluation of the level of SMEs environmental commitment;
- The three independent evaluation of the level of SMEs environmental commitment gave similar results. Moreover, these results were consistent with the information (documentation and preliminary interviews) collected before the case study (and long before the LDP test) to distinguish the samples of green versus passive SMEs.

The categorization process proposed by grounded theory makes it possible to delve deeper into the interpretation of the data collected. This process is based on the grouping, codification, and comparison of information based on similar concepts or themes emerging from the data collection (Strauss and Corbin 1990; Glaser and Strauss 1967). The qualitative analysis software QDA Miner was used to facilitate this inductive categorization process. First, audio recorded interviews were transcribed verbatim with word processing software and then transferred into QDA Miner software. Second, preliminary categories were defined based on the main themes of the interview guides. These categories were then refined, modified, and subdivided throughout the qualitative analysis process. The emergence of new categories reflecting field observations is one of the main features of grounded theory. These new categories addressed the relationship between the statements on environmental management and the aspects most likely to reflect differences in terms of consciousness development: systemic vision, relationship with stakeholders, anticipation of external pressures, etc.

In order to improve the reliability of the categorization process, two coders were involved in the data analysis. To enhance the coherence between data collection and data analysis, these two coders were also involved in the case study. Each coder was trained in QDA Miner software and

used the same categorization grid. The emergence of new categories was discussed with the coders in order to maintain a common reference framework. The two coders independently coded the transcriptions of 10 interviews randomly selected in order to measure possible bias in the interpretation of categories. Inter-coder reliability was measured by the Krippendorff's  $\alpha$  test. According to this test, measured with the QDA Miner software, the Krippendorff's  $\alpha$  was 95.3 %. This is well above 80 %, which is generally considered excellent inter-coder reliability (Strijbos and Stahl 2007).

At the end of the categorization process, 5,450 passages grouped into 75 categories and 10 main themes were coded by using the QDA Miner software. The main themes of the categorization framework reflected the main lines of data collection: SME commitment for sustainable development, economic impacts, environmental management, main environmental issues, motivations and obstacles, environmental initiatives, employee involvement, governance and regulation, leadership and values, and stages of consciousness development. To address the objective of this study, data interpretation focused on two types of categories:

- The SMEs' environmental commitment and leadership (initiatives for sustainability, environmental practices, top manager's personal commitment, etc.). Analysis of these categories provided an overall picture of each case and made it possible to establish relationships between the SMEs' level of environmental commitment and the top manager's stage of consciousness development.
- The values and abilities underlying environmental leadership (long-range vision, management of complexity, personal concerns for sustainability issues, etc.). Analysis of these categories facilitated the interpretation of possible relationships between the environmental leadership and characteristics of the SMEs that are usually associated with post-conventional versus conventional stages: values, vision, concern for social transformation, etc. (Pfaffenberger et al. 2011; Brown 2011; Cook-Greuter 2004).

The next two sections on data analysis are structured around these two sets of categories. The most representative passages were extracted to illustrate the main findings of the study.

#### Environmental Commitment and Consciousness Development

The complex relationships between environmental commitment and the top manager's stage of consciousness development were analyzed through two main steps:

- The comparison between the evaluation of SMEs' overall environmental commitment and results of the LDP test;
- The qualitative analysis of the SMEs' environmental commitment for each stage of consciousness development covered by the LDP test.

First, the evaluation of SMEs environmental commitment after each case study was consistent with the initial distinction between green and passive SMEs. According to the average results of this evaluation, the environmental commitment of only two SMEs (cases 1 and 2) were considered very high whereas four SMEs (cases 3, 4, 5, and 6) were rated as highly committed. All these SMEs belonged to the sample initially identified as green SMEs. With regard to the sample of passive SMEs, the environmental commitment of one SME (case 14) was rated as average, five (cases 12, 9, 10, 7, and 13) were rated as low and three (cases 9, 15, and 11) were rated as very low. These levels of SMEs environmental commitment were subsequently compared with results of the LDP test as soon as these results were available. In the small number of conceptual papers written on environmental leadership and consciousness development (van Marrewijk 2003; van Marrewijk and Hardjono 2003; Boiral et al. 2009; Rogers 2012), post-conventional managers are assumed to be more involved in initiatives for sustainability than their conventional counterparts. This assumption was confirmed by the close relationships between the case study data and LDP results. Consequently, all the post-conventional managers according to the LDP test ran green SMEs and were actively involved in corporate greening. Conversely, all the top managers from passive SMEs were rated as conventional according to the LDP test and did not appear very concerned with environmental issues.

Figure 1 represents the evaluation and the consciousness development of the top manager of each case according to the scale of Rooke and Torbert (2005). This representation illustrates the importance of each stage in relation to the global population of managers. Although the LDP results in our study did not cover all the nine possible stages (opportunist, strategist, and alchemist stages were not represented), the most common were covered (see Fig. 1). According to Rooke and Torbert (2005), the individualist, achiever, expert, and diplomat stages represent approximately 90 % of the managerial population. This distribution of managers among different stages is quite similar to others studies based on a larger population (Joiner and Josephs 2007; Kegan and Lahey 2009).

Second, the SMEs' environmental commitment was analyzed in light of the characteristics of the stages of consciousness development covered by the LDP test results (see Fig. 1): individualist, achiever, expert, and diplomat.

In order to limit the length of the paper, the analysis that follows is focused on the most salient findings from the 15 cases studied that either reflect or contradict the main characteristics of each stages.

The Individualist Manager

The individualist stage represents the most common post-conventional stage and is characterized by a higher capacity to step back from conventional ways of thinking and to take into account the subjectivity of one’s interpretations and complexity of organizational situations. Individualist managers are also more inclined to propose creative solutions, question existing rules, and promote participative approaches (Pfaffenberger et al. 2011; Joiner and Josephs 2007; Rooke and Torbert 2005).

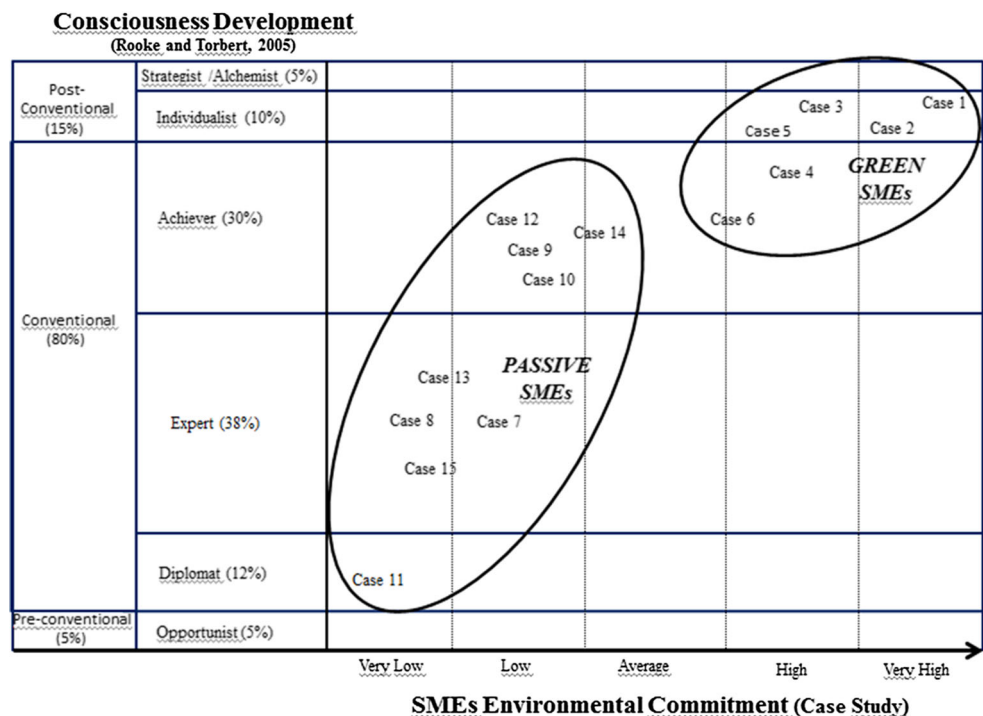
These general features were quite in line with the unconventional type of environmental commitment carried out by top managers from cases 1, 2, 3, and 5. For example, in case 1, the top manager promoted atypical measures to protect the environment, in particular during a facility expansion process. As a result, in order to avoid cutting down trees, she employed the services of a forestry engineer. More than three-dozen trees were saved or replanted and construction work was significantly reorganized in order to avoid environmental damage, despite the initial contractors’ resistance to these measures, which he perceived as eccentric. In case 2, the top manager also proposed innovative measures to construct a green building:

sustainable design, indoor environmental quality, energy efficiency, water harvesting, etc. These measures were undertaken under the leadership of the top manager despite huge resistance from shareholders and bankers who were reluctant to finance environmental measures perceived as unnecessary and too expensive. In case 3, the whole business model seemed focused on innovative initiatives for sustainable development: products made from natural and renewable materials, elimination of waste, installation of one of the largest private solar power systems in the province, distribution of 10 % of profits to environmental organizations, etc. In case 5, the top manager developed an original green-kitchen concept that was based, among other things, on the product’s life-cycle and offsetting of carbon emissions.

Although the environmental commitment of cases 1, 2, 3, and 5 were clearly driven by the top manager, interviews inside these organizations showed that most initiatives were based on a participatory approach and attention paid to employee suggestions. As anticipated, cases studies showed that SMEs run by post-conventional top managers were the most committed to environmental protection (see Fig. 1). Interviews inside these SMEs also confirmed that most employees considered their top manager as a “green leader” clearly committed to environmental protection:

Protecting nature is obvious for her, it’s always been on her mind. (Dir. Marketing, Case 1)  
 She really is tough-as-nails when it comes to protecting the environment. She has fought against all

Fig. 1 The greening of SMEs and consciousness development



the odds for that and she succeeded in making major changes to the company. (Dir. Operations, Case 2)

He is very pro-environment, very proactive in the field. He clearly takes environmental issues to heart.

He is always willing to contribute to the cause. (VP Marketing, Case 5)

A broader vision of top managers' responsibility and concern for ethical issues that typically characterizes post-conventional stages of consciousness did not exclusively drive their commitment for the environment. The importance of responding to external pressures and ensuring the profitability of environmental actions was also mentioned, especially by top managers of cases 3 and 5. Nevertheless, these more conventional attitudes were not the main drivers of environmental initiatives. Moreover, they are not in contradiction with post-conventional stages, which by definition include and transcend the preceding levels (Cook-Greuter 2004; Wilber 2000).

### The Achiever Manager

The characteristics of the achiever stage are well suited to leadership positions: focus on objectives and results, emphasis on effectiveness, ability to work in teams and to adapt to external demands, sense of responsibility, etc. (Rooke and Torbert 2005; Joiner and Josephs 2007). These characteristics can certainly facilitate the integration of environmental issues in day-to-day management. Nevertheless, such integration supposes that environmental issues be considered as an integral part of the organization's objectives and strategy.

This alignment with objectives and strategy was clearly established in cases 4 and 6. The case 4 environmental commitment was initially driven, to a large extent, by economic opportunities and environmental pressures to produce green outdoor lighting: promotion of energy efficiency by municipalities, pressure from environmental groups to reduce light pollution, etc.

The achiever top manager in case 6 seemed even more personally concerned by sustainability issues as such and explained in detail how documentaries on environmental degradation had had a huge impact on his green values. Nevertheless, the justification for his environmental commitment as top manager was embedded in economic and strategic issues rather than being explained in terms of personal values. To thrive in the highly competitive environment of the yoghurt industry, the strategy of this SME was therefore to make public and go forward with the ecological mindset and practices that were already present in the organization for decades. This strategy was the starting point for addressing a much wider range of environmental measures that contributed to reinforcing the

company's green image and productivity: reduction of packaging, minimization of the ecological footprint, optimization of transports, etc. Overall, the top managers from cases 4 and 6 seemed the most concerned, of all the green leaders interviewed, by the integration between their personal environmental values and their strong focus on improving economic performance.

This integration supposes both environmental values and measures or strategies to improve economic performance through corporate greening. Such conditions apparently did not exist in cases 9, 10, 14 and 16, where the companies were also run by achiever managers. In case 9, environmental issues were not considered to be essential. According to the top manager, the subcontracting activities of his company reduced the room to manoeuvre for environmental initiatives, which mostly depended on external suppliers. In cases 10 and 16, the top managers recognized that environmental issues were not a priority for their company and they did not see many economic or strategic reasons to implement proactive initiatives in this area. In case 14, an environmental policy had been developed and was posted at the company entrance. Nevertheless, this policy remained very general and relatively unknown; interviews inside the company confirmed that it was not really integrated into daily activities. In general, the achievers from passive SMEs remained quite skeptical about the justification of environmental initiatives and called for a pragmatic perspective taking into account the limited size and impacts of their organizations:

We feel concerned by environmental issues, but I don't think, given our size, that our company has a major impact. I don't think there's much I can do to correct that. (Top manager, Case 12)

We are concerned about environmental actions but they shouldn't take priority over other important issues. We have to find a middle ground. (Top manager, Case 14)

Maybe I am wrong, but I don't think we have much of an impact on the environment. So I don't see why we should implement any initiatives in this area. (Top manager, Case 10)

Generally speaking, the achievers environmental commitment was quite variable (see Fig. 1), ranging from high (cases 4 and 6) to low (cases 12, 10, and 9). This finding shows that there is no obvious correlation between stages of consciousness development and environmental commitment, at least for the achiever stage. For example, the top manager of case 4 has demonstrated a strong vision for the environment and has ceased all operations of his facility to organize a conference on climate change. Nevertheless, although this type of measure at first glance seems more in line with post-conventional stage thinking, the

environmental commitment of the top manager of case 4 appeared to be mostly externally and economically driven.

### The Expert Manager

The expert stage is characterized by a focus on rules, expertise, and knowledge. This focus may be useful to manage environmental issues characterized by technical aspects and scientific debates. Nevertheless, expert managers generally have difficulty in calling their own viewpoint into question, delegating responsibilities, and taking issues into account that appear to be outside their traditional area of expertise and action (Rooke and Torbert 2005; Joiner and Josephs 2007).

These difficulties were quite obvious in the way experts from cases 7, 8, 13, and 15 were reluctant to consider environmental issues as an integral part of corporate responsibilities. In fact, none of the four experts in the study were seriously involved or concerned by environmental issues (see Fig. 1). Three main types of attitudes reflected this lack of concern. First, top managers, especially from cases 7, 8 and 15, considered that environmental issues such as climate change had been quite exaggerated or were not necessarily scientifically proven. There was therefore no serious reason to take these issues into account within their company. Second, certain top managers, notably from cases 7 and 10, considered that environmental issues were not part of their area of expertise, and other respondents in the organization could speak about them more knowledgeably. Third, top managers from cases 13 and 15 highlighted the lack of internal expertise and resources to handle environmental issues. Whatever the reasons invoked, expert respondents were quite outspoken about their poor environmental commitment and knowledge:

I have no knowledge about these things. You should ask my engineer if you want more specific answers. (Top manager, Case 7)

It's not a priority. We haven't gotten very far with regard to the environment. (Top manager, Case 13)

I am far from being a specialist in environmental issues. I hear about it regularly and sometimes I read some articles. I think people have become more aware over time, but environmental issues are now very specialized. (Top manager, Case 15)

Overall, contrary to achievers, the attitude of experts with regard to environmental issues was quite homogeneous and in line with the characteristics of this stage of consciousness development (see Fig. 1). Few managers, notably from cases 7 and 8, have recognized that certain polluting behavior such as throwing used oil in the backward were no longer acceptable, but this new ecological concern was

associated with raising external pressures instead of personal values or organizational effectiveness.

### The Diplomat Manager

The diplomat stage is characterized by a strong identification to the group, conformity with social rules, concern for appearances and conflict avoidance (Rooke and Torbert 2005; Joiner and Josephs 2007). Although this stage can encourage environmental attitudes if they are perceived as politically correct, commitment in this area is expected to be rather superficial, intended to keep up appearances without being really integrated into organizational practices (Boiral et al. 2009). Moreover, the conflicting aspects of environmental issues, scientific debates around problems such as climate change, and uncertainties about economic impacts, regulations and public policies in this area can reinforce the diplomat's resistance to substantial environmental actions. This attitude of resistance and conflict avoidance was clearly exhibited by the top manager of case 11, who was the only diplomat in our study:

I would like to see more agreement around environmental issues. I am quite disillusioned about the subjective messages and criticism coming from ecological groups. As long as this issue hasn't been updated and people continue to disagree on the real environmental impacts, I am not really interested in getting involved. (Top manager, Case 11)

Generally speaking, the case 11 manager appeared to be the least committed to the environment of all the SME managers interviewed (see Fig. 1). First, although the steel fabrication and transformation generated significant environmental and safety risks, the top manager claimed that his products were green because they could be recycled indefinitely: "The advantage of steel is that it is a very environmental product, and people tend to forget that. Steel can be recycled and reused thousands of times." This very questionable argument was used with customers for marketing reasons and contributed to keep up appearances in spite of significant environmental challenges. Second, the case study showed that no real environmental measures were put in place inside the organization. Moreover, the top manager highlighted that environmental actions such as measures to improve employee awareness were unnecessary and costly: "It's obsolete, it's a waste of energy. We have to focus our energy where it counts." Although this position may appear quite categorical, this top manager appeared above all unable to embrace a systemic vision of his role as an entrepreneur by including environmental responsibilities. Like many diplomat managers, he had difficulties throwing off the traditional economic expectations associated with his role and asserting his own values.



Generally speaking, the study of case 11 did not shed light on salient information clearly in contradiction with the main features of the diplomat stage and its impact on environmental management.

In summary, the main findings of the study show a close relationship between, on the one hand, the nature and intensity of SMEs environmental commitment and, on the other hand, the top manager's stage of consciousness development according to the LDP test. Nevertheless, this relationship is complex and not always in line with the theoretical model employed, especially for achievers. These issues will be discussed at the end of the paper.

### The Values and Abilities of Environmental Leadership

Although the managers' stage of consciousness development appeared to shape the nature and scope of their environmental leadership, these stages did not necessarily explain, in and of themselves, the reasons why post-conventional top managers were more committed in this area than their conventional counterparts. These reasons appeared to be closely related to the values and abilities associated with environmental leadership and those related to consciousness development in general, more specifically the emergence of post-conventional stages. The analysis of categories related to the values and abilities of environmental leadership made it possible to identify a few key distinguishing features between the leaders of green versus passive SMEs. These distinguishing features are complementary, not mutually exclusive and clearly connected to consciousness development:

- Motivations and personal values;
- Vision and focus of change;
- Reconciliation and integration of conflicting organizational goals;
- Responsiveness to external pressures and stakeholders;
- Complexity management and collaborative learning.

#### Motivations and Personal Values

One of the main features of consciousness development is the emergence of a wider and more altruistic set of values and motivations (van Marrewijk 2003; van Marrewijk and Hardjono 2003; Cook-Greuter 1999, 2000; Graham 1995). Whereas conventional and, to a larger extent, pre-conventional stages are mainly concerned by self-preservation (that is by needs for economic and professional survival, security and affiliation), post-conventional stages rather aim to contribute to the common good (to meet needs for self-esteem, actualization, and transcendence). The needs and values underlying environmental leadership in our

study seemed to be shaped by the same type of distinction between self-preservation versus contribution to the common good. As such, top managers from passive SMEs were clearly skeptical about the relevance and usefulness of environmental commitment. In general, the environmental crisis and world-wide issues such as global warming and exhaustion of natural resources were not a real concern for their organization. Even when the importance of environmental issues was not denied from a general or personal point of view, it was not necessarily considered as part of the corporate responsibility, which mainly focused on the economy. As explained by the top manager in case 13 (expert): "You have to distinguish between the values of the individual and those of the manager. You can't always assume they are the same. Personally, I might be concerned about environmental issues, but inside the company, I have other priorities to address."

This decoupling of the managers' responsibilities from their broader environmental values was not observed in green SMEs. On the contrary, most top managers from these SMEs justified their commitment by the seriousness of the environmental crisis, even when the issues mentioned seemed quite removed from their direct business impacts. All top managers from green SMEs pointed out that businesses had an important role to play and that addressing the ecological crisis should be a central part of a manager's responsibility. Moreover, with the exception of case 6, these top managers stressed the importance of leading by example and being consistent with environmental values at work as well as in their day-to-day life.

It is important to demonstrate your environmental commitment. I prefer showing my personal commitment through concrete actions rather than by just speaking about it. When employees can see the changes themselves, then it becomes something real. (Top manager, Case 5)

As entrepreneurs, we have a very important role to play in the environment. We have no choice but to play our part. (Top manager, Case 2)

We didn't just make this investment for the company; we made it for the whole society. (Top manager, Case 1)

#### Vision and Focus of Change

The salient need to contribute to the common good in post-conventional managers comes with a more comprehensive and benevolent vision of change. Indeed, the development of post-conventional stages is assumed to bring about a more systemic perspective and to privilege change strategies that integrate short-, middle- and long-term needs (Rogers 2012; Joiner and Josephs 2007; Rooke and Torbert

2005). Conversely, conventional stages foster a more local perspective and a much short-term vision of change. This somewhat narrower perspective was clearly endorsed by leaders from passive SMEs. First, environmental actions were limited to specific and sporadic measures such as paper recycling, energy efficiency, etc. Interviews showed that top managers never seriously considered an overall vision so as to better integrate the environment or to question certain polluting practices. Second, respondents especially from cases 9, 10, and 13, often highlighted the lack of time to address long-range environmental issues. As stressed by case 9's top manager: "Environmental challenges always seem so tough. They're too complicated to be dealt with quickly and we don't have the time to deal with them. We tend to choose the easiest way out, and that's only human, unless you're really, really committed." Third, certain top managers, especially from cases 9, 11, 13, and 15, criticized the lack of pragmatism and the abstract efforts that had to be deployed when trying to solve environmental issues inside SMEs: "Sometimes we make jokes here about *the thinkers*. Maybe we need *thinkers*, but in our company, we don't have the time to think about our impact on planet earth!" (Top manager, Case 15)

Conversely, according to top managers from green SMEs, environmental challenges were very concrete and entailed global changes inside and outside their organizations. In cases 1, 2, 3 and 6, the vision of the organization was focused, to a certain extent, on environmental issues. All green SMEs implemented systemic and complex changes to better integrate environmental issues into the main activities: production process, purchasing, research and development, etc. These changes were therefore far from sporadic, circumstantial or technical but rather involved the whole organization. Moreover, most top managers from green SMEs stressed the importance of promoting a long-term approach, and the legacy left to future generations—which is at the core of the sustainable development concept—was often evoked to justify investments in this area:

We need to think 100 years down the road. Sustainable development is a long-range goal and our society doesn't do that very well. (Top manager, Case 1)

What drives me most is my concern for future generations. I am very worried about the heritage we'll leave behind. Are we going to leave a time bomb or can we defuse it before it's too late? (Top manager, Case 2)

We need to rethink everything, reinvent everything; because nothing here has been designed to be green. The buildings, machinery, waste... there is a whole world out there that has to be reinvented now. (Top manager, Case 4)

## Reconciliation and Integration of Conflicting Organizational Goals

The emergence of post-conventional stages is often described as a process of integrating and transcending the lower-stage limitations while allowing a more comprehensive, flexible and inclusive view of the world to take its place (Cook-Greuter 2004, 2000; Pfaffengerger et al. 2011). This process supposes a greater ability to manage contradictions, conflicting goals and uncertainties. Conversely, conventional stages are generally marked by a compartmentalization of reality in terms of contexts, people and sets of interests which makes integration sometimes difficult, if not impossible. Statements concerning the need to meet economic and environmental goals were quite revealing of this poor integration ability. Economic constraints were clearly the main obstacle to environmental initiatives in passive SMEs. In fact, a large part of the statements from the SMEs' top managers were focused on the costs and risks of undertaking environmental actions. First, according to these managers, there is clearly a win-lose relationship between environmental and economic goals, which undermines any attempts to reconcile them from the outset. Second, the economic crisis and limited resources in SMEs make it even more difficult to invest in this area. Accordingly, voluntary environmental initiatives were infrequent unless they were driven by market demands, led to clear economic opportunities or represented inexpensive options. In any case, the carrying out of these initiatives was mostly associated with fears of negative economic impact:

Environmental issues can have huge economic impact and undermine the survival of our company. I've put the question on the back burner for the moment. (Top manager, Case 11)

If I have to fire 100 employees just because I implemented an environmental program, then I won't do it, that's for sure! (Top manager, Case 14)

In the furniture industry, all the companies we have seen that endorsed these fine principles have now all gone bankrupt! (Top manager, Case 15)

Leaders from green SMEs clearly did not endorse this win-lose rationale between environmental and economic goals. On the contrary, interviewees shared many illustrations of the win-win rationale. For example, the top manager of case 6 explained how the re-optimization of the delivery trucks distribution system contributed to significantly reducing both greenhouse-gas emissions and costs related to fuel consumption. Similarly, although the launch of organic products was not, at first, profitable, it eventually became one of the main sources of profits. Nevertheless, contrary to the often rigid positions on the supposed costs

of environmental initiatives, this win–win rationale was rarely systematized or seen as a rule that could be taken for granted. The economic impacts of environmental initiatives thus appeared to be complex, contingent, and often uncertain. Moreover, the economic benefits were rarely presented as the main driver of environmental actions from green SMEs:

I didn't jump into environmental improvements just for the money. We are used to taking people and the environment into account too. (Top manager, Case 1)  
Environmental actions often represent expenses that only pay back within 3 or 4 years, sometimes even more. (Top manager, Case 5)

That said, the top manager from a green SMEs acknowledged that the reconciliation of different bottom lines is a perpetual challenge and that privileging environment systematically is not viable:

A company cannot survive only through green actions but by making money. I am not here to save the planet Earth. I am a businessman who wants to be responsible. My commitment is to make money in keeping with my main stakeholders: the shareholders, employees and planet Earth. You cannot privilege one of these stakeholders at the expenses of the others. (Top manager, Case 6)

#### Responsiveness to External Pressures and Stakeholders

Post-conventional stages are generally associated with the development of abilities to deal with different viewpoints and collaborate with stakeholders who represent various interests (Joiner and Josephs 2007; Rooke and Torbert 2005). By contrast, conventional stages appear mostly focused on meeting the dominant rules and social conventions and more concerned about adapting to external pressures than possible collaboration with different stakeholders. Interviews with conventional leaders showed that adaptation to environmental pressures was mostly reactive. Although most respondents from passive SMEs recognized that environmental issues had become an increasing concern in society, they essentially adopted a “wait-and-see” attitude with regard to possible external pressures. Certain respondents, especially from cases 11 and 15, viewed environmental issues as a trend that should not affect the company's “business as usual” approach. Other respondents, especially from cases 10, 15, 16, considered that promoting environmental actions was first and foremost the responsibility of governments rather than companies, whose role should be limited to adapting to existing rules. The importance of market pressures was also often highlighted. For example, according to the top manager of case

10, whatever its positive effect on the ecosystems, the adoption of the Forest Stewardship Council (FSC) environmental standard by his company had to be subordinated to customer demands:

Even if our company gets the FSC certification and I require that my suppliers be FSC certified, there is no real value added as long as customers don't require this standard. And I won't be able to increase the price of my products if my customers aren't ready to pay the extra price.

Contrary to conventional top managers, post-conventional respondents from green SMEs clearly adopted a proactive attitude and even called for more environmental commitment and clearer public policies from the government, notably in cases 1, 2, and 4. Because of the companies green positioning and anticipation of increasing pressures from customers and society, this proactive attitude was not necessarily disinterested. Nevertheless, leaders from green SMEs also developed innovative environmental initiatives in collaboration with a large array of stakeholders. For example, case 1 contributed to environmental conservation projects with local associations and was actively involved in a public recycling agency. Case 5 collaborated with the local municipality in the construction of a bicycle path with the intention of reducing greenhouse-gas-emissions and improving healthy behavior among citizens and employees. Far from adopting a reactive, wait-and-see attitude, all top managers from green SMEs explained that they themselves had exerted pressures on suppliers and other stakeholders (government, municipalities, customers, employees, etc.) to promote specific environmental issues or encourage broader changes in society:

On several occasions, we have told other companies and retail shops that we don't want to work with them because of their lack of environmental commitment. (Top manager, Case 3)

We give priority, in our choices, to suppliers who are really concerned about the environment because our mission is entirely focused on it. (Top manager, Case 2)

#### Complexity Management and Collaborative Learning

Consciousness development can be described as a “sequence of increasingly complex and coherent stages of reasoning” (Cook-Greuter 2000, p. 228). In this regard, managers who reached post-conventional stages of consciousness are expected to better manage cross-cutting, interdisciplinary and complex issues, as well as to stimulate employee involvement and perform transformative leadership (Joiner and Josephs 2007; Rooke and Torbert 2005;

Bartunek et al. 1983). Conversely, it is generally assumed that conventional managers are more focused on well-defined and specific issues that can be more easily solved through established structures and practices. This kind of focus often falls short when it comes to environmental management, which entails working with complex issues transcending organizational boundaries and requiring a collaborative approach throughout the organization (Boiral et al. 2009). In this case study, top managers from passive SMEs were generally perplexed about how to manage the complexity of environmental challenges. To begin with, many of our questions remained unanswered because the respondents apparently did not understand the questions raised by the interviewers or did not seem to know how to handle them. For example, the top manager of case 12 recognized that although he could not answer most of our questions, the interview raised environmental issues he was unaware of but felt should be better addressed in the future. Second, none of the top managers from the passive SMEs clearly highlighted the importance of promoting a participative approach inside the organization to better address the environmental issues or obtain innovative suggestions in this area. Third, some top managers, especially from cases 9 and 16, noted the excessive complexity of environmental issues, the need for simple solutions to manage them inside SMEs, and the lack of internal expertise: “I wouldn’t say that environmental issues are not important, but they are much too complicated to manage. We need to make things simpler before deciding whether to embark or not” (Top manager from Case 9).

The complexity of environmental management was clearly acknowledged by post-conventional managers. For example, the top managers from cases 4 and 6, who implemented a product life-cycle analysis, highlighted the high complexity of assessing the real environmental impacts of their products from cradle-to-grave. Nevertheless, environmental complexity was essentially perceived as an opportunity to challenge certain misconceptions about the real environmental impacts and improve internal practices through cross-cutting actions involving various departments. In general, environmental management was perceived as a collective learning process requiring an active involvement from both top managers and employees. Contrary to the situation in passive SMEs, employees from green SMEs generally confirmed that their top managers were very concerned about their participation. In spite of the small size of most companies, various training and awareness programs were developed, notably in case 2. In case 4, a green committee was also implemented to encourage employee suggestions and initiatives. Whatever the measure implemented, environmental initiatives from green SMEs seemed quite decentralized and called upon manager abilities to stimulate employee participation:

We asked people in the factory to become more involved and to check for themselves if they thought that someone didn’t think about something. The recycling increased from 0 to 85 % in the very first week. (Top manager, Case 5)

What works best is to challenge people to see how they can make what they’re doing more ecological. They have to find these ecological solutions by themselves. It allows them to progress and succeed, to be more creative. (Top manager from Case 1)

Table 3 summarizes the relationships between the values and abilities associated with post-conventional stages and the main tendencies observed in the environmental management of green versus passive SMEs. Generally speaking, whatever the organization considered, environmental leadership was fostered by a more systemic perspective, a long-range view of change, a better capacity to integrate environmental and economic goals, and the ability to deal with various stakeholders, to manage complexity and to promote internal participation. The fact that these values and abilities are clearly related to the main aspects of consciousness development certainly explains, to a large extent, why post-conventional top managers appeared to be more able to meet environmental challenges.

## Discussion

The objective of this study was to analyze how the abilities and values associated with the various stages of consciousness development can influence environmental leadership and management in SMEs. The results of the study show that the most highly committed SMEs were ruled by post-conventional leaders. Conversely, all passive SMEs were ruled by conventional leaders. The study also uncovered the relationship between the main characteristics of stages of consciousness development and the way environmental issues were managed by the SMEs’ top managers. Thus, as suggested by developmental theories, individualist managers from cases 1, 2, 3, and 5 promoted innovative environmental measures and were more inclined to promote participative approaches than their conventional counterparts. Their environmental commitment was also more driven by personal values and global ethical concerns. Conversely, achiever managers from cases 4, 6, 9, 10, 14 and 16 were involved in environmental management insofar as initiatives in this area were coherent with the corporate strategy and were not perceived as a threat to economic performance. Expert managers from cases 7, 8, 13, and 15 were all skeptical about the *raison d’être* of environmental commitment, which tended to be seen as a very general concern that was outside of their

**Table 3** Post-conventional characteristics and the greening of SMEs

Main values, vision and abilities of post-conventional stages	Main tendencies observed in the environmental management and leadership of green SMEs	Main tendencies observed in the environmental management and leadership of passive SMEs
Altruistic set of needs and values, broader and systemic perspective	Global environmental crisis is often evoked to justify green initiatives;Entrepreneurs have a major role to play and should endorse broader values;Top managers should lead by example and demonstrate their personal commitment	Addressing global environmental issues is not part of corporate responsibilities;Entrepreneurs should remain focused on economic issues and company survival;Personal values should not necessarily translate into corporate commitment
Comprehensive and benevolent vision of change, with a long-range focus	Global and complex organizational changes to integrate environmental issues into the main activities and departments;Promotion of a long-term approach;Concern for future generations	Sporadic and very restricted environmental measures;No overall and long-range view of change;Abstract perception of long-range environmental concerns and policies
Integration of apparently conflicting goals and interests	Many possibilities to reconcile environmental and economic objectives;Complex and contingent economic consequences of green initiatives;Economic impacts are not the only aspect taken into consideration	Opposition between environmental and economic interests;Economic aspects prioritized;Environmental initiatives quite unlikely or even undesirable because of economic crisis and SMEs' lack of resources
Handling of different viewpoints and collaboration with stakeholders	Anticipation of external pressures;Environmental collaboration with various stakeholders;Environmental pressures exerted on certain suppliers and stakeholders	Wait-and-see attitude with regard to environmental pressures;Environmentalism perceived as a trend;Market demand and regulation seen as main drivers for environmental action
Better management of complexity and collaborative learning	Promotion of cross-cutting changes based on product life-cycle analysis;Call for employee participation, awareness actions and collective learning to address the complexity of environmental issues	Reluctance to address complex and cross-cutting environmental issues;Lack of internal awareness;Call for simple and straightforward solutions adapted to SMEs' resources and capabilities

traditional area of expertise and responsibility. Finally, the diplomat manager from case 11 appeared to be the most passive with regard to environmental initiatives because of the uncertainties, economic impacts and conflicting elements involved.

### Contributions

The main contribution of this study is that it uncovers a fundamental psychological dimension of environmental leadership that has until now remained largely underexplored. The study helps us to better understand not only the actions of environmental leaders, but perhaps more importantly what is underlying and informing those actions. The results of this study call into question the prevailing instrumental and monolithic vision of environmental leaders by demonstrating the underlying values and thinking behind their commitment to corporate greening.

The study also helps bridge the gap between environmental management and developmental theories. Although a few studies have proposed a conceptual framework to better understand environmental management from a developmental perspective, research in this area has remained largely theoretical or focused on post-conventional upper-stages, which represent a very small portion of the whole managerial population (Brown 2011). The results of this study make it possible to illustrate how the most common stages of consciousness development can

influence, in practical terms, the values and practices of environmental managers. Moreover, contrary to the mainstream approach of environmental management, this study not only focused on green leaders or business models in this area, but also on the practices of passive SMEs.

Such a comparison between leaders from green and passive SMEs remains underexplored in the literature. This study helps to explain the main differences between these leaders, not only in terms of environmental management but, more importantly, in terms of values, meaning systems and abilities. These differences could shed new light on controversial debates in the literature, such as the economic impacts of environmental actions (Ambec and Lanoie 2008; Roy et al. 2001). The traditional opposition between a win–win and a win–lose rationale could therefore be related, to a certain extent, to the stages of the managers' consciousness development. As shown in this study, post-conventional top managers seemed to have developed more abilities to integrate conflicting goals and to improve economic performance through environmental initiatives. Overall, the win–lose rationale endorsed by certain managers and politicians could be related to the less flexible and more conflicting view of the world that is found in more conventional stages.

Overall, this study helps to re-examine various environmental issues and practices from a new developmental perspective that focuses on the values, worldview and abilities underlying corporate greening. Moreover, the

study contributes to the vast literature on developmental theories, which have remained quite anthropocentric in overlooking environmental issues (Boiral et al. 2009). Environmental commitment could emerge as one of the main implications of consciousness development. From this perspective, resolving the global environmental crisis could depend, to a certain degree, on the development of post-conventional stages among economic and political leaders, or even the whole population. The results of the study suggest that these stages could play a significant role in the emergence of ethical values and abilities generally associated with environmental leadership in the literature (Shafer 2006; Crossman 2011; Egri and Herman 2000; Metcalf and Benn 2013).

### Limitations and Avenues for Future Research

An analysis of the limits of this study can help identify directions that future studies of this topic might take. First, carrying out a single case study is far from sufficient to measure or extrapolate relationships, even though it makes it possible to delve deeper into complex issues (Yin 2003; Eisenhardt 1989). Because it is only based on 15 cases, the results of this study can hardly be generalized, nor be regarded as sufficient to prove the theory on the impacts of stages of consciousness on environmental leadership. The main objective of qualitative studies is not to validate a theory and test hypotheses, but instead to explore new ideas and delve deeper into the understanding of complex social phenomena. Quantitative research based on a larger sample could be considered in order to confirm the relationships highlighted in this study. Nevertheless, analyzing the real environmental commitment of managers and their stage of consciousness development through large scale studies raises serious methodological challenges. Moreover, the complexity of the abilities, values, and practices entailed in environmental leadership can hardly be captured through questionnaires and requires, as much as possible, an in depth analysis of each organization. Given these difficulties, more qualitative studies should be undertaken among various types of organizations and leaders.

Second, although this study has covered the most common stages of consciousness development, certain stages remained unexplored or under-represented. This finding may relativize the relationships observed between certain stages of consciousness development and environmental leadership, and call for further research. Consequently, although certain top managers of green SMEs were very committed to supporting the environment, none of them were rated as Strategist or Alchemist in the LDP test. This result may appear surprising given the supposed relationship between post-conventional stages and environmental leadership. Nevertheless, it is clearly not necessary to be a strategist or an

alchemist—who represent <5 % of the population—to be highly committed to environmental values. On the contrary, the results of the study show that conventional managers (achievers) can demonstrate strong environmental leadership. Generally speaking, the sample limits did not make it possible to explore all possible links between stage of consciousness and environmental leadership. For example, only one top manager of the study (case 1) was a diplomat. It would be interesting to analyze to what extent diplomats, who represent 12 % of the whole population of managers (Rooke and Torbert 2005), can be involved in environmental initiatives. The same observation apply to experts, who represent almost 40 % of the managerial population. Although all the experts in our study ran passive SMEs, there is no doubt that certain green leaders fall into this category. Likewise, it is reasonable to assume that certain post-conventional leaders may be reluctant to commit themselves to environmental management. Empirically exploring the strengths and limitations of each stage of consciousness development in terms of environmental leadership would provide a more comprehensive picture of how the top managers' stages of consciousness development can impact corporate greening.

Third, this study is based on the developmental perspective, which has certain limits. Theories of adult development tend to assign post-conventional stages greater value in terms of abilities, value system and vision than conventional and pre-conventional stages (Kegan 1994; Cook-Greuter 2004; Rooke and Torbert 2005). Since post-conventional stages comprise approximately 15 % of the adult population, this theory may appear elitist for some audiences. Moreover, although reflections on consciousness development have a long history, notably in Asian cultures, the values and emphasis on cognitive development underlying the dominant models of adult development in the literature (Cook-Greuter 2000; Kegan 1994) could seem culturally biased since the mainstream research in this area has been conducted largely in Western countries. Furthermore, if stages of consciousness development satisfactorily explain values and worldviews, the way to encourage the emergence of post-conventional stages needs to be further clarified, addressing the misconception that they can be directed and controlled by organizations (Baron and Cayer 2011). Finally, the models on consciousness development are grounded in values and meaning structures that are difficult to measure and circumscribe in terms of behavioral operationalization (Pfaf-fenberger et al. 2011).

To address some of these limitations, future research could focus on the impact of cultural differences on the values and abilities associated with environmental leadership and consciousness development. The conduct of studies on environmental leadership in SMEs from various countries

could shed light on different values, vision and abilities, which might differ from the characteristics of post-conventional stages. Future research could also explore the conditions fostering both environmental leadership and consciousness development. For example, the education of leaders and their exposure to similar ethical values held societally (i.e., by family, peers, and communities) could have an impact on their environmental commitment as well as their stage of consciousness development. Such research supposes an exploration of managers' background, personal history and other enabling factors that lie outside the scope of this present study. Finally, future research could delve deeper into certain behavioral aspects of the relationships between environmental leadership and stages of consciousness development. Although research on these stages have mostly been focused on the meaning system of individuals, it is reasonable to suppose that they can shape specific behaviors for the environment. For example, future research could explore the relationships between stages of consciousness development and different types of organizational citizenship behaviors for the environment (OCBE), which have been defined as "individual and discretionary social behaviors not explicitly recognized by the formal reward system and contributing to improve the effectiveness of environmental management of organizations" (Boiral 2009, p. 223). Given that post-conventional stages are assumed to be less dependent on conventions and established meaning structures, it is reasonable to suppose that they tend to favor discretionary initiatives such as OCBEs.

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## Interview Guide

### Script for initiating interview:

My name is Heinrich Meiring and I am currently a student at the University of Pretoria's Gordon Institute of Business Science and completing my research in partial fulfilment of a Masters in Business Administration (MBA).

I am conducting research on unethical decision making. In particular, I would like to understand the factors that influence a person to make a decision which eventually could lead to that person's conviction for a white collar crime offence. The purpose of this interview is for me to learn from you and, in particular, what factors you believe played a role in the decision which lead to your conviction. My aim is to learn from your reflections on your own decision making process.

Our interview is expected to last about 90 minutes. Your participation is voluntary and you can withdraw at any time without penalty. All data will be reported anonymously and without identifiers. I commit to honest reporting on data gathered from you.

This interview is to take place in an semi-structured format. As such, I would like you to freely reflect on the factors that lead to you making the decision which lead to your conviction.

In telling me about the factors that influenced your decision, you may sketch, insofar as you feel comfortable and deem it relevant, any of the following:

1. Any background to the decision.
2. Your thinking about the decision at the time, including its complexity, importance and possible consequences.
3. Any personal context, family context, organisational context and social context at the time of the decision.
4. Any values that you held at the time of the decision, as well as the values of those relevant people around you at the time when the decision was made.
5. Any considerations you took into account at the time of the decision, and even what you did not consider (but would have considered in retrospect).
6. Any discussions you had about the decision, at the time that the decision was made.
7. Any feelings you had about the decision at the time.
8. How you thought about the decision after you made it.

That said, you need *not* feel restricted to the above. I would like you to tell me the story of your decision making process in the way that you feel most comfortable telling it.