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Exploration study of leaders motives when faced with ethical decision dilemma in the Mining industry

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ABSTRACT

Ethical dilemmas are complex situations that leaders often face on a regular basis. These dilemmas arise as a result of conflicting interest and desires by different stakeholders; however leaders are expected to manage them accordingly. There have been a number of scandals resulting from inappropriate means of handling ethical dilemmas in the last decade. The purpose of the study was to establish motives of leaders when faced with ethical dilemma in the mining industry. Ten ethical dilemma cases were developed and tested using middle management in one of the coal mines as the population sample. Motives and factors that are influencing decision making processes were explored. Findings from the study indicated that social and normative motives are the key drivers of decisions which are equally influenced by individual, situational and organisational factors. There were slight differences in how young managers approach ethical dilemmas as opposed to older managers. The implication for businesses is mainly to invest in ethical education for their leaders as ethical behaviour requires an ability to identify issues and understanding means of dealing with dilemmas.

Keywords: Ethical dilemma, Motives, Leaders, Social, Economic, Normative

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.

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CHAPTER 1: INTRODUCTION TO RESEARCH PROBLEM

1.1   INTRODUCTION

During the last decades there have been scandals arising from various companies which in turn perpetuated great concerns regarding ethical practices in organisations (Pendse, 2012).

Many organisations tend to employ leaders with different backgrounds, value systems, education and moral believes. It is these leaders who are entrusted with the responsibility to make decisions that often pose ethical dilemmas and force them to draw on their moral backgrounds and expectations.

In recent years Corporate Social Responsibility (CSR), i.e. a practice that compels companies to be held accountable for sustainable development, safety and health of the environment in which they operate, has become increasingly important in many businesses more so in mining industries. According to Cragg & Greenbaum (2002), mining is an industry where ethical issues confronting managers are predominantly salient and as a result leaders in the mining industry find themselves constantly challenged with regards to their decision making process as there is a need for them to take into account the values and interests of all stakeholders.

In this chapter, the background to the research problem will be outlined, together with the scope of the study, motivation and the key objectives.

1.2   BACKGROUND TO THE RESEARCH PROBLEM

The mining industry has a reputation for the high number of workplace fatalities related to unethical behaviour on some health and safety issues (Eweje, 2005). As a result this led to stringent safety regulations which have had a significant impact on the coal production following the coal brook multi fatal incident and the Vaal Reefs shaft incidents. Since the beginning of 1990, there have been considerable changes in terms of coal production (Bian, Inyang, Daniels, Otto, & Struthers, 2010), furthermore there has been a shift in culture being observed in which there is an increased focus on safety, environment and sustainable development.

Coal is known as a dirty source of energy and the use of it in certain countries have been discontinued (Bian, Inyang, Daniels, Otto, & Struthers, 2010). Bian et.al (2010)

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further gives examples of France that closed down all coal mines in 2004 while the German government announced in 2007 that subsidies for coal production would be completely phased out by 2018.

Though coal is still a cheaper source of energy; making use of it requires addressing environmental challenges from a mining perspective. This includes eliminating coal mine accidents, land subsidence, water pollution, air pollution, spoil heaps, acid mine drainage, disturbance of hydro-geology etc. (Bian et.al, 2010). Health, safety and environmental concerns often pose ethical dilemmas as they influence production potential of the coal operations. These operations usually employ between a thousand and two thousand employees each, based on the average asset size in the industry.

The requirement for listed mining companies to report on sustainability as part of the global reporting requirements is still voluntary but it has meant that mining companies and employees have to take societal matters into account when conducting their business (Lins, Althoff, & Meek, 2011). This has also brought about development of codes of conduct meant to guide the employees and leaders.

The mining industry has stakeholders that could easily lead to ethical dilemmas. These include government from a license authorisation point of view, customers and suppliers from contract negotiations and performance, as well as unionized labour from a bargaining system point of view. They also rely on communities for access to land, while the sector is exposed to a number of corporate social responsibility challenges that originate from the discrepancies between the needs and desires of various stakeholders (Lins et al., 2011).

A number of studies have been conducted globally looking at ethical decision making; however there are not a lot of studies done in an African context. Unethical decisions of business leaders were found to be one of the key factors leading to many economic disasters (Donaldson, 2012). However world leading business schools are aiming to curb the behaviour through integrating business ethics in their curriculum (Remisova, Lasakova & Buciova, 2014).

There has also been an increase in interest of studying intuition in ethical decision making and the way the brain functions when leaders are faced with ethical dilemma situations (Woiceshyn, 2011), with the aim of understanding and predicting ethical decisions. Leaders are required to make decisions on a regular basis, and often some of these decisions concern matters that challenge ethical boundaries. Ethical dilemmas are regarded as complex, conflict ridden, and potentially have serious consequences, all of which increase the likelihood of emotional reactions for those involved (Thiel, Connelly, & Griffith, 2011).

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The outcome of these decisions in a business context, sometimes impacts a number of stakeholders such as shareholders, employees, suppliers, customers and communities (Woiceshyn, 2011). According to Maak and Pless (2006), stakeholder theory stresses the importance of considering the legitimate interests of those groups and individuals who can affect or be affected by the decision (Maak & Pless, 2006). Given the demands of these multi-facet external forces, leaders face a daunting challenge in trying to balance competing interests (Bagozzi, Sekerka, & Hill, 2009).

Jackson, Wood &and Zboja (2013) argue that it is not organisations that are unethical, but individuals in the organisation who are acting unethical.

1.3   RESEARCH AIM

Jackson et al. (2013) identifies factors that are related to the dissolution of ethics in an organisation. These factors include Individual factors such as a person's background, value system etc., organisational factors which can be elements that impact the operating environment and contextual factors which are defined as features of the situation that can exert influence on the decision.

In the study of Kish-Gerphat, Harrison and Trevino (2010) which was meta-analytic evidence about sources of unethical decisions at work, "bad apples" were looking at individual factors, "bad barrels" referring to the organisational factors and "bad cases" were explaining the situational or contextual case. However, decisions are made by individuals, and these decisions could be motivated by different reasons.

This research is aimed at understanding individual motives of leaders when faced with ethical dilemma in the mining industry. Motives are non-conscious needs, wants, drives, or recurrent concerns about goal states as defined by McClelland (1985). According to Nielsen and Parker (2012), external and internal motivation influences the decision making processes, whereby external refers to a situation where people do something because they are forced or persuaded to do so in order to avoid punishment or obtain reward while the internal refers to situations where people so something because they value the activity.

A number of studies pertaining to ethical issues in the mining industries have been conducted and the findings suggests that exploitation of mineral resources have frequently resulted in severe social and environmental disruptions (Hilson and Murck, 2000; Jenkins and Yakovleva, 2005; Hilson and Nayee, 2001; Cragg and Greenbaum, 2002; Eweje, 2005; and Si, Li, Bi, and Yang, 2010).

Motives of the leaders driving decisions may also be as a result of external or internal factors, and could result or lead to unethical behaviour. Therefore the study is aimed at understanding what these motives are, so that organisations in the mining industry could better influence and limit behaviours that are unethical that usually result in social and environmental distractions.

Kish-Gerphat *et al.* (2010) highlight the importance of distinguishing between unethical intention and unethical behaviour. He further explains that a common assumption based on Rest's (1986) ethical decision model is that intention precedes behaviour.

1.4 RESEARCH MOTIVATION

The motivation for this study arose from an empirical study conducted on mixed motives in business compliance (Nielsen and Parker, 2012). The study focussed on measuring motives that drives business compliance. Three categories of motives were tested: economic, social and normative. The expectation during the study was that a constellation of plural motives exist, driving business compliance. Their findings were motives that influence behaviour are a combination of factors such as individual, organisational and structural levels.

This was further supported by a meta-analysis study on bad apples, bad cases and bad barrels which focussed on the sources of unethical decisions in the work place (Kish et al. 2010). They examined the individual, moral cases and organisational factors causing unethical choices and established that there is complexity in dealing with ethical decisions as well as the need to research more antecedents for unethical choices.

Pimentel, Kuntz and Elenkov (2010) found that models in ethical decision making are insufficient for two reasons namely:

- They do not identify individual characteristics as integral part of failing to identify ethical dilemmas
- They have limited themselves to within boundaries of normative ethical theories.

Therefore they offered a combined review of research on ethics that was informed by all the philosophical theories including social sciences and applied business research.

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1.5   RESEARCH PROBLEM

The main purpose of the study is to establish the motives that influence leaders when making decisions in ethical dilemmas situations. Ethical dilemmas are as a result of conflicting interests and desires by different stakeholders, however, they need to be managed and treated accordingly. In high competitive environments, the possibility and probability of unethical behaviour increases (Jackson et al., 2013, and Trevino (1986). Understanding the different individual, contextual and organisational factors that influence leaders when making decisions would result in better ways of curbing unethical behaviours through education and knowledge sharing.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

The literature reviewed in this chapter looked at two key leadership elements that were essential in ethical decision making processes:

- Motives theories
- Ethical decision making theories

There are different applicable theories to each of these elements. The literature review looked at theories applicable to each of the elements and how they integrate to influence a leader's behaviour in situations of ethical dilemma.

2.2 MOTIVES THEORIES

Motives are defined as the reasons, needs, wants, intents, purposes, and goals etc. that affect a person's decision or choice (Norcia and Tigner, 2000). This definition was originally derived from McClelland (1985) where he defined motives as non-conscious needs, wants, drives or recurrent concerns about goal states. Therefore motives are said to energise, orient and select behaviour (Biernat, 1989). This means that motives drive behaviour which is the resultant of the choices made and they can also lead to both desirable and undesirable behaviours.

On a much more generalist point of view motives can be referred to as the set of results of which an individual is inclined to or desire the most, i.e. being it high pay, soaring performance and sociable colleagues (Sagie, Elizur, & Koslowsky, 1996) and (Kooij, De Lange, Jansen, Kanfer, & Dikkiers, 2011).

According to Peters (1960), motives signify values that move persons to make the decisions that they make. Maslow's hierarchy of needs (1943) has been the most leading theory (Cinar, Bektas & Aslan, 2011). Maslow's view was that people are motivated to act by their needs, and once one need is satisfied, the person would seek to satisfy another need. The needs are arranged in a hierarchical scale, starting from physiological at the bottom to self-actualisation at the top (see **Error! Reference ource not found.**).

In this model, we can deduce that once the needs at the bottom are met, only then the needs can be addressed. In a moral dilemma situation, the last three levels (Social,

Esteem and Self actualisation) are probably relevant when making a decision at leadership level. This view is supported by McClelland (Hicks and Gullet, 1981), who found that affiliation, power and achievement played a role in human motivation. These elements can be associated with the social, esteem and self-actualisation elements of Maslow's hierarchy of needs. These elements as distilled by McClelland will be explored in the research.

Figure 1: Marslow's Hierarchy of Needs (1943)
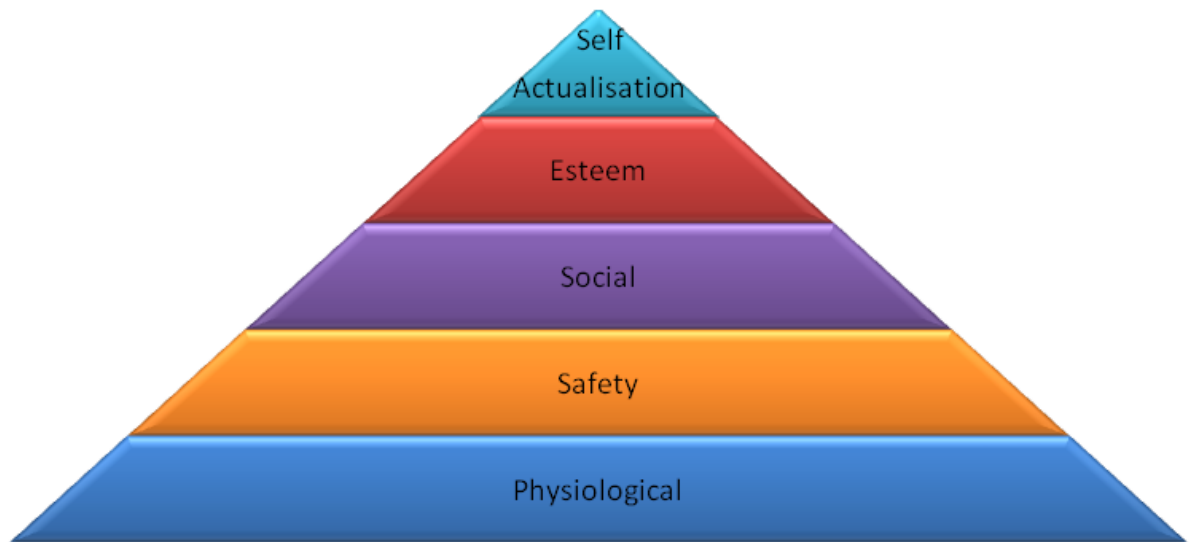
Another theory that is applicable to motives is expectancy theory introduced by Vroom (1964). This theory differs from the Maslow's and McClelland theories in that it does not provide an outline of what motivates people (Lunenburg, 2011). It is instead a cognitive process theory based on people's expectation that there is a relationship between the effort they put, the performance from the effort and the potential rewards from the effort and performance (Lunenburg, 2011).

Based on Vroom's (1964) four assumptions on the expectancy theory, Lunenburg (2011) argued that the theory can be viewed as consisting of three key elements denoted in Figure   below. He argued that a person is motivated to the degree that he or she believes that:

- Effort will lead to acceptable performance (expectancy),
- Performance will be rewarded (instrumentality), and
- The value of the rewards is highly positive (valence)

Expectancy   Instrumentality

| Effort | → | Performance | → | Rewards |

Valence
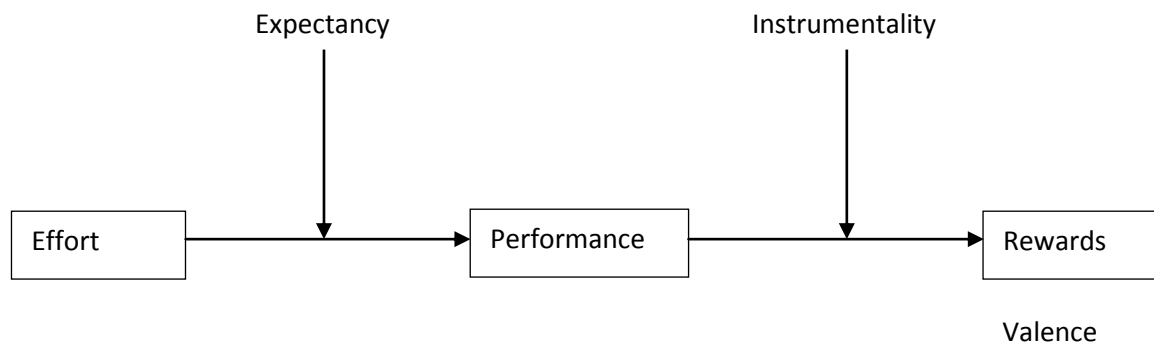
This theory is applicable as it allows one to explore the basis of decisions taken by evaluating the relationship between the three elements when the decision was made. According to Norcia and Tigner (2000), discerning motives that lead business people to make ethical decisions in economic context is important, as it aids the moral evaluations of such decisions.

Three main schools that categorize motive theories are:

- Economic motives
- Social motives
- Normative motives

Within the motivation literature, intrinsic and extrinsic motivation has been studied extensively (Nielsen and Parker, 2012). Intrinsic motivation is regarded as internal motivation which refers to situation where a decision maker will do something because he/she values the activity and wants to do it for its own sake Extrinsic motivation is said to be external, where decisions are made as a result of external forces that persuaded the decision maker in order to avoid punishment or to gain a particular reward (Nielson and Parker, 2012).

2.2.1 Economic motives

Economic motives are defined by Nielsen and Parker (2012) as motives that drive the manager when making decisions to choose the option that maximises economic or material utility. They further referred economic motives to "calculative" thinking or rational thinking required before acting. The classification was consequent from the

neoclassical economic theory which regards an economic man as a utility maximiser. However, neoclassical economic theory has received a lot of criticism in that it assumes an egoistic model of motivation, while contrasting the altruist view of ethical choices (Norcia and Tigner, 2000).

Businesses however are economic entities with the primary aim of making profits (Nielsen and Parker, 2012). Therefore it only comes naturally to use economic or material motives that will be maximising the utility in a dilemma situation. In particular, it is assumed that individuals seek to maximize their utility or satisfaction from consumption of various commodities, while businesses and their managers seek to maximize economic profit (Kulshreshtha, 2005).

Norcia and Tigner (2000) argue that morality is deemed to be altruistic which means economic utility and moral duty tend to conflict each other. Kulshreshtha (2005) supports the argument that little attention has been paid in current economic thought to ethical motivations for action, such as a concern for others (altruism) and the public interest (Kulshreshtha, 2005).

2.2.2 Social motives

Social motives are concerned about earning the approval and respect of others (Nielsen and Parker, 2012). David Dunning (2011) in his book has indicated that human beings over time have dependent on each other in order to survive the changing environments through coordinating and cooperating with others in their social groups. These social groups are deemed to have a significant power to influence people's thoughts, feelings and behaviour (Dunning, 2011).

Social motives as per Dunning (2011) identified three basic social motives which are:

- The need to belong
- The desire to help others
- The need to gain influence and power

In a business environment, a manager/leader may be faced with similar social pressures when dealing with different stakeholders, which could either be employees reporting under him/her, customers, suppliers, etc. who might belong to the same social group inside or outside the work environment. The decision maker might be pressured to meet the needs and wants of the stakeholder in their social group.

As highlighted by Leary and Allen (2011)'s article, it is thought that in order for one to be acknowledged and associate themselves with a certain group of individuals, one is compelled to conduct business in a way that is acceptable to that specific group.

According to Douglas and Sutton (2004), people conform to the opinions of others more than they anticipate, which means that decision makers make decisions as a result of the influence they receive from the environment. However, it can be argued that the statement is true for those with external locus of control, while those with internal locus of control may not yield to the same pressures.

It is also said that social motives are often linked to economic motives (Nielsen and Parker, 2012). An example in the mining industry would be the relationship between shareholders and the surrounding communities in which they are operating in. Shareholders are interested in the economic returns whilst the communities are interested in job security, a clean, healthy and safe environment etc.

For one to benefit, they need to satisfy both economic and social motives that play in the situation. However, when there is a dilemma such that a decision between profit and social harm takes place, the decision making process becomes complicated and can be frustrating to the decision maker (Remisova *et al* 2014).

2.2.3   Normative motives

Normative motives are concerned with acting in response as a result of moral sense driven by certain regulations, law or company policies (Nielsen and Parker, 2012). Moral judgement by people is based on normative theories and people's belief that the law is just, and the most appropriate way of dealing with ethical issues. Most of the theories around normative motives are linked to ethical decision making theories which will be covered in the next sections.

2.3   ETHICAL DECISION MAKING THEORIES

Ethical decision making is described by Kohlberg (1973), as a rational process, where people reason through moral dilemmas by applying moral principles or some other criteria. However it can be argued that these moral principles differ from one person to the other, making the decision making process subjective.

Ferrell, Friedrich and Ferrell (2013) define morals as a person's personal philosophies about what is right and wrong which relates to the individual alone. Organisations however have principles, values and norms that may have originated from individuals, policies or other legal systems that are meant to provide guidance to individuals or groups on behaviour in business (Ferrell *et al*, 2013). Therefore leaders are expected to conform to both individual and organisational principles when making decisions.

According to Ferrell *et al* (2013), ethical behaviour requires understanding and identification of issues and dilemmas, areas of risks, and approaches to making choices in an organisational environment. This is similar to Rest's model (1986) that addresses the process in ethical decision making, whereby an ethical issue is identified, followed by a judgement to establish a moral intent, and finally acting on the judgement.

Sonenshein (2007) argues that ethical rational decision models are limited as they ignore the equivocality which is the existence of several different, simultaneous interpretations and uncertainty principles. Uncertainty in this case is described as lack of information that is required for constructing a plausible interpretation of the situation. Other limitations that were identified includes that rational decision making theories view deliberate and extensive reasoning as a precursor for the ethical behaviour, construction of ethical issues are underemphasised and lastly that moral reasoning is not always used to make moral judgements. He argues that an optimal model should be composed of:

- Issue construction
- Intuitive judgement, and
- Post hoc explanation and justification.

2.3.1 Rational Theory Models

There are three approaches as grouped by Sonenshein (2007) regarding rational ethical decision making research work which are 1) managers as philosopher's research, 2) person situation research and 3) issue contingent research. The first approach relates to manager's engaging on reasoning based on normative theories such as deontology or utilitarianism and act along these theories. This means that individuals make practical and logical decisions that provide them with the greatest benefit or satisfaction and that are in their highest self-interest.

The second approach of rational decision making proposes that managers' act based on the stage of their moral development as opposed to the moral theory. This was adopted from Kohlberg's theory model on moral development. This means that managers that are morally developed would make more ethical decisions than the ones who have not developed well enough. Kohlberg reasoned that there are three (3) levels of moral development: pre-conventional level, conventional level and post-conventional, autonomous, or principled level.

The Pre-conventional level

Kohlberg (1971) defined this stage as that of a child who is responsive to cultural rules and labels of good and bad, right or wrong, but he interprets them in terms of either the physical or hedonistic consequences of action or the physical power of those who enunciate the rules and labels. Level 1 has two stages where stage 1 the individual views the non-breaking rules enforced by punishment.

Stage 2 individuals are displayed as relativists. Unlike the utilitarianism theory which tends to assume idealistic universally accepted ideologies, relativism puts emphasis on situationally determined ideologies (Kish-Gephart, Harrison & Trevino, 2010). Individual who use the relativism theory believe that situations differ and that one must weigh the circumstances when making the decision (Kish-Gephart et al, 2010).

In leadership cycles this could be related to a novice manager who is still trying to find his feet and at the same time trying to deal with ethical dilemmas.

Conventional Level

This level as defined by Kohlberg (1971) is a level wherein the individual perceives the maintenance of the expectations of his family, group, or nation as valuable in its own right, regardless of immediate and obvious consequences. The attitude is considered to be beyond social conformity to personal expectations and social order, but that of loyalty to it, of actively maintaining, supporting, and justifying the order and identifying with the persons or group involved in it.

This level represents stage 3 and 4 in terms of moral development. Stage 3 individuals have a desire to please others while stage 4 individuals have more respect for laws and are focussed on upholding those (Kish-Gephart et al, 2010).

Post-conventional, Autonomous, or Principled level

Effort to define moral values and principles that have validity and application apart from the authority of the groups of persons holding them and apart from the individual's own identification with the group has been demonstrated in stage five and six (Kohlberg, 1971). This level represents individuals on stages 5 and 6.

The underlying philosophy at stage 5 is that of utilitarianism. Crane and Matten (2010) explains utilitarianism as an action that is morally right if it results in the greatest amount of good for the greatest amount of people affected by the action. This theory is considered to be the ultimate consequentialist principle.

Stage 6 individuals have an orientation on universal ethical principles guided by the criteria of justice. Jackson, Wood and Zboja (2013) makes reference that a person who reaches stage six has developed to the point that his or her moral compass in internal, and he or she makes ethical decisions based on a well-developed, internal ethical framework.

Sonenshein (2007) however argues that moral development may assist in moral reasoning but does not necessarily make moral judgements. Ferrell et al (2013) supports Sonenshein argument that a high level of personal moral development will not prevent an individual from violating the law in a complicated organisational context.

The third approach which is issue contingent research refers managers responding to ethical issues based on the components of moral intensity (e.g. impact on victims and beneficiaries) which was adopted from Jones model (1991). Moral intensity refers to a construct that captures the extent of issue-related moral imperative in a situation. He further defines its components as comprising of characteristics such as:

- Magnitude of consequences – defined as the sum of harm or benefits of the moral act to those involved
- Social consensus – this refers to the degree of social agreement that a proposed act is good or bad
- Probability effect – this is the probability that the act will happen and actually harm or benefit those involved
- Temporal immediacy – this is the length of time between the present and the act

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- Proximity – this refers to the immediacy of those involved
- Concentration of effect – defined as the strength of consequence for those involved.

Legal concepts are considered with precedence to the concept of moral intensity (Jones, 1991). Packer (1968) argued that one of the functions of penalties in criminal law is retribution. He also argued the extent of the retribution is often proportional to the evil perpetrated.

Jones (1991) argues that moral intensity affects the recognition of moral issues through its impacts on the individual's recognition of the consequences of decisions. He further makes four propositions:

- Proposition 1 – Issues of high moral intensity will be recognised as moral issues more frequently than will issues of low moral intensity.
- Proposition 2 – Issues of high moral intensity will elicit more sophisticated moral reasoning than will issues of low moral intensity.
- Proposition 3 – Moral intent will be established more frequently where issues of high moral intensity are involved than where issues of low moral intensity are involved
- Proposition 4 – Ethical behaviour will be observed more frequently where issues of high moral intensity than where issues of low moral intensity are involved.

These propositions seem to suggest that on constructing the research methodology one should look at issues with high moral intensity. The categorical imperative theory is advanced by Kant (Crane & Matten, 2010) a German philosopher who argued that moral decisions are not dependent on any particular situation or consequences. To Kant all moral decisions were therefore based on certain eternal, abstract and unchangeable principles.

Kant developed a theoretical framework for these principles called the categorical imperative, which could be applied to any moral issue regardless of who benefits or is, involved (Crane & Matten, 2010). The categorical imperative consists of three parts referred to as the three maxims (Crane & Matten, 2010):

- Maxim 1: Act only according to that maxim by which you can at the same time will that it should become a universal law,
- Maxim 2: Act so that you treat humanity, whether in your own person or in that of another, always as an end and never as a means only, and

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- Maxim 3: Act only so that the will through its maxims could regard itself at the same time as universally lawgiving.

Given that these maxims tend to be viewed as universal, they would appear to be more aligned with the idealism theorists and would likely not find favour with the relativism theorists. Crane and Matten (2010) describes ethics of rights and justice as "natural rights that are certain basic, important, unalienable entitlements that should be respected and protected in every single action.

He further argues that this theory was not deducted from a theoretical methodology, but based on rights which are very powerful as they are widely acknowledged. It can be deduced that if a leader's basis for making an ethical decision is based on ethics of rights and justice theory, human rights provides a straightforward answer to the ethical dilemma (Crane & Matten, 2010).

Woiceshyn (2011) argues based on neuro-cognitive research that the relationship between the conscious reasoning mind and intuition is that of a manager and a subordinate. The conscious mind in this case, acts like a manager whilst the intuition acts like a subordinate.

Sonenshein (2007) proposed that the rationalist approaches should be reconsidered using alternative explanation from social psychological and sense making perspectives. He also argued that individuals engage in sense-making under conditions of equivocality and uncertainty. He challenged the rationalist view showing that individual responses to ethical issues are not always based on deliberate and extensive moral reasoning. He proposed four limitations to the rationalist view:

- Failure to address the presence of equivocal and uncertainty common in natural settings
- Viewing deliberate and extensive reasoning as a precursor to ethical behaviour
- Underemphasising the constructive nature of ethical issues
- Claiming that moral reasoning is used to make moral judgements

Based on the above, Sonenshein (2007) developed the Sensemaking-Intuition Model (SIM) that can be used to understand ethical decision making. The construct of the model has three key elements: issue construction, intuitive judgement and explanation and justification (see appendix 2).

Motivational drivers and expectation influencing issue construction according to the model mentioned above, is an important phenomenon to explore.

According to Lumer (2010), "all current scientific psychology says that in order for someone to act there has to be some desire or motive, in decision theoretic terms,

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preference and a belief that connects desire and action". Linking back to Rest's model, the desire or motive becomes a resultant of the second stage which involves judgement to establish a moral intent.

Rest's ethical decision making process model is regarded as being the most influential (Woiceshyn, 2011) and has been widely referenced in ethical reasoning research. As indicated above, two of the four process steps (moral judgement and moral intent) are based on moral rational theories.

Combining the rational and intuitive and adapting them to Rest's decision process model, results in the model as presented in Figure 3 .

Figure 3: An adaptation of Rest Decision Making Process Model
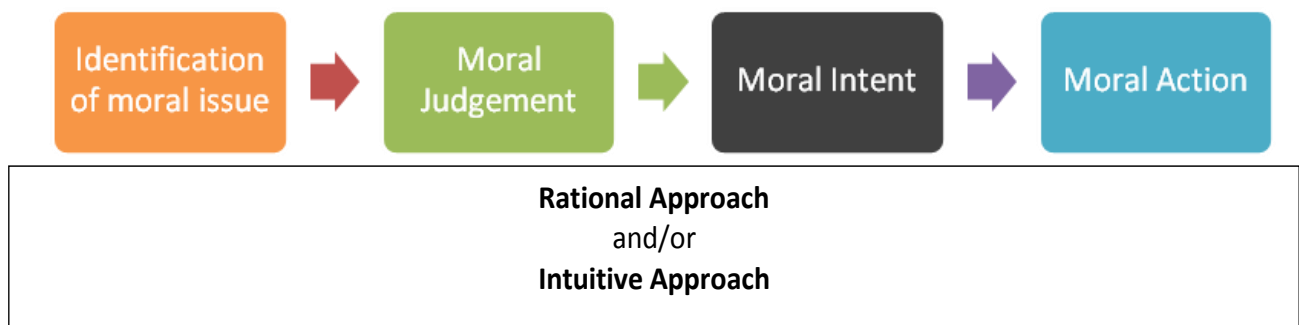
Kooij et al (2011) argued that motives and values are influenced by adult development and work experiences across the life span. This implies that there is a direct correlation between the experience gained and motives when one encounters an ethical dilemma and this is further emphasised by Pimentel et al (2010) who argues the fact that younger individuals are prone to influence from their peers when they encounter ethical dilemmas. However grownups will approach the situation in a much more calculated manner taking into account their perceived impact as part of their decision making.

2.4   FACTORS INFLUENCING ETHICAL CHOICES

Motives are influenced by individual ("bad apples"), moral issue which depicts situational/contextual factors ("bad cases") and lastly the environment including organisational culture ("bad barrels") factors (Kish-Gephart et al., 2010). A model was developed highlighting the characteristic of each factor as indicated in Figure 4.

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2.4.1 Individual Characteristics

The individual characteristics identified by Kish-Gephart et al. (2010) include:

- Cognitive moral development – this is as per Kohlberg (1971) moral development stages as defined above
- Locus of control – this refers to the extent to which individuals believe they can control events affecting them.
- Moral philosophy – this refers to principles, theory, attitude or the nature of knowledge that one has directing his/her behaviour
- Machiavellianism - the employment of cunning and duplicity in general conduct
- Job satisfaction level – this refers to the extent an individual is content with his/her job.

Figure 4: Antecedents of ethical choices in the workplace. Adapted from Kish-Gephart et al. (2010)
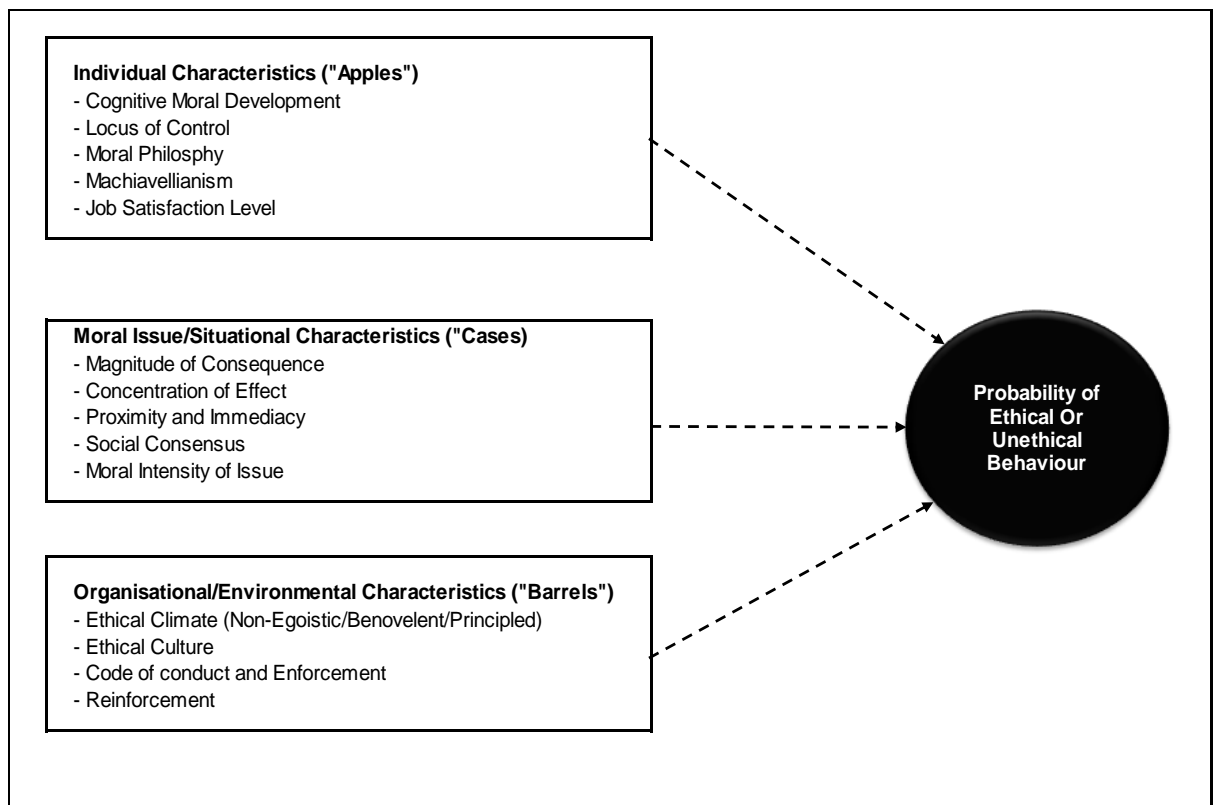
Jackson et al. (2013) attributes the deterioration of ethics in organisation to decisions and actions made by individuals. He built on Kish-Gephart et al. (2010) that individual factors affect ethical decision making. Some of the individual factors discussed include

level of moral development, formal education in ethics, current value system, degree of ethical sensitivity, self-concept or self-image and self-efficacy, short versus long term orientation and risk taking propensity influence ethical or unethical behaviours.

2.4.2 Moral Issue Characteristics

The moral issue characteristics on Kish-Gephart et al. (2010) model were originally derived from the Jones model (1991) which on issue contingent research. The characteristics included Magnitude of consequence, Concentration of effect, Proximity and Immediacy, Social consensus, and Moral Intensity of issue. Jackson et al. (2013) included the following factors:

- Perception of markets – competition inside and outside the organisation is said to be influencing the ethical behaviour, whereby in high competitive environments, the possibility and probability of unethical behaviour increases (Jackson et al., 2013, and Trevino (1986).
- Perceived opportunity for gain – this refers to an individual's assessment of opportunity for gain versus the likelihood of punishment that exists for that particular action.
- The nature of ethical issue

2.4.3 Organisational Characteristics

The organisational characteristics identified by Kish-Gephart et al. (2010) include:

- Ethical climate – refers to the moral atmosphere of the work environment
- Ethical culture – refers to the customs and behaviour of a particular group.
- Code of conduct and enforcement – many businesses develop their own code of conduct, policies and procedures for the sole purpose of providing standards that will influence the employee's performance and behaviour.
- Reinforcement – this refers to the process of encouraging or establishing a particular behaviour in a work environment.

Jackson et al. (2013) looked at societal, industry and organisational cultures. He argued that societal standards shape both the individual and organisations that are

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operating in the vicinity of that society. On the other hand industry culture tends to influence organisations by creating norms and communities of practice. Organisation's culture is mostly shaped by the organisation's corporate values (Jackson et al., 2013).

It can be inferred that all the contextual and organisational factors are primarily driven by individuals resulting in being adopted by society and businesses.

2.5   LITERATURE REVIEW CONCLUSION

The literature that was reviewed indicates that there are three commitment of motives namely economic, social and normative (Nielsen and Parker, 2012). Motives are defined as the reasons, needs, wants, intents, purposes, and goals etc. that affect a person's decision or choice (Norcia and Tigner, 2000).

Economic motives refer to motives that drive the manager when making decisions to choose the option that maximises economic or material utility and tends to adopt an egoistic model (Nielsen and Parker, 2012). Social motives refer motives that are concerned about earning the approval and respect of others (Nielsen and Parker, 2012).

According to Dunning (2011), social motives are motivated by the need to belong, the desire to help others and also the need to have influence and power. Normative motives are concerned with acting in response as a result of moral sense driven by certain regulations, law or company policies (Nielsen and Parker, 2012).

Kohlberg (1971) moral development theory has been studied intensely and referenced by many philosophers and researchers. It focussed on moral development comprising three levels namely Pre-conventional level, Convention level and Post Conventional level. All the three levels represent the level of an individual's moral development over time. The model has been useful in different studies conducted attributing the level of moral development to subsequent ethical behaviours.

Kooij et al (2011) supported Kohlberg's model and added on the research that motives and values are influenced by adult development and work experiences across the life span. Sonenshein (2007) also supported Kohlberg's theory, however added two more approaches regarding rational ethical decision making research work which are 1) managers as philosopher's research, 2) issue contingent research.

The first approach relates to manager's engaging on reasoning based on normative theories such as deontology or utilitarianism and act along these theories. This means that individuals make practical and logical decisions that provide them with the greatest benefit or satisfaction and that are in their highest self-interest. The second approach

which is issue contingent research refers managers responding to ethical issues based on the components of moral intensity (e.g. impact on victims and beneficiaries) which was adopted from Jones model (1991).

Lastly, factors influencing ethical decision making such as individual, organisational and situational were reviewed. The chapter gave an overview of literature on motives and ethical decision making theories which are relevant for the study. The next chapter will present the research questions that were developed utilising the literature reviewed in this chapter.

CHAPTER 3: RESEARCH QUESTIONS

The primary objective of this research is to establish a better understanding of individual motives of leaders when faced with ethical dilemmas in the mining industry. In order to achieve the primary objective, responses to the following research questions will be investigated:

3.1 RESEARCH QUESTION 1

Are leaders in the mining industry driven by social, economic or normative motives?

According to Nielsen and Parker (2012), three commitments that motivate leaders in decision making processes are:

- Economic motives - the extent to which the organisation and its managers are committed to maximizing its economic or material utility.
- Social motives – the extent to which the organisation and its managers are committed to earning the approval and respect of others.
- Normative motives - the extent to which the organisation and its managers are committed to obeying the law because doing so makes the firm realize its normative understanding of what is it to "do the right thing."

The questions is aimed at understanding which of the three commitments is the dominant driver for making decisions in the mining industry and furthermore identify the main reasons for the dominant driver.

3.2 RESEARCH QUESTION 2

Are there differences in dominant motives in functional department?

The functional departments in an organisation serve different purposes with different objectives. The question seeks to understand whether the dominant motive in a specific department is as a result of their functionality or not. This would be established by comparing the results from the different departments to understand the differences and similarities.

3.3   RESEARCH QUESTION 3

Are there differences in dominant motives per age group?

Whilst Kohlberg proposed a moral development stage of conventional morality as the theoretical level for all the respondents, it is not clear whether within that stage of morality; people have different motives that determine their ethical decisions. One way of many that one can look at is whether there are differences in motives per age group. This could show whether there are specific "wisdoms" that become more prevalent in decision-making at older ages.

3.4   RESEARCH QUESTION 4

What are the individual, organisational and contextual factors that influence ethical dilemma choices?

This question seeks to understand the different factors that usually influence the motives as explored in a number of ethical studies (Jackson, Wood, & Zboja, 2013):

- Individual factors – relates to a person's background; an example would be the value system of an individual and formal education etc.
- Organisational factors – these are elements that impact the operating environment of the organisation.
- Contextual factors - these are situational factors that would exert influence in the decision making process.

3.5   CONCLUSION

The research questions mentioned above will help understand motives of leaders when faced with ethical dilemmas in the mining industry better. There is no prior research that has been conducted to test the dominant motive in the Mining sector. However studies have been conducted testing the individual, situational and organisational factors influencing ethical decisions. The following chapter will outline the methodology employed for the research.

CHAPTER 4: RESEARCH METHODOLOGY

The study was aimed at understanding motives of leaders when faced with ethical dilemmas. This chapter outlines the research methodology followed in order to answer the research questions as outlined in chapter 3. The population, unit of analysis, data collection process and data analysis methods are described in detail. The chapter concludes with the list of limitations for the study.

4.1 RESEARCH DESIGN

Numerous exploratory studies have been conducted in understanding ethical decision making. According to Saunders and Lewis (2012), exploratory studies are usually undertaken to discover new information or phenomenon regarding a topic that is not well understood by the researcher as they ask both the "what and why" questions (Wisker, 2001).

In this research, it was not a new phenomenon but a pursuit to understand further decision making processes when faced with ethical dilemma situations. Therefore a deductive approach was undertaken which is a process of testing a theoretical proposition by using a research strategy specifically designed for the purpose of testing it (Saunders and Lewis, 2012).

Online survey technique was selected for this study as it allows data collection from a large sample in a cost effective manner (Saunders and Lewis, 2012). The sample chosen did not reside in the same region; hence the survey was found to be more appropriate in order to reduce geographical dependence. Online surveys have the following advantages:

- It is easy to gather data from a large number of respondents in different geographical locations
- It involves minimal costs
- It is easier to manage the data from the respondents
- It facilitates high number of responses
- The respondents do it at their leisure
- It also offers flexibility in terms of design etc.

Both quantitative and qualitative data was acquired through the survey questionnaire. For research questions one, two and three the data was analysed quantitatively while

research question four data was analysed using qualitative methods. Using a combination of qualitative and quantitative data enabled the researcher to improve on understanding motives and also ensuring that the limitations of one type of data are balanced by the strength of the other. Both qualitative and quantitative methodologies share a number of characteristics as described by Dobrovolny and Fuentes (2008):

- Both are based on conceptual framework, explanations, rationale or theory.
- Include clear evaluation questions and plan that is able to answer the research questions
- Both employ a systematic approach to the evaluation process and to measuring meaningful and relevant variables that informs better understanding
- Both rely on data gathering process

The purpose of using quantitative data analysis is to validate whether a particular assumptions is true given the literature in chapter 2, and also to describe the behaviours in numbers (Dobrovolny and Fuentes, 2008). The qualitative side of the data analysis were utilised to provide more context and understanding of the respondent so that the researcher will not generalise findings unless similar cases exist, so as to provide rich description.

4.2   POPULATION

The purpose of the study was to understand the motives in decision making when leaders are faced with ethical dilemmas. Therefore middle managers were the most appropriate sample to provide a better understanding of these motives. Population refers to the complete set of group members where the study was undertaken (Saunders & Lewis, 2012).

In this study, middle managers in the mining company were targeted. Some of the reasons for targeting the middle managers were as follows:

- They deal with vast number of stakeholders in the mining industry i.e. employees reporting under them, top management, suppliers and customers, government officials, surrounding communities etc.
- They make up the core team for union engagements and labour decisions
- They take part in supplier selection processes and negotiations
- They are the largest size sample relative to top management

- They make decisions regarding safety in the workplace and environmental compliance

4.3   UNIT OF ANALYSIS

Unit of analysis refers to the "what" or "who" that is being studied. The research focussed on motives at individual level of the different managers who are decision makers in the organisation. Therefore the unit of analysis for this study were the views and opinions of managers on the different cases presented to them during the data gathering process as they shared how they generally deal with ethical dilemmas.

4.4   SAMPLING METHOD AND SIZE

The sampling frame for this particular study was middle management i.e. Superintendents (Supt.) and Head of departments (HOD) in the selected mining company. A multinational coal mining company was found suitable and selected for conducting the study, which comprises of four mining operations and services departments.

Probability sampling technique was used by the researcher which involves selecting a sample at random from a complete list of the population (Saunders & Lewis, 2012). The list of all the middle managers was made available from the organisation's Human Resource department where this research was conducted.

The survey initially was targeted at 80% of middle management, however it was sent to all the Supt's and HOD's. Another objective was to cover all the departments as their functions interrelate and perform various decisions. These departments included Production, Maintenance, Engineering, Human Resource, Finance, Projects, Planning & development and Integrated Operations.

At the time of study, there was a total sum of 120 middle managers in the selected organisation representing the different departments as described above. However, they reside in different areas generally closer to their operations facilities. The online survey was distributed to all in order to establish a generic understanding of what motivates leaders in ethical dilemma situations.

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4.5 MEASURING INSTRUMENT

An online survey questionnaire was used in for collecting data. Surveys allow researchers to compare results received across the different locations of respondents, which means that distance or location is never a constraint (Saunders & Lewis, 2012). The measuring instrument was considered suitable for the study as it was asking relevant questions appropriate for an exploratory study, and they allowed data collection from a large number of sample (Saunders & Lewis, 2012). A set of ethical dilemma scenarios that involved multiple stakeholders and functions across the organisation were developed. The scenarios were designed in a manner that allowed the participant to make a decision amongst three choices and to motivate the reason for making that particular selection.

The same questionnaire was used across all the departments to understand these motives when making decisions and a comparison was done to understand if there are differences or similarities on how these dilemmas are handled. Each question tested different motives and covers the three interests or commitments that motivate managers when making decisions (Nielsen & Parker, 2012):

1. Economic (material) motives
2. Social motives
3. Normative motives

Demographics in terms of age, department and years of experience were part of the measuring instrument .Kohlberg's theory (1971) proposes that manager's act based on their stage of moral development as opposed to the moral theory. Therefore the intent of the measuring instrument was to also assess based on the age of participants, whether elderly managers would deal with ethical dilemmas differently from the younger managers.

The measuring instrument was tested through sending the questionnaire to two representative respondents selected on a convenience basis. The respondents completed the questionnaire on a word document and feedback to the researcher comprised of comments on the changes required, time it took to complete the survey, and also the flow of questions asked. This process was included so as to ensure that the questionnaire is effective and relevant is answering the research questions. The pre-test allowed the researcher to make changes in terms of questions that were ambiguous and not easy to understand.

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4.6   DATA GATHERING PROCESS

In order to understand motives of leaders when faced with ethical dilemmas, respondents were requested to complete an online questionnaire (attached in appendix 3). The questionnaire evaluated four research questions as stipulated in Chapter 3. The table below indicates which question on the online survey schedule address which research question.

Table 1: Research Questionnaire Matrix

Research Question	Description	Measuring Instrument – Survey Questionnaire
RQ1	Are leaders in the mining industry driven by social, economic or normative motives?	Questions 1 (a) to 10 (a)
RQ2	Are there differences in dominant motives in functional department?	Questions 1 (a) to 10 (a), and 16
RQ3	Are there differences in dominant motives per age group?	Questions 1 (a) to 10 (a), and 18
RQ4	What are the individual, organisational and contextual factors that influence ethical dilemma choices?	Questions 1 (b) to 10 (b), 11, 12, 13, 14, and 15
Demographics	What are the demographics of the population sample?	Questions 16, 17 and 18

The online survey was facilitated using Survey monkey, and respondents had a window of a week and a half to respond. The survey was sent to a total number of 120 middle managers at the selected company. Individual emails were sent with a link to the survey and details on the purpose of the study. Follow up emails were sent to the respondents to remind and encourage them to participate in the survey.

A total of 79 respondents completed the survey before the closing date giving a 66% response rate. All questions were completed with less than three people skipping the part where they needed to motivate their selection. Anonymity of respondents was assured whereby no names were captured, except the demographics.

4.7   ANALYSIS APPROACH

The data acquired from the survey required both quantitative and qualitative analysis to be done. Numerous steps were taken to analyse the data gathered for this study.

4.7.1   Quantitative Analysis

Based on the responses to the questionnaire, data was grouped categorically into descriptive sets so as to aid answering of the research questions. The first three research questions were explored using quantitative analysis method from the survey questionnaire.

The first research question aimed to establish the dominant motive in the mining industry, whether it is economic, social or normative. Descriptive statistics were performed to determine the frequency and distribution of motives from the responses to the questions. Each scenario had three options that represented economic, social or normative motives.

The second research question aimed at establishing whether there are differences in dominant motives in functional departments. Kruskal-Wallis test which is a non-parametric test was conducted to determine if there are differences or similarities across departments when dealing with ethical dilemmas. This type of test is used for comparing two or more independent samples of equal or different sizes (Guo, Zhong, & Zhang, 2013). It extends the Mann-Whitney U test when there are more than two groups. In this case, seven departments were analysed to test if the dominant motive differs or not.

The third research question aimed at exploring whether there are differences in how dilemmas are tackled based on age. Same test as above was conducted which also was a non-parametric test, Kruskal-Wallis U test. The ten scenario cases were tested to evaluate the differences on how elderly managers respond versus the younger managers when facing the same dilemma situation.

4.7.2   Qualitative Analysis

The respondents were encouraged to state reasons for their decisions in each dilemma situation. There were also questions that were qualitative in nature in the questionnaire. Therefore this was used to understand the individual, organisational and contextual factors that influence ethical choices.

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Qualitative research is usually about observations and words (Taylor-Powell & Renner, 2003). In this case, there were no observations that were done, only text data retrieved from the survey data. The analysis process for the qualitative data was as follows:

- The data was cleaned up and grouped per question/scenario for ease of analysing. According to Saunders and Lewis (2012), similar data preparation is essential for qualitative analysis whether using a software tool or not.
- Data text was read by the researcher in order to have a better understanding of what the respondents shared.
- Themes and patterns were identified per research question. The data was categorised accordingly.
- Connections within and between categories were then developed
- This was followed by the final stage of interpretation whereby the researcher was bringing it all together.

4.8   RESEARCH LIMITATIONS

The key limitations of the methodology are:

- Data collected through a survey were not as detailed as data collected using other research methods (Saunders & Lewis, 2012).
- Some of respondents may not feel comfortable providing answers that present themselves unfavourable, therefore may model answers.
- The population selected only represented one mining company, which means only one environment and culture was tested.
- Only two layers of middle management were targeted (superintendents and E-level Managers).
- Other departments did not have as many respondents as a result of their structures, which made comparison to be not as accurate as a result of unequal observations from the subgroups.
- The response rate was largely dependent on the participants making the time to respond to the survey

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4.9 CONCLUSION

This chapter focussed on the research methodology used for the study. Motivation for selecting the research methodology was discussed in detail. This included population for the study, unit of analysis, sampling method and size, measuring instrument, data collection process, techniques used for data analysis and lastly the limitation of the methodology. The results from the data collection process will be discussed in the following chapter.

CHAPTER 5: RESULTS

5.1 INTRODUCTION

This chapter presents the findings of the data collection phase from the survey questionnaire conducted. The survey questionnaire was designed to answer all four research questions described in Chapter 3. Ten cases were formulated as discussed in the previous chapter, with three options to choose from. The respondents were given an opportunity to motivate their selection in each scenario in order to provide context. Therefore the responses to the survey provided both qualitative and quantitative data which were addressed per research question. 81% of the respondents indicated that they have experienced such dilemmas before, while 19% has never really come across the dilemmas, however gave input on how they would tackle these types of ethical dilemmas

5.2 RESULTS OF STUDY DEMOGRAPHICS

It is quite evident that the Mining sector is a male dominant industry, however there has been significant improvements picked up in the last ten years in terms of female stats within this sector. This is further substantiated by the fact that during the survey 20% of the total respondents were females and 80% was males. In term of how it compares with the actual numbers, at the time of survey there were only 15% females making up middle management. Respondents that took part in the survey represented the seven departments as shown below by Figure 5:

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Figure 5: Department that took part in the survey
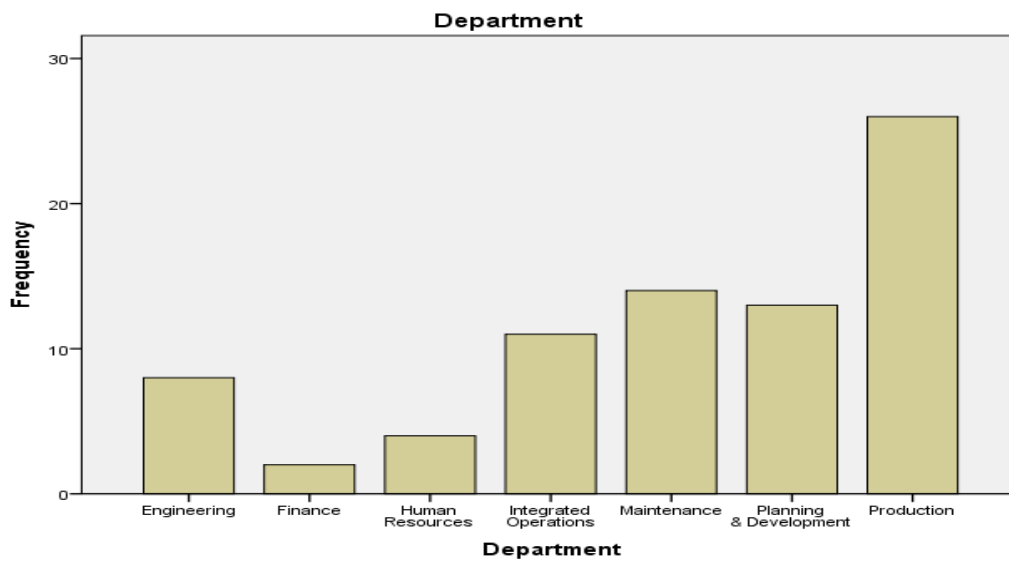
As it can be seen from the figure above, most respondents were from production, followed by Maintenance, Planning & Development and Integrated Operations. Human Resources and finance are currently services departments, and do not have as many employees, hence the low number of respondents

5.2.1 Age Profile

Most of the middle managers that responded to the survey were between the ages of 30 and 39, followed by 40 to 49 as can be seen by Figure 6 below. About 17% of respondents were above the age of 50 years and below 12% below the age of 30 years. This is a fair indication of the current age distribution of middle managers in the selected coal mining organisation.

Figure 6: Age Profile
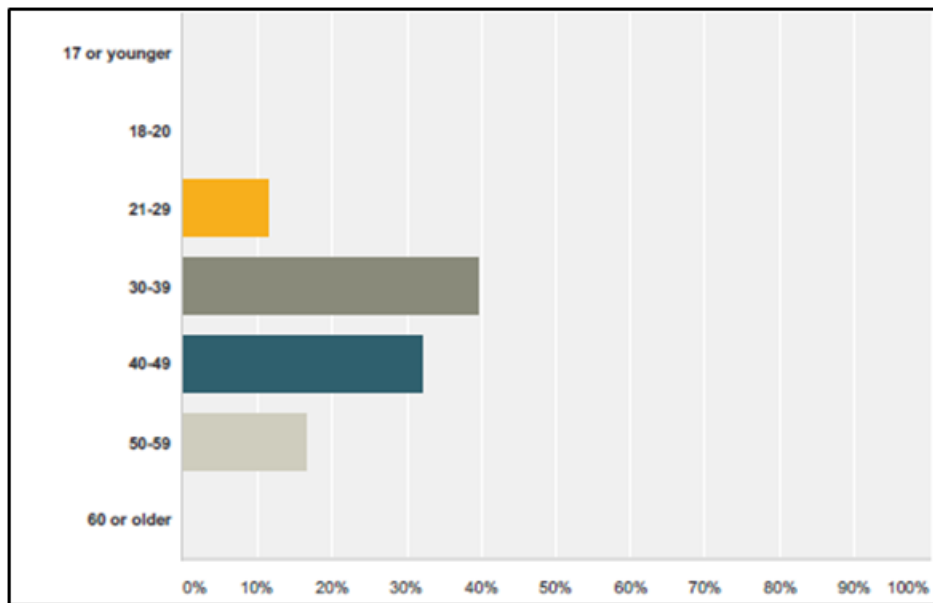
5.3   CASE STUDIES

Each case study had three options that the respondents had to choose from which best described how they would handle the situation in real life. Each of the scenarios had three options that could be linked to the three classes of motives namely economic, social or normative. This was based on the literature reviewed in chapter two.

5.3.1   Case 1 Results: Employee condition dilemma

Scenario one was about an employee with a medical condition that required intake of medication containing alcohol (0.1%). This was one of the best employees who have worked for the company for the last 15 years. However, the company had a zero alcohol policy which means that no level of alcohol is allowed.

Seventy percent of respondents selected the option of negotiating for the employee whilst only one respondent opted for doing nothing and telling the employee to keep quiet. Only 29% of respondents were going to report the employee causing him to be incapacitated. This is indicated by Figure 7 below:

Figure 7: Employee Condition Dilemma
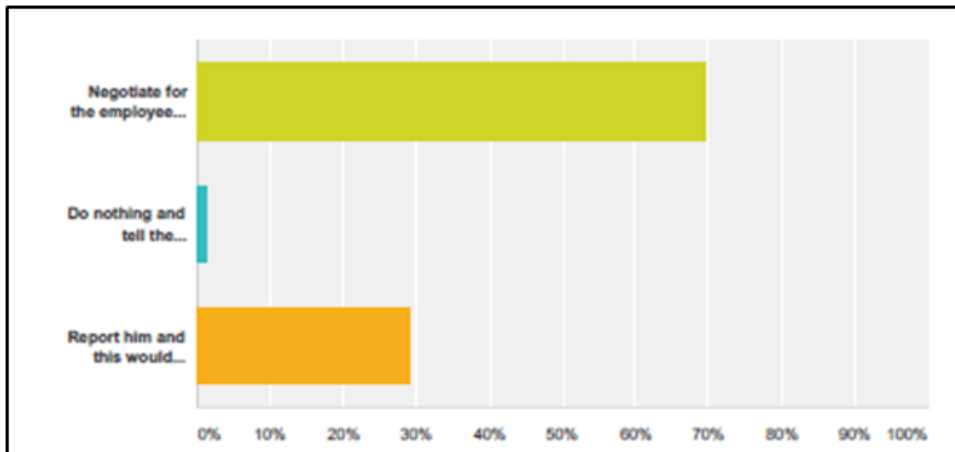
5.3.2   Case 2 Results: Reliable Supplier dilemma

Scenario 2 involved a supplier that intentionally over-charged the organisation, and later confessed to have made a mistake. He was one of the few suppliers in the industry who specialised in the required skill for a project and this was discovered in the middle of a critical project.

Forty nine percent of the respondents chose the option of accepting the apology and continuing with the relationship with the supplier irrespective of what has happened, while 18% of respondents would complete the project and discontinue the relationship thereafter. About 33% of respondents opted for terminating the relationship immediately after discovering about the over- charging activity even though it would compromise the project delivery. This is indicated by figure 8

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Figure 8: Reliable Supplier dilemma
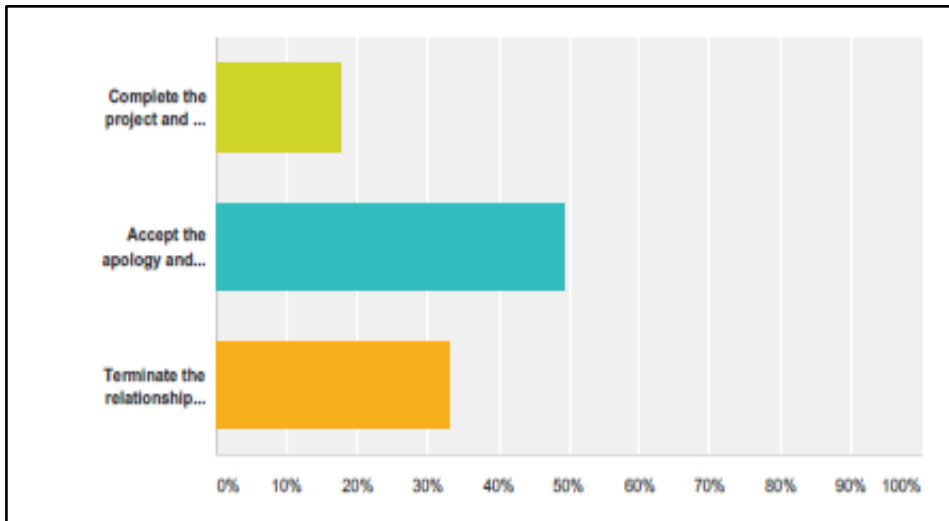
5.3.3 Case 3 Results: Customer Product Requirements dilemma

Scenario 3 involved one of the customers whose system of checking product qualities broke down, which means there was no means of tracking the product qualities for some time. The manager had given an instruction to maximise sales while the measuring system is still down. Above 70% of respondents would caution the customer as this may cause the customer to put measures of testing for quality in this case, while 13% would maximise their sales knowing that there are no means of finding out from the customer's perspective. Only 16% chose the option of ignoring their manager's instruction to continue as normal.

Figure 9: Customer Product Requirements dilemma
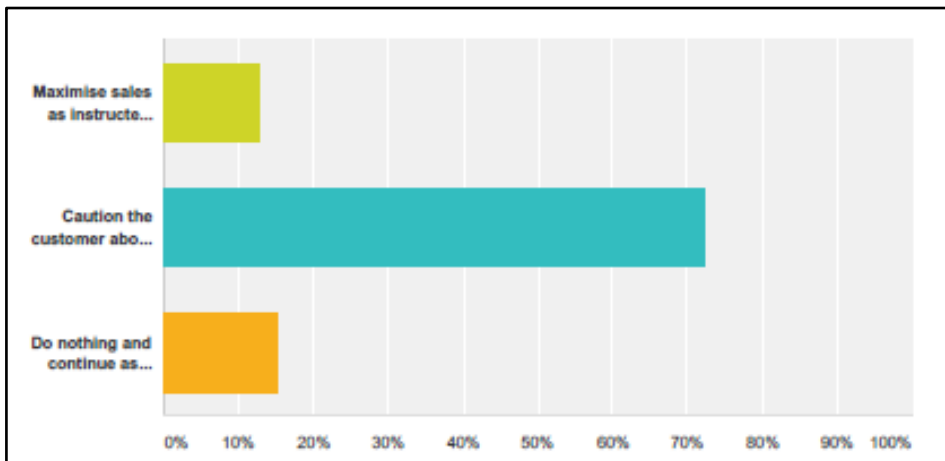
5.3.4   Case 4 Results: Production bonus dilemma

Scenario four involved a production team that was approaching the end of their financial year and were aiming at getting a good production bonus. Five days to the closing of the year, a water pipe line burst, and leaked dirty plant water to the national water stream.

None of the respondents selected the option of waiting until the end of the month in order to maximise production and address the environmental spill later. 76% of the respondents opted for stopping the plant immediately irrespective of the impact financially, while another 24% of respondents opted for reporting the situation to the authorities to get the best advice on how to resolve the matter. This is indicated by Figure 10 below:

Figure 10: Production bonus dilemma
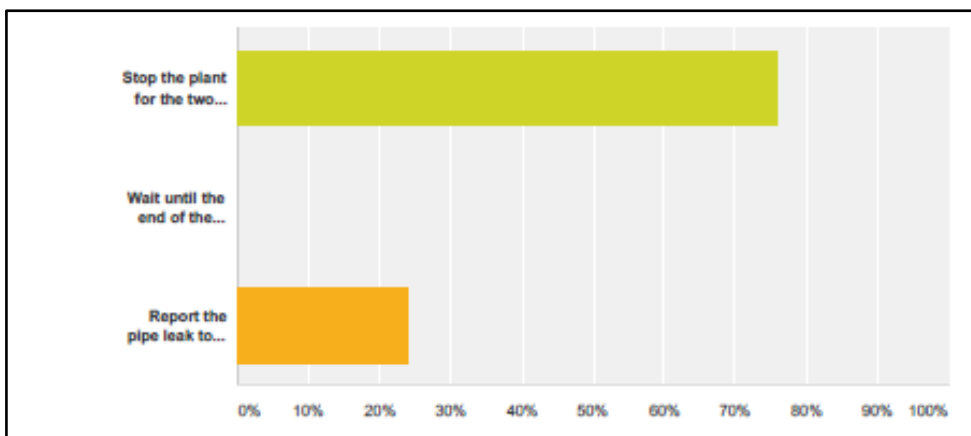
5.3.5 Case 5 Results: Over-declaration of production dilemma

Scenario five involved production over-declaration by 20 000 tons as identified by auditors that needed to be rectified. In order to correct the error, production had to be reduced by the same amount of tonnages, thus impacting the team's performance results.

Most of the respondents opted for the option of making the adjustments, and so impacting the production bonus of the team for the month. Less than 20% of the respondents chose the option to overwrite the tonnes while 22% of respondents selected the one of postponing and only deduct the shortfall at a later stage. This is shown below by Figure 11:

Figure 11: Over-declaration of production dilemma
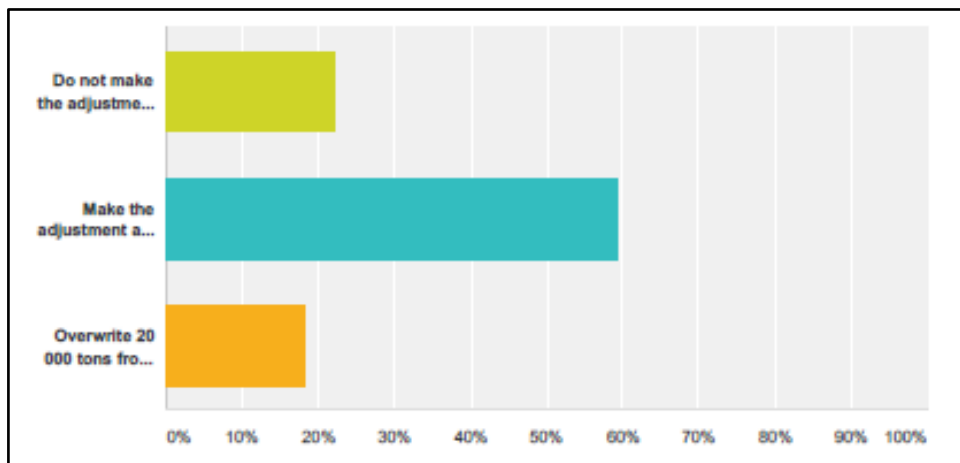
5.3.6 Case 6 Results: Subordinate not meeting deadlines dilemma

Scenario six involved a subordinate that was constantly not meeting the performance standards, while one of the senior managers was also putting pressure to dismiss the subordinate. Most of the respondents selected the option of following the correct performance management procedures while 24% of respondents believe in giving the person a second chance as there might be valid reasons for not meeting the deadlines as agreed.

Only 20% of respondents opted for moving the person to another department where she/he may be able to deliver and handle the pressure that comes with the job requirements. This is shown below by Figure 12:

Figure 12: Subordinate not meeting deadlines dilemma
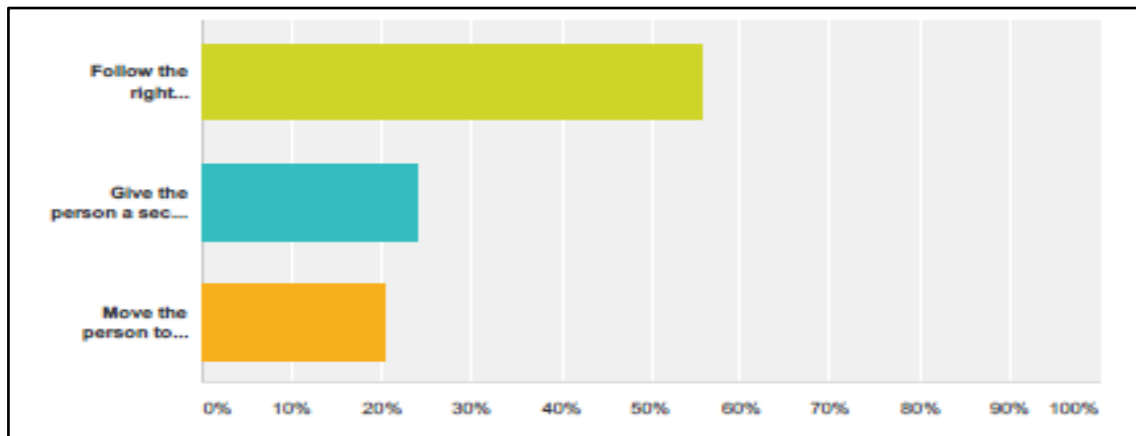
5.3.7   Case 7 Results: A colleague who is a close family friend dilemma

Scenario seven involved a colleague who was also a close family friend. He went on a holiday; however he declared to his manager that he was sick instead.

In this case most respondents selected the option of confronting their friend and convincing him to tell the truth about his/her whereabouts. Only 5% said that they would keep quiet as it doesn't concern them while 10% would report him to his/her senior. This is shown below in Figure 13 below:

Figure 13: A colleague who is a close family friend dilemma

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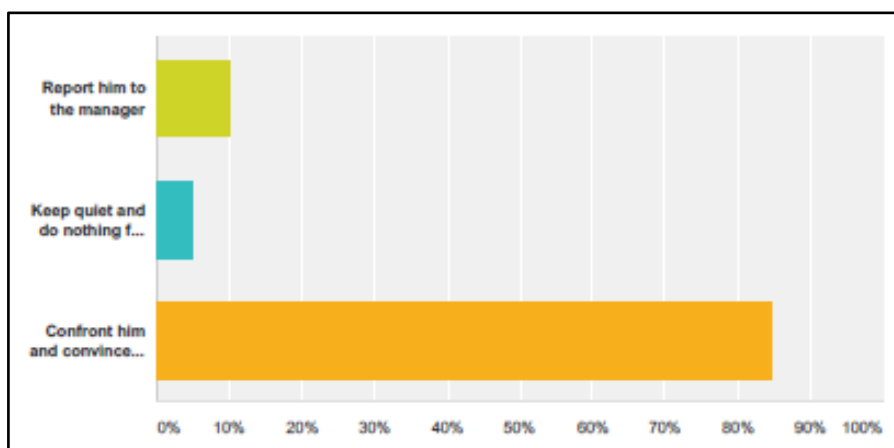
5.3.8   Case 8: New safety regulation dilemma

Scenario eight involved a new safety regulation that was introduced; however the new process prolonged the duration it took to attend to breakdowns. This became a concern as it delayed the team in terms of fixing the problem quicker.

About 84% of respondents were ready to challenge the safety regulation that is hindering the production outputs. Only 3% opted for ignoring the new regulation and going back to the old ways of doing things while 14% of respondents chose to encourage the employees to comply with the new regulation. This is shown below by Figure 14:

Figure 14: New safety regulation dilemma
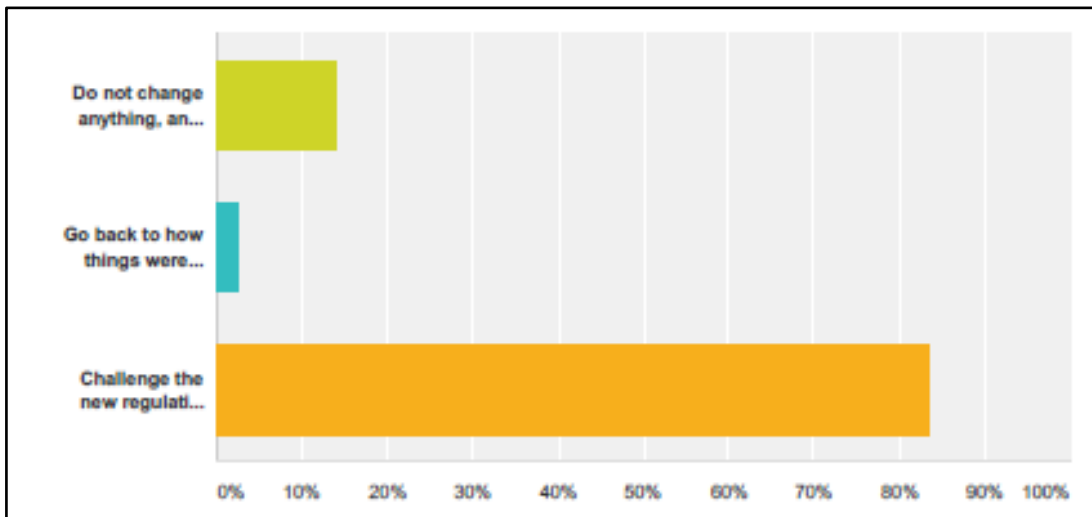
5.3.9   Case 9: Benchmarking exercise dilemma

Scenario nine involved a friend who worked for a competitor company, and was busy conducting a benchmarking exercise. He requested information and the manager approved the distribution of information, however he did not follow the right procedures for granting approval.

In this scenario 72% of respondents opted for not sharing the information with their friend despite receiving approval from the senior manager. Only 3 % would share the information after receiving approval while 26% of respondents would partially give information that not company sensitive. This is shown below by Figure 15:

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Figure 15: Benchmarking exercise dilemma
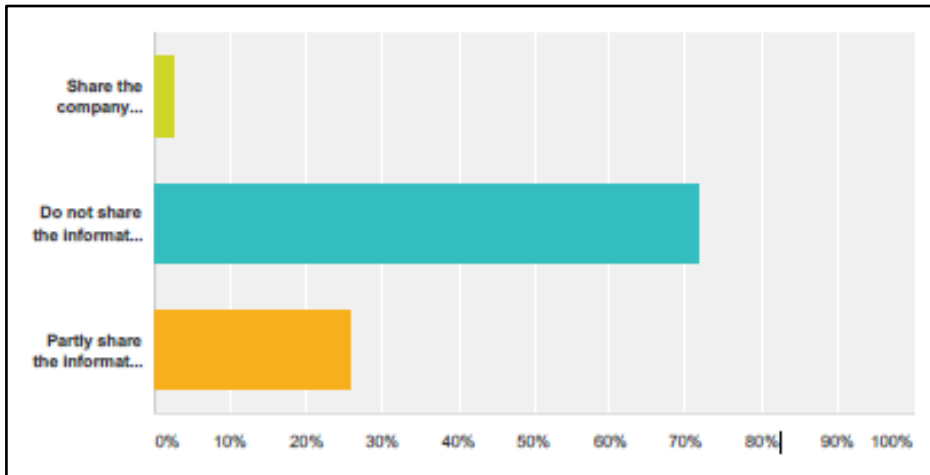
5.3.10 Case 10: Customer complaint dilemma

Scenario ten involved a customer who logged a complaint as a result of poor qualities received. Thorough investigation around the problem indicated that the poor qualities are inherent in the product, the difference is that previously the products were being blended hence this issue was never picked up before.

In this case 53% of respondents would negotiate with the customer for a different rate so that they may continue supplying the product while 44% would strike a deal with another supplier with a better quality to continue supplying the product. Only 3% of respondents would allow the customer to move his business elsewhere as they know that they can never meet the specifications. This is shown below by Figure 16:

Figure 16: Customer complaint dilemma
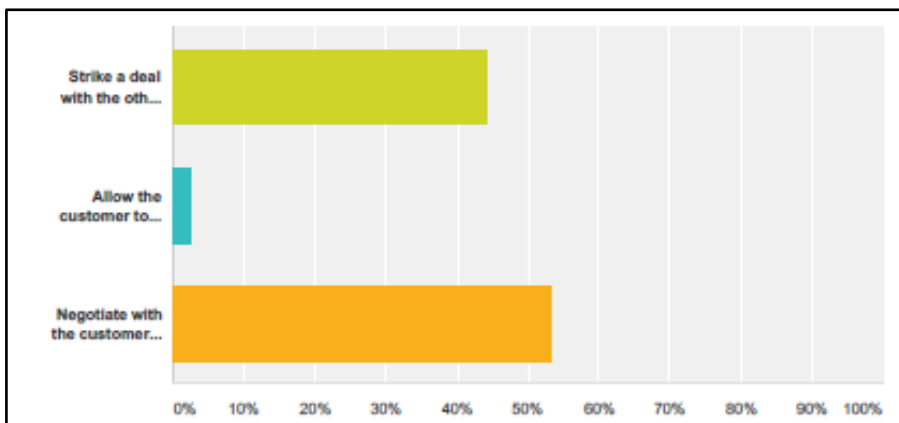
5.4 RESEARCH QUESTION 1 RESULTS

Research question one sought to establish whether leaders in the mining industry are driven by social, economic or normative motives. Each dilemma had a social, economic and normative motive that the respondents had to choose from. This is shown below in Figure 17:

Figure 17: Social, Economic and Normative Motives for Individual Scenarios
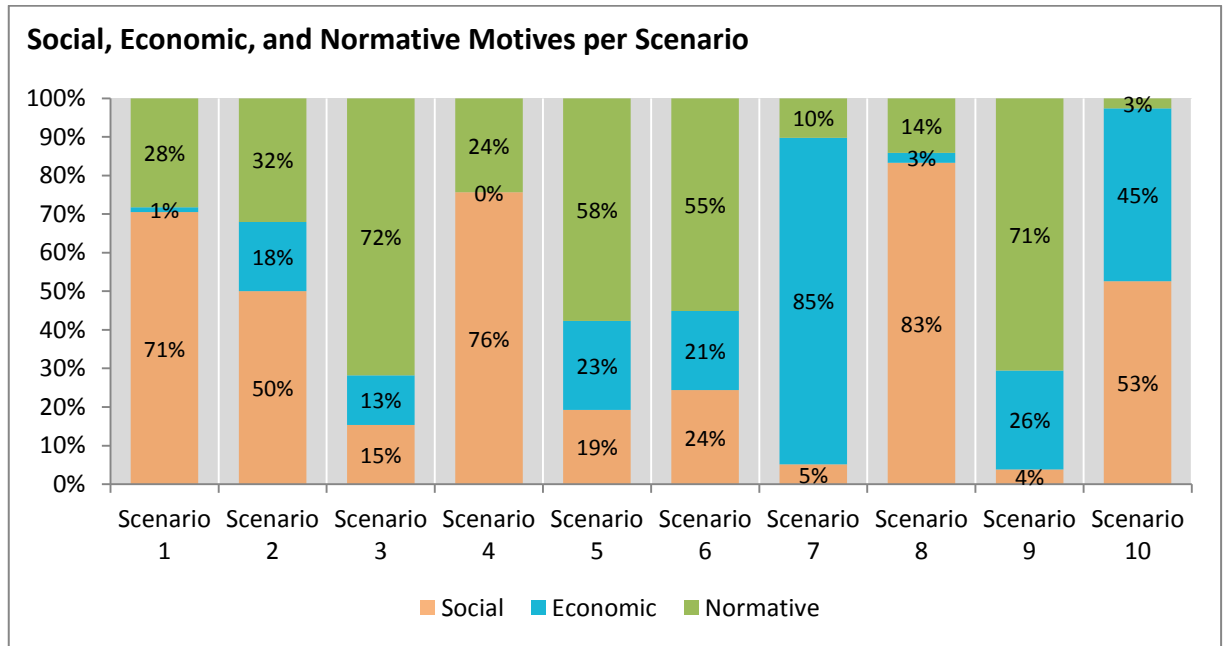
The largest percentage of respondents selected social motives for scenario1 (Employee condition dilemma) at 71%, scenario 2 (reliable supplier dilemma) at 50%, scenario 4 (production bonus dilemma) at 76%, scenario 8 (new safety regulation dilemma) at 83% and lastly scenario 10 (customer complaint dilemma) at 53%. This is indicated in Figure 17 above.

Normative options were dominant for scenario 3 (customer requirements dilemma) at 72%, scenario five (over-declaration of production dilemma) at 58% and scenario nine (benchmarking exercise dilemma) at 71%. The only scenario where economic motives were selected was scenario 7 (Colleague who is a close friend dilemma) at 85%.

Figure 18: Social, Economic, and Normative Motives for the Combined Scenarios
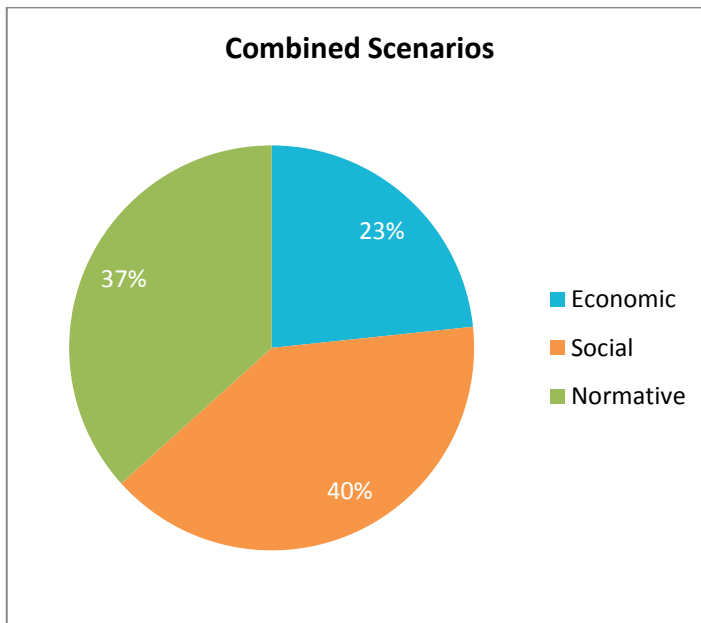
The combined view of the scenarios as indicated by Figure 18 above shows that social and normative motives were mostly selected at 40% and 37% respectively. Economic motives were slightly lower at 23%.

5.5   RESEARCH QUESTION 2 RESULTS

Research question 2 sought to establish whether there are differences in dominant motives per functional departments. Kruskal-Wallis test was conducted which is usually used for comparing two or more independent variables of equal or different sizes (Guo, Zhong, & Zhang, 2013). Seven departments were compared in this test to see if there are any differences. The table below represent the findings:

Table 2: Kruskal-Wallis Results comparing Functional Department Values

```
Kruskal-Wallis Test on Motive

Department                 N  Median  Ave Rank     Z
Engineering               80   2.000     379.6  -0.46
Finance                   20   2.000     436.7   0.93
Human Resources           40   2.000     372.1  -0.53
Integrated Operations    110   2.000     390.9   0.02
Maintenance              140   2.000     382.1  -0.49
Planning and Development 130   2.000     380.0  -0.58
Production               260   2.000     402.8   1.08
Overall                  780             390.5

H = 2.54  DF = 6  P = 0.863
H = 2.91  DF = 6  P = 0.820   (adjusted for ties)
```

The p-value is greater than the significant level of 0.05 (α) at 0.820, and therefore indicates that there is no difference in the dominant motive per functional departments. This means that the way leaders handle dilemma situations is not dependent on functional responsibility.

5.6 RESEARCH QUESTION 3

Research question three sought to understand whether there are differences in how leaders at different age groups deal with dilemma situations. There were more than two variables again; therefore a Kruskal-Wallis test was performed. The results are tabled below:

Table 3: Kruskal Wallis Test Results Comparing Motives per age group

```
Kruskal-Wallis Test on Age

Age Group    N  Median  Ave Rank     Z
21-29       90   2.000     344.3  -2.07
30-39      310   2.000     383.0  -0.76
40-49      250   2.000     401.7   0.95
50-59      130   2.000     419.0   1.58
Overall    780             390.5

H = 6.82  DF = 3  P = 0.078
H = 7.80  DF = 3  P = 0.050   (adjusted for ties)
```

The p-value which has been adjusted for ties in the table above is equal to the significant level of 0.05 (α), meaning that there are differences in how leaders deal with

dilemma situations per age group. The Z-scores for ages between 20 and 39 are lower than the mean average, while ages above 40 have Z-scores above the mean.

Given that the P-value is close or similar to the level of significance, it suggests there is no strong difference between the age groups. This is illustrated by Table 4 below, which shows that each group has at most two instances that differ with other groups out of the ten.

Table 4: Motive map per age group

Age Group	Case Studies									
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
21-29	S	S	N	S	S	N	E	S	E	S
30-39	S	S	N	S	N	N	E	S	N	S
40-49	S	S	N	S	N	S	E	S	N	E
50-59	S	N	N	S	N	N	E	S	N	S
Average	S	S	N	S	N	N	E	S	N	S

5.7 RESEARCH QUESTION 4

The fourth research sought to establish the different factors that influence motives for acting in a particular manner. Respondents gave reasons for selecting the options on how they would tackle a particular ethical dilemma scenario.

5.7.1 Case Study 1 – Employee condition dilemma

Scenario one was about an employee with a medical condition that required intake of medication containing alcohol (0.1%). This was one of the best employees who have worked for the company for the last 15 years. However, the company had a zero alcohol policy which means that no level of alcohol is allowed.

The option that was selected by most respondents was to negotiate for the employee so that he/she may continue working. In terms of the reasons given, they were mostly influenced by organisational rules and procedures. Situational factors influenced them to a lesser extent, while individual factors were also stated by fewer respondents as shown by Table 5 below:

Table 5: Qualitative Reasons for Employee Condition Dilemma

Negotiate for the employee		
Motivation for selection	**Type of influence**	**Frequency**
Inform top management/occupational health and hygiene as per operating procedure (need to declare medical condition).	Organisational	**15**
Understand the risk profile	Situational	**11**
Alternative position to be considered	Individual	**9**
Alcohol level is insignificant	Situational	**7**
Health condition monitoring on a monthly basis	Organisational	**6**
Change rules to accommodate the individual	Organisational	**5**
Loyalty and other values	Individual	**4**
Different type of medication	Situational	**1**

The respondents, who selected the option of keeping quiet, mainly gave reasons that the alcohol limit is very low, therefore insignificant, and does not pose any safety risk to other employees.

5.7.2   Case Study 2 – Reliable Supplier dilemma

Scenario 2 involved a supplier that intentionally over-charged the organisation, and later confessed to have made a mistake. He was one of the few suppliers in the industry who specialised in the required skill for a project. Most respondents opted for accepting the apology and gave reasons as tabled below.

Table 6: Qualitative reasons for Reliable Supplier Dilemma

Accept apology		
Motivation for selection	**Type of influence**	**Frequency**
People make mistakes, deserve a second chance	Individual	**17**
Investigate the root cause further	Situational	**7**
Supplier confession formally	Organisational	**4**
Relationships are important	Situational	**3**
Project delivery should not compromised	Situational	**2**
Contractual obligations	Organisational	**2**

Most of the respondents gave the reason that people make mistakes, and therefore they need to be given a second chance. However, organisational and situational factors interplayed in their reasoning too as shown by Table 6 above

5.7.3   Case Study 3 – Customer Product Requirements dilemma

Scenario three was about the system of measuring product quality from the customer's side that had broken down. The manager gave an instruction to maximise sales since the results were not going to be checked for compliance. Most respondents opted for cautioning the customer so that an alternative way of measuring product qualities could be developed. This was influenced mostly by wanting to maintain a trusting relationship with the customer and also influenced by the individual's values. The table below indicates a summary of how they motivated their selection:

Table 7: Qualitative reasons for Customer Product Requirements Dilemma

Caution the customer		
Motivation for selection	**Type of influence**	**Frequency**
Proactively address the risk	Situational	**20**
Maintain trusting relationship	Individual	**14**
Values - integrity, trust etc.	Individual	**14**
Protect future sales	Organisational	**5**
Customer needs are important	Organisational	**4**
Prevent fraud	Situational	**2**
Company's reputation	Organisational	**1**
Manage your stakeholders	Organisational	**1**

For the respondents who opted for maximising the sales, their main reason was to follow instructions given by the manager irrespective of whether they are in line with what you believe is right or wrong. The second option that was not opted for by the majority was to do nothing, and continue as normal. The respondents felt strongly about living and sticking to their individual values of trust and honesty.

5.7.4 Case Study 4 – Production bonus dilemma

Scenario four was a about the production team approaching the end of financial year, and a pipe leakage breakdown occurred, contaminating the national water stream. Most of the respondents opted for stopping the plant for two days to fix the pipe leakage so as to avoid contaminating the national water stream. Reasons are tabled below for this selection:

Table 8: Qualitative reasons for Production bonus dilemma

Stop the plant for two days		
Motivation for selection	**Type of influence**	**Frequency**
Water pollution could have significant consequences and impact on community	Situational	**29**
Sustainability of the environment	Organisational	**10**
Right thing to do	Individual	**5**
The pipe could be fixed quicker	Situational	**3**
Important to comply to policies and procedures	Organisational	**3**

The concern was around the consequences associated with the pipe leak for the sake of a production bonus. Compliance to rules and procedures also emerged from their responses as non-compliance could threaten license to operate. Therefore other two options, the respondents gave reasons that were influenced by individual factors such as values, and inherently believing that it is the right thing to do.

5.7.5 Case Study 5 - Over-declaration of production dilemma

Scenario five involved over-declaration of production which needed to be rectified; however rectifying the error would impact the current month's performance results. The respondents selected the option of making the adjustment immediately irrespective of how it can affect the morale of the employees. Situational factors prevailed mostly in the reasons given for the selection as can been seen in Table 9 below:

Table 9: Qualitative reasons for Over-declaration of production dilemma

Make the adjustment		
Motivation for selection	**Type of influence**	**Frequency**
Production targets were not met - undue benefit	Situational	**11**
Incur impact now rather than later	Situational	**7**
Investigate previous months	Situational	**4**
Communicate to the team	Organisational	**3**
Values - Integrity and accountability, credibility	Individual	**3**

The respondents felt strongly that employees should not be impacted by typing errors that they were not responsible for; therefore the company should rather take the knock for the over-declaration. They associated this with their values of trust and credibility by their leaders.

5.7.6   Case Study 6 - Subordinate not meeting deadlines dilemma

The scenario involved an underperforming subordinate who was also not in good terms with the senior manager. An instruction was given to dismiss the employee; however the decision maker faced a dilemma of how to go about dealing with the situation. Most of the respondents selected the option of following the performance management processes in order to dismiss the subordinate. The table below indicates the factors that influenced their motivation:

Table 10: Qualitative reasons for Subordinate not meeting deadlines dilemma

Follow performance management procedures		
Motivation for selection	**Type of influence**	**Frequency**
Stick to the rules and procedures	Organisational	**20**
Treat everyone the same, be consistent and fair	Organisational	**10**
Training and coaching to be provided in addition	Organisational	**6**
Leader to evaluate their own contribution towards under-performance	Individual	**1**

Organisational culture of driving consistency and complying to performance management procedures were reasons given by most respondents in dealing with the dilemma. Other respondents that opted for giving the employee a second chance, considered mostly individual factors in this case. Most respondents believed in giving additional coaching to the employee so that the weak areas could be addressed.

5.7.7   Case Study 7 - A colleague who is a close family friend dilemma

Scenario seven involved a dilemma of a colleague who was cheating the system at work, and went for a holiday using sick leave days instead of annual leave days. Most respondents opted to confront him to confess the truth to his/her manager. The factors that influenced the decisions were mostly individual such as values and moral principles. This is shown in Table 11 below:

 Table 11: Qualitative reasons for a colleague who is a close family friend dilemma

Confront him to do the right thing		
Motivation for selection	**Type of influence**	**Frequency**
If he does not confess, I would report him to the manager, and then he/she will have to deal with the consequences.	Individual	**20**
Values - integrity and honesty	Individual/Organisational	**9**
It is the right thing to do	Individual	**6**
Only convince him, but not my place to report him	Individual	**4**

5.7.8 Case Study 8 - New safety regulation dilemma

This dilemma involved a new safety regulation that has resulted in prolonging the process of attending to breakdowns in the mine from an average of 30 minutes to 4 hours. The respondents opted for challenging the new regulations so as to achieve a win-win solution in order to improve productivity. This is shown below by Table 12

Table 12: Qualitative reasons for new safety regulation dilemma

Challenge the new regulation		
Motivation for selection	**Type of influence**	**No of respondents**
Do not just accept the status quo - challenge the regulation and the way things get done.	Situational	**31**
Assess the risks first and put measures in place	Organisational	**4**
Deeper understanding of the new regulation	Individual	**3**
Stick to the rules and regulations	Organisational	**2**

Situational factors were evident in the reasons given for motivating why they would challenge the new regulation and also how things get done. Most respondents mentioned that they would not just accept the status quo, despite knowing that rules are usually introduced for a reason and purpose.

5.7.9 Case Study 9 - Benchmarking exercise dilemma

Scenario nine involved a benchmarking exercise that was undertaken by a close friend who needed information from his friend. The manager approved the sharing of information, however did not follow the correct procedures in granting the permission. Most respondents opted for the option of not sharing the information merely because they know that their manager did not follow the right procedures. This choice was mostly influenced by the code of conduct and business procedures that were put in place to protect company sensitive information. This is shown below by Table 13.

Table 13: Qualitative reasons for Benchmarking exercise dilemma

Do not share the company information		
Motivation for selection	Type of influence	Frequency
Correct procedure not followed	Organisational	22
I would never share company information with competitors	Individual	5
Make the manager aware of not following the correct procedures	Situational	3
Get a written consent from manager	Individual	2

The factors that have influenced the selection of the option of not sharing the information are mostly compliance culture driven, which are organisational factors. The consequences of bridging the rules and procedures motivated the respondents to select the option of not sharing the information.

5.7.10 Case Study 10 - Customer complaint dilemma

Scenario ten involved a customer complaint that was logged due to the qualities of product received that did not meet the minimum specifications. The problem has always been there, but was never picked up because the products were blended together with another supplier's product that sweetened theirs. For this dilemma, most respondents chose the option of negotiating for a different rate, however costs and benefits of doing so being taken into consideration. This is shown below in
Table 14 below:

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Table 14: Qualitative reasons for Customer complaint dilemma

Negotiate a different rate		
Motivation for selection	**Type of influence**	**Frequency**
Evaluate the costs and benefits	Situational	**4**
Values not compromised	Individual/Organisational	**4**
Relationships matters	Individual	**3**
Do the right thing	Individual	**2**

Some of the respondents opted for striking a deal with another supplier to come up with an optimised solution that will not compromise the relationship with the customer. Situational factors prevailed in most of the reasons given.

5.8   FACTORS INFLUENCING ETHICAL DECISIONS

5.8.1   Individual Factors

The individual factors that were mentions are represented below in Figure 19.

Figure 19: Individual Factors influencing Ethical Choices
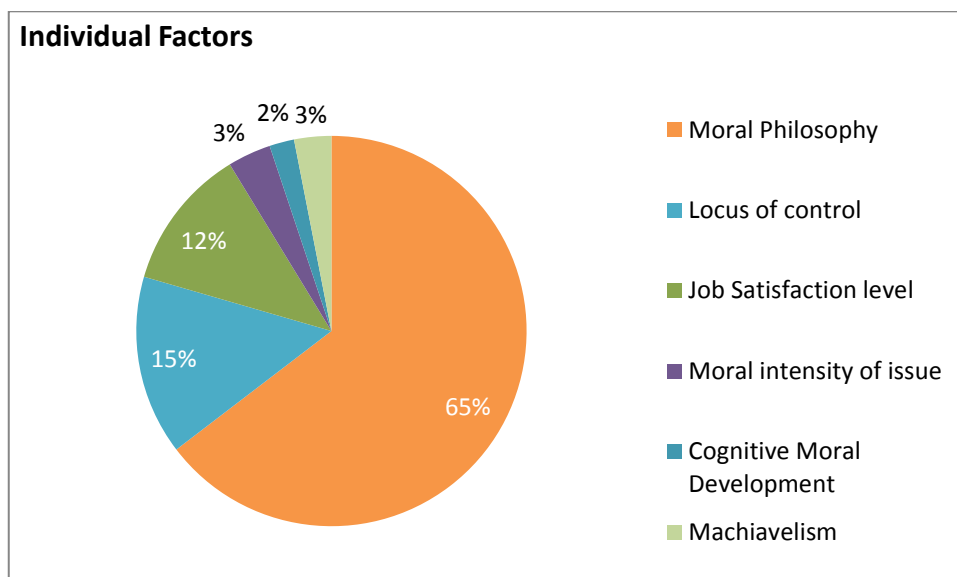
Moral philosophy factor was significantly higher than all other factors that were used for motivating the ethical choices. Locus of control and Job Satisfaction level came out second and third at 15% and 12% respectively.

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5.8.2 Situational Factors

The situational factors are represented below in. Magnitude of consequence came out higher at 34%, followed by social consensus and proximity and immediacy at 27% and 25% respectively.

Figure 20: Situational Factors influencing Ethical Choices
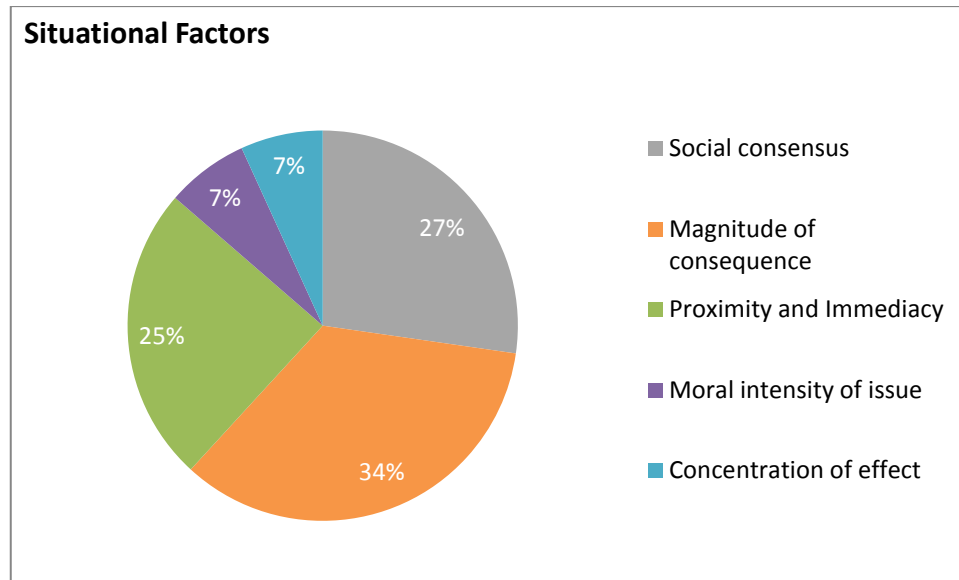
5.8.3 Organisational Factors

The organisational factors are represented below in Figure 21. Code of conduct enforcement came out higher at 65%, followed by ethical climate, ethical culture and reinforcement at 16%, 13% and 6% respectively.

Figure 21: Organisational Factors
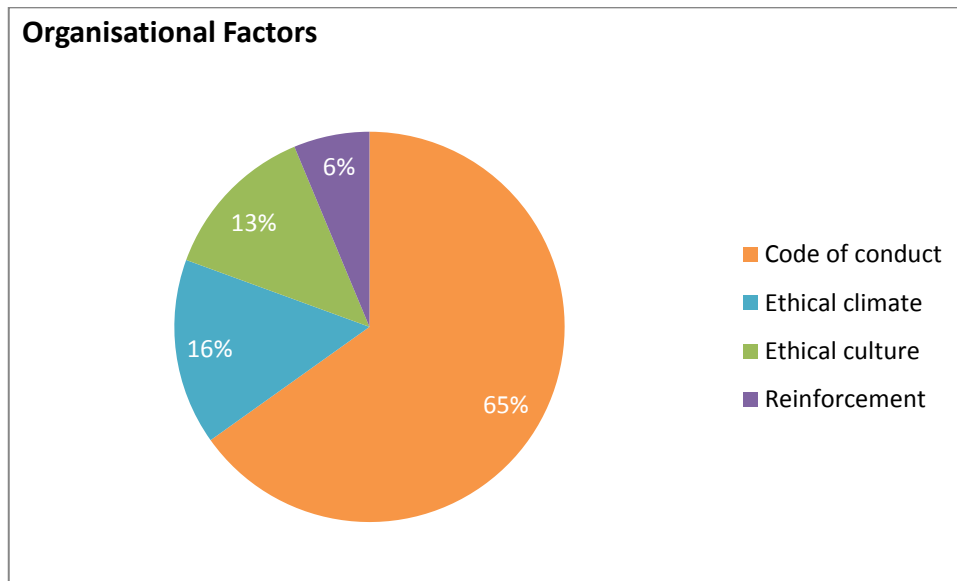
Table 15 below gives a summary of responses to questions 12 and 13 on dealing with the dilemmas in the workplace. Situational factors were mainly reasons given by the respondents as shown below:

Table 15: Qualitative reasons for Dealing with dilemma situations

Reasons for motivation	Type of factors	Number of respondents
Think of consequences first	Situational	26
Evaluate the situation, and review alternatives	Situational	18
Use and rely on experience	Individual	16
Effective stakeholder engagements and management	Organisational	6
Values not to be compromised	Individual	5
Relationships matters, encourage transparency and good communication	Individual	5
Comply to rules and regulations, policies etc.	Organisational	3

Most of the respondents consider first the magnitude of consequences when evaluating the decision that they have to take. Some search for alternative solutions that would yield better results before making decisions. Other respondents rely on previous experience, and even go to the extent of consulting those who have experienced similar dilemmas for advice.

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One of the questions sought to understand which of the three options below has the highest influence on the respondents when dealing with ethical dilemmas:

- Values,
- Situational context and
- Workplace environment and culture

The graph below shows the selection by respondents:

Figure 22: Relative Influence of Values, Situational context and Workplace Environment on Responses to Ethical Dilemmas
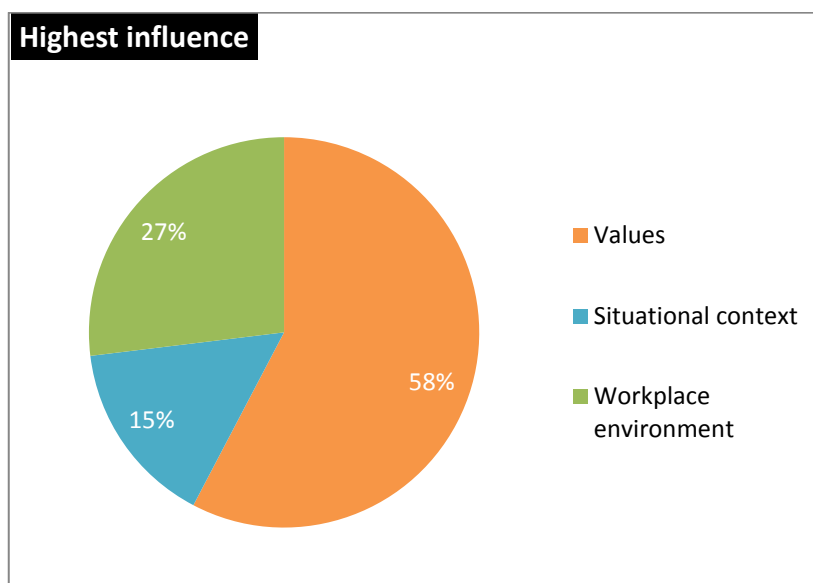
Fifty eight percent of respondents selected their own values to have the highest influence on how they deal with ethical dilemmas. Workplace culture received the second rating of about 27%, with situational context being selected by only 15% of respondents.

Eighteen decision drivers were also presented to the respondents so that they may choose their top three. All 18 drivers were selected by the 78 respondents; however, the top 5 common drivers are shown by below:

Figure 23: The top 5 decision drivers as selected by the respondents
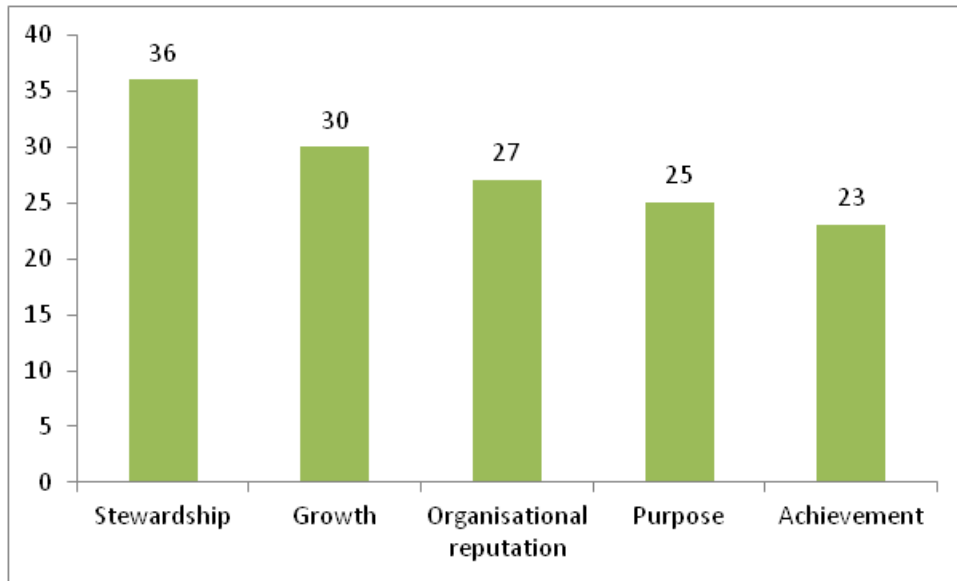
The graph showing all the drivers as selected by the respondents can be viewed in appendix 4.

5.9   CONCLUSION OF RESULTS

5.9.1   Demographic profile of respondents

The sample population consisted of 78 respondents that completed the online questionnaire. These were middle managers working for a coal mining company that was selected for the study. 20% of respondents were females with males being the dominant gender that took part in the study.

Seven departments were represented namely Production, Maintenance, Engineering, Human Resources, Planning and Development, Integrated Operations and Finance.the respondent's age varied between age groups of 20 - 30 and 50 - 60 years.

5.9.2   Results pertaining to research question 1

Descriptive statistics was conducted and found suitable for presenting the dominant motive from the case studies scenarios presented to the respondents. Social motives were found to dominate, followed by normative and economic motives. Economic motives were found to be the least contributor to motivating leaders when faced with ethical dilemmas.

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5.9.3 Results pertaining to research question 2

Research question two sought to understand whether there are differences in dominant motives per department. Kruskal-Wallis test was performed to analyse the differences. The results indicated that motives are independent of functional department, whereby the leaders are not influenced by their functional departments.

5.9.4 Results pertaining to research question 3

The third research question sought to establish whether dilemmas are handled differently as a result of age of a leader. Kruskal-Wallis test was found suitable for conducting the test, and the results indicated that different ages deal with ethical dilemmas differently.

5.9.5 Results pertaining to research question 4

The fourth research question sought to understand individual, situational and organisational factors that influence leaders when faced with ethical dilemmas. All three factors seemed to influence how leaders deal with ethical dilemmas and these factors were found to be dependent on the nature of the ethical dilemma.

The next chapter will discuss the findings of this chapter in more detail.

CHAPTER 6: DISCUSSION OF RESULTS

6.1   INTRODUCTION

This Chapter will discuss the research findings as reported in Chapter 5. The interpretation was done using the literature findings as outlined in Chapter 2. Therefore this Chapter will provide a better insight into the research questions and how they were answered. The primary research question for the study is what are the motives of leaders when faced with ethical dilemmas. Motives are the reasons, needs, wants, intents, purposes, or goals that affect a person's decision or choice (Norcia and Tigner, 2000). The discussion that follows addresses all the research questions including the respondents' demographics.

6.2   DEMOGRAPHICS

One may believe that the Mining industry is known for being male dominated as a result of the nature of work activities being conducted. This has changed over the past 10 years, during which that has been significant growth in numbers in term whereby females are now growing in number. The study was targeted at middle management level to understand how they tackle ethical dilemma situations.

6.3   RESEARCH QUESTION 1

Are leaders in the mining industry driven by social, economic or normative motives?

Research question one sought to establish whether leaders in the mining industry are driven by social, economic or normative motives. Nielsen and Parker (2012) suggested that leaders in decision making processes are driven by three commitments which are economic, social and normative motives as explained in Chapter 2.

Ten case studies illustrating different ethical dilemma situations were tested and the findings from them were a combination of all three commitments mentioned above.

Nielsen and parker (2012) supported the idea that many businesses are inherently motivated to comply and go beyond compliance. This means that such business operate beyond normative motives which are primarily about complying with rules and

regulations. Given that economic motives follow an egoistic model, it is more likely that the prevailing motive will be social. This leaves social and normative motives to drive most decisions in many businesses. One could infer that this business motives will filter to an extent to the employees of an organisation.

Kulshreshtha (2005)) also confirm that depending on whether a business strengthens a certain aspect to counter prevailing motives, they could dissuade certain behaviours. They further argued that some employees can primarily be economically motivated and still retain elements of both social and normative motives. This suggests that the three motives are likely to co-exist and depending on the organisational setup and what inhibitors are strengthened, one of the motives will dominate.

From the study one would have therefore expected that all three motives would exist to differing levels of degrees. The mining industry has experienced significant fatal events that have led to significant safety regulations. Given that normative motives are driven by compliance to rules and regulations, one could infer that the dominating motive in the mining industry would most likely be normative.

The study results indicated the two dominant motives are social and normative at 40% and 37% respectively. These two vary significantly when compared to the economic motive at 23%. This is supported by Dunning (2011) who argue that as people we have learnt to adapt to rely on the coordination and cooperation with others in our social groups. It can therefore be argued that to an extent our behaviours will also be influenced by these social groupings we belong to.

The requirements for listed mining companies to report on sustainability, which is voluntary, have meant that mining companies and employees have to take societal matters into account when conducting their business (Lins et al., 2011).

Mining companies have as a result focused more and more at items beyond the economic business needs. One would therefore expect that leaders within the mining industry's behaviour will be influenced by the new norm of taking social responsibilities into the heart of doing business.

Social motives as per Dunning (2011) identified three basic social motives which are:

- The need to belong
- The desire to help others
- The need to gain influence and power

The survey respondents were middle managers that are expected to care for their subordinates, and achieve results through them. It is assumed that leadership attributes contributed to a certain extent in the responses. As part of leadership they

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are most likely to be driven by the last social motive which is the need to gain influence and power.

On the other hand, one could argue that as business leaders, there's an expectation to deliver economic results. Compensation models also tend to focus on rewarding good economic performance results. For example, in only one of the ten tested scenarios did the economic motive dominate (scenario 7 – A colleague who is a close family friend).

6.3.1 Conclusion for Research Question1

Social and normative came out as the strong motives in that order. There is no prior research in the sector that one can use to test the assumption that the move to social motives is a migration from the normative form other than the fact that the older generation as will be seen below seem to display more of the normative motive than the social motives of their younger peers.

Given the broad spectrum of society where leaders all come from, it was to a certain extent expected that all motives would feature to a large degree with some moderation for industry specifics. It would be interesting to run a research looking at middle managers across the board and test if there is a difference in motives. For example the army versus the IT middle managers would be a good test to work out if industry specifics play a significant role in motives.

6.4   RESEARCH QUESTION 2

Are there differences in dominant motives in functional department?

Research question 2 sought to establish whether there are differences in motives per functional departments. Seven departments were compared amongst each other. As indicated in research question one above, Dunning (2011) argued that humans adapt to social groupings for coordination and cooperation. A mining business can be viewed as a society, with different factions and groupings.

The Production function is responsible for the actual extraction and processing of the minerals. They are characterised by behaviours such as seeking to get things done quicker and efficiently. They are structured in a command centred manner, meaning that they tend to be hierarchical in their setup. The service departments on the other hand primarily consist of professionals. They are largely autonomous in the execution of the work with limited command and control structures.

The Finance and Supply functions on the other hand are highly compliance driven (following rules e.g. GAAP, IFRS). As such in line with Dunning (2011), one would expect these groupings (Finance, Productions etc.) to behave in a manner that represent their work groupings. This is on the assumption that work plays a pivotal role in their lives above other affiliated activities.

Therefore one would have expected Production, Integrated Operations and Planning & Development to have selected more economic related responses. This was based on the assumption that their social groupings would be based more on those elements.

The findings from the survey indicated that there are no differences in dominant motives per functional department as per Table 16. Although overall there are no significant differences, the functional motives map as shown below in Table 16 suggests that in a few instances there were some differences observed. On scenario 6 (sub-ordinate not meeting deadline dilemma) the Human resources function's response was biased to the social motive compared to most other departments who's response suggested a normative motive.

To an extent this will be in line with how one would have expected Human Resources personnel to respond given the functional accountability in the organisation.

Also on the same scenario the Engineering personnel's responses favoured an economic motive, which once again aligns with the social grouping theory given the efficiency and performance drive focus of such a function.

Table 16: Functional motives map

Department	Case Studies									
	1	2	3	4	5	6	7	8	9	10
Engineering	S	S	N	S	N	E	E	S	N	S
Human Resources	S	S	N	S	E	S	E	S	N	S
Integrated Operations	S	S	N	S	N	N	E	S	N	S
Maintenance	S	S	N	S	N	N	E	S	N	S
Planning & Development	S	S	N	S	N	N	E	S	N	E
Production	S	N	N	S	N	N	E	S	N	E

Scenario 10 (customer complaint dilemma) also demonstrate this social grouping theory were the Planning and Development and Production personnel's responses were more aligned to the economic motive.

Overall however it would appear that Dunning (2010)'s view of social groupings influence on motives doesn't hold in this case. It is however possible that the micro-social groupings as represented by the functions here do not represent a social

grouping. If the effective social grouping is considered as the mining business, the results would possibly align with the social grouping effect.

6.4.1 Conclusion for Research Question2

The research expectation that there will be significant differences across departments and functions was not supported by the results. Suggesting that the functional allocation of personnel and to an extent their training doesn't affect what motivates them. It is therefore more likely that the motives as per responses are more driven by consequential considerations as confirmed by the comments on each scenario.

Although there are certain scenarios that showed that there is some differences in the motives of the different functions, these were not conclusive enough to confirm the impact of the functional allocation on motives.

6.5 RESEARCH QUESTION 3

Are there differences in dominant motives per age group?

Research question three sought to establish if there are differences in dominant motives per age group. Whilst Kohlberg (1971) proposed a moral development stage of conventional morality as the theoretical level for all the respondents, it was not clear whether within that stage of morality; people have different motives that determine their ethical decisions. One way of many that we looked at was whether there are differences in motives per age group.

Pimentel et al (2010) argued that younger individuals are susceptible to own peer input when faced with ethical decisions. The older individuals would consider the perceived seriousness as a criterion to their decisions.

Kooij et al (2011) as indicated in Chapter 2 argued that motives and values are influenced by adult development and work experiences across the life span. This suggests that life experiences have a significant role in motives when faced with an ethical dilemma.

All three Kohlberg (1971), Kooij et al (2011) and Pimentel et al (2010) seem to suggest that in this research there should be a significant difference between the young and older people's motives. The young people's motives could be more aligned with more social groups as they tend to be highly influenced by peers while the older leaders are more aligned to that of the company. The assumption is that the overall company population is aligned to the company's processes and rules.

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The results of the research as shown in Table 3 of Chapter 5 showed a P* value of 0.05, which suggests that there is a difference in motives between the age group. On further analysis of comparing one age group to another, this difference seems to be significant between the 21-29 and 40-49 groups, with a P* value of 0.049 as shown in Table 17 below.

Table 17: Kruskal-Wallis test between age groups 20-29 and 40-49

```
Kruskal-Wallis Test on Respondent Age

What is
your age?    N      Median  Ave Rank       Z
21-29        9   4216420257      23.1   1.97
40-49       25   4209258296      15.5  -1.97
Overall     34                   17.5

H = 3.89  DF = 1  P = 0.049
```

Combining the above 40 ages (40-49 and 50-59) and comparing them to the 21-29 age gives an even smaller P* value of 0.037, which suggests a significant difference between the less than 30 year old and the over 40 motives.

Table 18: Kruskal-Wallis test between age groups 20-29 and 40-49

```
Kruskal-Wallis Test on Respondent Age

Age (vs2)    N      Median  Ave Rank       Z
21-29        9   4216420257      32.6   2.08
40-59       38   4208833491      22.0  -2.08
Overall     47                   24.0

H = 4.33  DF = 1  P = 0.037
```

A close look at the information suggests that the older grouping (40-59) base their decisions on normative motive compared to the younger group who's dominant motive is the social motive.

Taking Kooij et al (2011)'s argument into account, it is quite possible that the older people operated in the mining industry in the early years when the industry had a high control and command structure with high focus on compliance to safety rules.

Baltes et al (1999) suggests that as people age, the motives related to further personal development decrease. This is coupled with an increase in the motives that advance the maintenance and regulation of work-related losses.

6.5.1 Conclusion for Research Question3

The results suggest that there is a difference in motives between the young (21-29) and the old (40-59) respondents when faced with an ethical dilemma. The young grouping's decisions are driven by social motives compared to the older grouping whose decisions are driven by normative motives. This in the mining sector could be attributed to the change in the culture from a safety compliance driven culture the old employees would have experienced.

Literature reviewed also seems to support the study results, which suggests that to a certain extent, motives are influenced by age.

6.6   RESEARCH QUESTION 4

What are the individual, organisational and contextual factors that influence ethical dilemma choices?

The fourth research question sought to establish the individual, organisational and contextual factors or characteristics that influence ethical dilemma choices.

Kish-Gephart et al. (2010) introduced the concept of the three antecedents for unethical choice based on the "bad apples" analogy. They argued that based on their research there are three characteristic, the characteristic of an individual ("bad apples"), and the ethical issue itself ("bad cases") and the organisational environment ("bad barrels"). This model was used as the basis to evaluate the factors that influenced the choice of the survey participants assuming they have made a positive unethical choice i.e. they chose an ethical choice.

This is further supported by literature that key situational/organizational factor that significantly influence ethical behaviour is the reinforcement (or lack of reinforcement) for previous ethical behaviour. Pendse (2012) and Skinner (1969) defied the central notion behind reinforcement theory as behaviour that is governed by its (expected) consequences, and therefore the best way to modify behaviour is to redesign the situation so that people are reinforced for the desired behaviour.

In Chapter 2 the different factors that influence individual/situational/organizational were looked at. In chapter 5 the results of the survey suggested that the dominant factors were situational (37%) followed by individual (33%) and then organizational (30%). Although situational factors are dominant individual, which seems to suggest that the dominating group of factors will be on a case by case basis.

The domination of situational factors could be linked to the backgrounds of the respondents in line with the theory by Dunning (2011), which was used as the basis for looking at different functional groups above. It could be argued the nature of mining business lends itself to analytical approach to problems, influenced by theories such as Lean, and six-sigma amongst others. One could therefore argue that respondents are likely to approach each scenario on a situation by situation basis, which would be in line with their day to day approaches to their business life. This together with the earlier stated compliance culture borne out the safety rules and regulations, made the likelihood of situational and organizational group of factors dominating as background drivers high.

At the same time it is also clear that the individual factors also play a role, which then does away with the trained notion of motive driving factors. It also suggests that the concept of reinforcement as argued above by Pendse (2012) and Skinner (1969) may hold in this case. This is assuming that the optimisation training through lean, six-sigma and other business improvement holds when it comes to the primary driver being situational. At the same time one could argue it doesn't hold assuming that the compliance nature of the mining industry in the past would have led to the dominance of organisational group of factors.

Analysis conducted on each respondent's (see chapter 5) reasons behind the ethical choice they took demonstrates that the factors change on a case by case basis. An individual's motives are therefore not influenced by only a singular group of factors (individual/situational/organizational). This is aligned with the literature by Kish-Gephart et al (2010), in their framework on ethical decision making they suggested all the three factor groupings could contribute to a single ethical or unethical intention and behaviour.

Kish-Gephart et al (2010) also argued that some of the factors within the grouping can give a sense of whether a person/employee is likely to have unethical intentions or behaviours. As part of the research survey the underlying factors for each grouping or antecedents was explored based on the comments and reasoning provided for each selection choice in the different survey scenarios. The results of the different factors that are dominant in each antecedent were shown in chapter 5 and will be analysed further below.

6.6.1 Individual factors ("bad apples")

As discussed in chapter 5, the dominating individual factors were those related to moral philosophy (65%). Kish-Gephart et al (2010) argued that moral philosophy (see chapter 2) is driven from normative philosophical theories. They argued that most people could be classified into two categories based on Forsyth (1980)'s groupings. The two groups were idealism and relativism. Idealism was argued to be focused on the welfare of others whereas relativism was based on situational moral principles and not focused on universal morals.

Given that the survey results had already demonstrated a leaning towards situational grouping of factors, it is likely that the type of moral philosophy driving the intended ethical/unethical decision is driven by the relativism philosophy.

Kish-Gephart et al (2010) argued that those with high Machiavellianism and low locus of control are most likely to make unethical decision in an attempt to please "number one". It would appear in this case that the majority of respondents do not therefore appear to have intentions to conduct unethical activities.

It is further interesting that the distant second dominant factor as per results in chapter 5 is the locus of control (15%). This further emphasis the point that from an individualism point of view there is a high degree of underlying factors that suggest the unwillingness to possibly make unethical decisions in the group surveyed.

6.6.2 Situational factors ("bad cases")

The dominating situational factor as shown in the result in Chapter 5 is the magnitude of consequences (34%) followed by social consensus (27%) and proximity and immediacy (25%). Kish-Gephart et al (2010) argued that as per Jones (1991) high intensity moral catching issues are likely to be recognised as having consequences for others. It is therefore interesting that at an individual basis most respondents based their decision on moral philosophy and at a situational level on the magnitude of consequences. It is more likely therefore that they perceived the scenarios to indicate a high intensity moral dilemma with high consequences for others. It is however interesting that the extent of domination of the magnitude of consequences per situation is not as high as the moral philosophy was on the individual factors.

Proximity, magnitude of consequences and concentration of effect are argued to be so closely interrelated that they could be clustered as one group related to the amount of "expected harm" (McMahon & Harvey, 2006).

Crane and Matten (2010) argued that moral decisions are not dependent on any particular situation or consequences. On the other hand Bagozzi et al (2010) argued that in certain instances a decision to act is made in terms of its potential consequences. To some extent the respondents in the survey seemed to apply the consequentialism model in line with the expected harm grouping.

In this case one can therefore argue that the combined score of magnitude of consequences and immediacy of 59% is more aligned with the individual factors dominant score of moral philosophy.

Social consensus on other hand is considered a positive to ethical behaviour on the assumption that behavioural norms are aligned with ethical decision making and behaviour. Once again a linkage with the high moral philosophy of most respondents at an individual level could be linked to suggest that the social consensus is likely to be in the positive of ethical behaviour.

6.6.3   Organisational factors ("bad barrels")

In Chapter 5 the results for organisational factors showed a dominance of the code of conduct (65%) followed by the ethical climate (16%). Given the compliance culture of the mining industry mentioned throughout, the code of conduct was to some extent the expected driver for organisational factors.

Interestingly Kish-Gephart et al (2010) found that there was no discernible relationship between codes of conduct and ethical/unethical behaviour. They argued that the reason for this could be that codes of conducts have become too ambiguous.

It could be that in this case given that the respondents come from the same organisation, its code of conduct when it comes to ethics is explicit and as such when the individual and situational factors have been taken into account the next driver becomes the company's code of conduct on matters. Kish-Gephart et al (2010) further argued that the enforcement aspect of the code of conduct can also make a difference

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on whether it's a factor or not on ethical dilemmas. This research did not delve into detail with regards to the company's code of conduct. It would be interesting to establish whether the code of conduct is dominant due to its explicit elements or its enforcement elements in this particular case.

6.6.4   Conclusion for Research Question3

The results suggest that there is not a single group of factors that are considered in singularity in making ethical/unethical decisions. All three antecedents seem to not only play a role in driving the motives for ethical decision making, but to some extent interrelate and influence each other. This is aligned with the findings by Kish-Gephart et al (2010), who also concluded that these antecedents are source or facilitators of unethical decision making and or behaviour. They further argued that these may work through impulsive or automatic means as compared to the rational calculated means.

The strong moral philosophy grounding in the individual antecedent backed by the expected harm factors in the situational precedents formed a strong link in this case that could provide a further area of exploration. The peculiarities of the mining industry also make the review of the factors likely to be biased. It would be interesting to see how other middle managers in other industry would compare given a similar set of scenarios.

CHAPTER 7: CONCLUSION

7.1 INTRODUCTION

In this chapter, a summary of the research outcomes will be provided in line with the key objectives for the study of establishing the motives of leaders when faced with ethical dilemmas. Implications for management and business will be provided which will summarise recommendations for all stakeholders. The limitations of the study will be highlighted in order to show the characteristics that could have impacted or influenced the findings for this study and ideas for future research will be proposed.

7.2 PRINCIPAL FINDINGS

Leaders in the Mining industry are predominantly confronted by ethical dilemmas which has become salient (Cragg and Greenbaum, 2002) as revealed in chapter one. Scandals in companies such as Enron have brought a great concern in ethical practices of many businesses (Pendse, 2012). Ethical dilemmas arise as a result of conflicting interests and desires by different stakeholders; however, they need to be managed accordingly. This has brought about an increase in ethical decision making studies over the last decade as mentioned by Woiceshyn (2012).

A review of literature revealed that a decision maker will do something because he/she values the activity and secondly decisions are made as a result of external forces that persuaded the decision maker in order to avoid punishment or to gain a particular reward (Nielson and Parker, 2012). He further suggested that leaders in decision making processes are driven by three commitments which are economic, social and normative motives.

The second approach of rational decision making proposes that managers' act based on the stage of their moral development as opposed to the moral theory. All three Kohlberg (1971), Kooij et al (2011) and Pimentel et al (2010) seem to suggest that in this research there should be a significant difference between the young and older people's motives.

The study results indicated the two dominant motives are social and normative. These two vary significantly when compared to the economic motives and this is supported by Norcia and Tigner (2000) who agreed that business decisions are not driven purely by economic self-interest or profit maximisation. However Kulshreshtha (2005) mentions

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in his article that maximisation of economic profits is still a genuine business goal today as long as it results in greater economic efficiency or productivity improvements in any organisation.

The study also found that there are no significant differences in dominant motives per functional departments. Dunning (2011) indicated that specific groups tend to behave in a manner that presents their social characteristics, as this was observed with functional departments leaning towards motives that are associated with their line of responsibility.

There was slightly a high level of situational factors given when respondents motivated their choices of how they would deal with the ethical dilemma than there were for individual and organisational. However the differences are marginal whereby they are all equal or greater than 30%. This indicated that all factors play a role in influencing how leaders make their decisions in the mining industry.

7.3   IMPLICATIONS FOR MANAGEMENT

This research has led to practical implications for the mining industry, but also makes theoretical contributions.

According to Ferrell *et al* (2013), ethical behaviour requires identification of issues or dilemmas, areas of risks, a better understanding and approaches to making choices in an organisational environment. Therefore in order to curb unethical behaviours, leaders are required to have the ability to identify and manage ethical dilemmas. A positive correlation has been found between formal education in ethics and subsequent ethical behaviour (Jackson et al., 2013). It is therefore recommended that businesses should invest in ethical education for their leaders. This is also strengthened by the findings from Kooij et al (2011) who indicated that motives and values are influenced by adult development and work experiences across the life span.

The dominant motive in the mining industry was found to be social, followed by normative. The individual factors that were studied also indicated that code of conduct; rules and procedures play a fundamental role in curbing unethical behaviour. Therefore ensuring that these standards are developed and reviewed regularly to keep them relevant and up to date will add to more ethical behaviours.

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7.4   SUGGESTIONS FOR FUTURE RESEARCH

This study was conducted in a single coal mining company, consisting of three mining operations. Therefore future research should be conducted to test if similar findings would be found in a different company operating under different culture. It would be interesting to run a research looking at middle managers across the board and test if there is a difference in motives. For example the army versus the IT middle managers would be a good test to work out if industry specifics play a significant role in motives.

There is no prior research in the sector that one can use to test the assumption that the transition to social motives is a migration from the normative form other than the fact that the older generation as will be seen below seem to display more of the normative motive than the social motives of their younger peers.

Norcia and Tigner (2000) suggested that making ethical decisions takes time, effort and care. It would be interesting to measure the time or understand the impact of time and effort into each ethical dilemma situation.

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APPENDICES

APPENDIX 1: CONSISTENCY MATRIX

Title   <u>**EXPLORATION STUDY OF LEADERS MOTIVES WHEN FACED WITH ETHICAL DECISION DILEMMA IN THE MINING INDUSTRY**</u>

PROPOSITION/QUESTION/HYPOTHESIS	LITERATURE REVIEW	DATA COLLECTION	ANALYSIS
1. Are leaders in the mining industry driven by social, economic or normative motives?	(Nielsen & Parker, 2012) (Dunning, 2011) (Kulshreshtha, 2005)	Online Survey questionnaire Questions 1(a) – 10(a)	**Quantitative** Descriptive Statistics
2. Are there differences in dominant motives in functional department?	(Nielsen & Parker, 2012) (Dunning, 2011) (Kulshreshtha, 2005)	Online Survey questionnaire Questions 1(a) – 10(a)	**Quantitative** Kruskal-Wallis Test
3. Are there differences in dominant motives per age group?	(Kooij, De Lange, Jansen, Kanfer, & Dikkiers, 2011) (Pimentel, Kuntz and Elenkov, 2010)	Online Survey questionnaire Questions 1(a) – 10(a)	**Quantitative** Kruskal-Wallis Test
4. What are the individual, organisational and contextual factors that influence ethical dilemma choices?	(Sonenshein, 2007) (Jones, 1991) (Remisova, Lasakova, & Buciova, 2014)	Online survey questionnaire • Questions 1(b) – 10(b) • Questions 11 - 14	**Qualitative** Themes / Hermeneutics data analysis method
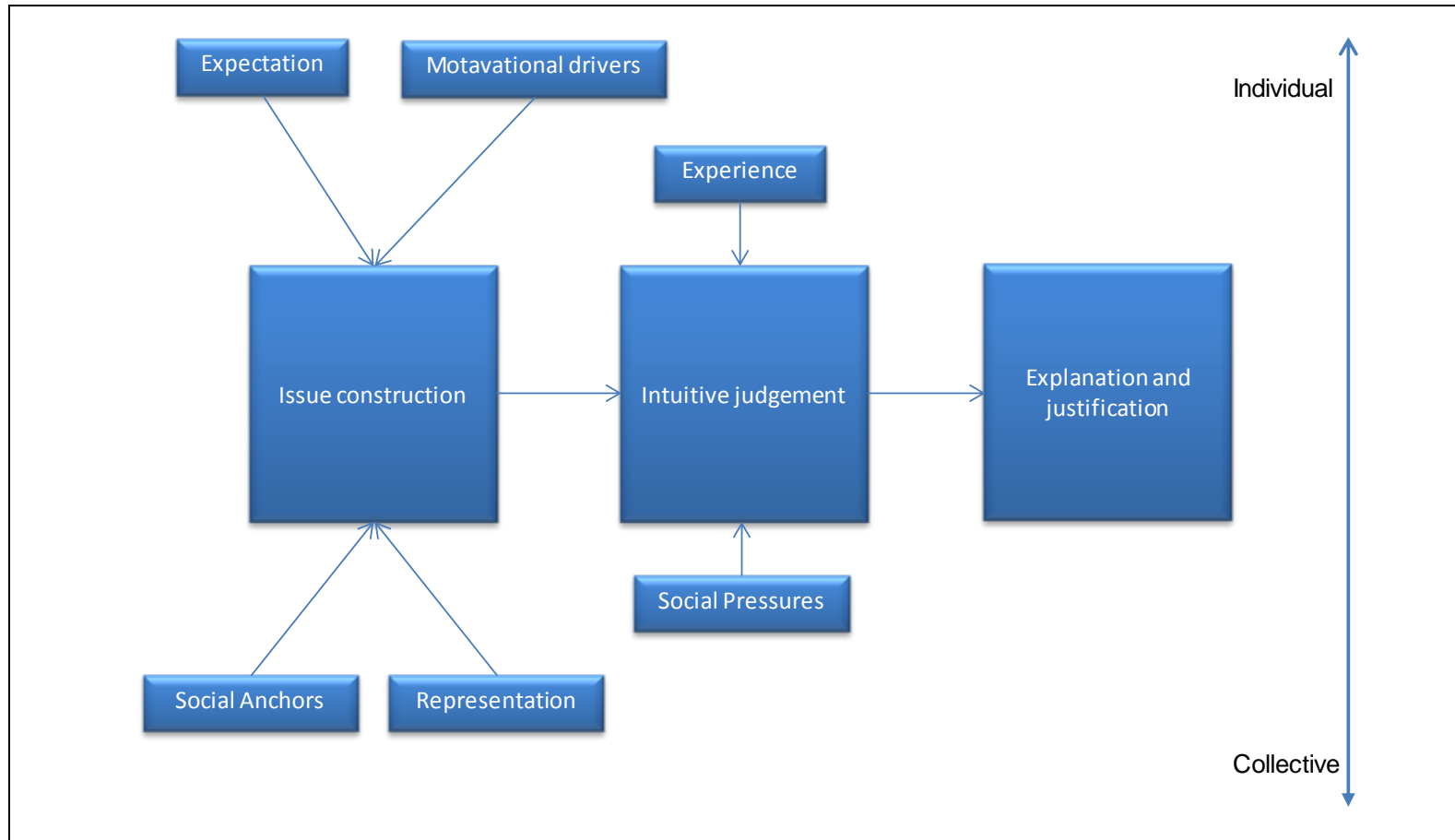
APPENDIX 3: ONLINE SURVEY QUESTIONNAIRE SCHEDULE

Part A - Dilemma situations

I am conducting research on motives when faced with ethical dilemma in the workplace. The study is aimed at finding out more what are these motives that drive decisions and why. This questionnaire will not be used to determine whether you are ethical or not, but it will help to establish a better understanding of what the drivers of decisions are. You are therefore requested to complete an on-line questionnaire. This should take not more than 20 to 30 minutes of your time.

Your participation is voluntary and you can withdraw at any time. No individual data will be analysed separately. All the data will be kept confidential. By completing the questionnaire, you indicate that you voluntary participate in this research. If you have any concerns, please contact me or my supervisor. Our details are listed below:

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Please read the case and select one option that you think would be best option in the situation or one that is nearest to what you believe. Please use X to tick your best option.

Department: _____

Age   _____

Gender   _____

Question 1

Your employee has a permanent condition that requires them to be on medication 100% that contains alcohol (0.1%). This employee has been working for you for the last 15 years. He is one of your best employees, and you don't want to lose him. However, your company has a zero alcohol policy, and you are certain that the alcohol testing machines only picks at 0.2% levels. What would your best option be given the choices below?

a)

Options	Your Choice
1. Negotiate for the employee not to be incapacitated and allowed to continue working.	S
2. Do nothing and tell the employee to keep quiet.	E
3. Report him and this would force the employee to be incapacitated	N

b) Please motivate briefly the reason(s) for your selection:

Question 2

One of your most reliable suppliers has been over-charging when invoicing and you are certain that it was intentional. However, he comes and confesses to have made a mistake, and offers to pay the company back. He is one of the few people in the industry that have that specific skill, and they are very reliable. You are in the middle of an important project under very tight deadlines. What would your best option be given the choices below?

a)

Options	Your Choice
1. Complete the project and do not use him again in future.	E
2. Accept the apology and continue with the relationship because you believe in giving people second chances.	S
3. Terminate the relationship and impact the project.	N

b) Please motivate briefly the reason(s) for your selection:

Question 3

Your customer has specific product requirements; however the system of checking this has gone on a major breakdown which will take approximately 6 months to fix. There's no other way of checking this before supplying to the customer. Your manager instructs you to make use of the opportunity to maximise sales as the quality penalties will not be in effect. What would your best option be?

a)

Options	Your Choice
1. Maximise sales as instructed by your manager	E
2. Caution the customer about the plan of action	N
3. Do nothing and continue as normal	S

b) Please motivate briefly the reason(s) for your selection:

Question 4

Your company is approaching end of its financial year, and your team is in line to get a good production bonus for the year because performance has been great during the year. Five days before the end of the financial year, a breakdown occurs whereby a water pipe that transports recycled water back into the plant burst and leaks the water into the national stream. For the pipe to be fixed, this requires the plant to be shut down for two days which will impact the production bonus. What will be your best decision in this case?

a)

Options	Your Choice
1. Stop the plant for the two days and fix the pipe to avoid contaminating	S

the national water stream	
2. Wait until the end of the month before fixing the pipe leak	E
3. Report the pipe leak to the authorities and get advised on the best alternative	N

b) Please motivate briefly the reason(s) for your selection:

Question 5

Your department is being audited by an external organisation. The auditors discover that production was over-declared by 20 000 tons because of a typing error on one of the reports. In order to correct this, the current month's production has to be reduced by 20 000 tons whilst the team is really looking to get the production bonus. What would your best option be?

a)

Options	Your Choice
1. Do not make the adjustment in the current month, and postpone it for the following month	E
2. Make the adjustment and impact the production bonus	N
3. Overwrite 20 000 tons from stocks as losses and do not impact the production bonus of the teams.	S

b) Please motivate briefly the reason(s) for your selection:

Question 6

One of your subordinates is constantly not meeting deadlines, and this impact your department's deliverable. Your manager is putting pressure on you to fire the person as they both have history together. What would you do in this case?

a)

Options	Your Choice
1. Follow the right performance management procedures in order to fire the person.	N
2. Give the person a second chance given his/her reasons for not meeting the deadlines	S
3. Move the person to another department where he/she will manage to cope with the deliverables.	E

b) Please motivate briefly the reason(s) for your selection:

Question 7

One of your colleagues is a close family friend of yours. He has been booked off-sick for a full week. You later discover that he was not sick, but went on a family holiday, and did not want to make use of his leave days. What would you do?

a)

Options	Your Choice
1. Report him to the manager	N
2. Keep quiet and do nothing for the sake of your friendship	S
3. Confront him and convince him to tell his manager the truth	E

b) Please motivate briefly the reason(s) for your selection:

Question 8

Your company has not been doing well in terms of achieving its production targets and this has negatively impacted the profits. One of your employees informs you that the new safety regulation that has been recently implemented has slowed down their processes of attending to breakdowns. Breakdowns that previously took them 30min to fix, are now taking plus minus 4 hours. What would you do?

a)

Options	Your Choice
1. Do not change anything, and encourage the employees to comply to the new safety regulation	N
2. Go back to how things were being conducted before the new regulation was implemented	E
3. Challenge the new regulation with the aim of achieving a win-win solution.	S

b) Please motivate briefly the reason(s) for your selection:

Question 9

One of your close friends works for a competitor company. He is conducting a benchmarking exercise and has requested information on your company, however you are not comfortable giving him the information that he has requested. You have informed your manager regarding the request, and he has given his approval to share the information, but did not follow the correct procedures for granting the approval. What would you do?

a)

Options	Your Choice
1. Share the company information because your manager has approved.	S
2. Do not share the information as you don't feel comfortable with your manager's approval	N

3.	Partly share the information that you feel comfortable with, and leave out sensitive company information which might turn-out not to be useful to your friend.	E

b) Please motivate briefly the reason(s) for your selection:

Question 10

One of your customers has logged a customer complaint regarding the quality of product supplied. After conducting a thorough investigation, you realise that the problem has always been there but it was never raised because the products have always been blended with another supplier's product. The customer further threatens to move the business elsewhere if the identified problem persists. In order to fix the quality problem, a huge amount of capital is required which the company cannot afford. What would you do?

a)

Options	Your Choice
1. Strike a deal with the other supplier to coordinate the blending of the two products in order to keep the customer satisfied.	E
2. Allow the customer to move his business given that you cannot meet the quality specifications.	N
3. Negotiate with the customer to still supply the available product at a different rate.	S

b) Please motivate briefly the reason(s) for your selection:

Question 11

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In the current or previous roles that you have occupied, have you experienced similar type of dilemmas? Please circle your choice?

Yes/ No

Question 12

Given these typical dilemmas, how would you normally approach (practical behaviours) and what motivates you to approach them this way?

Question 13

How does the following things impact the way you approach an ethical dilemma.

   a) Workplace environment as defined by the workplace culture and systems
   b) Situational context
   c) Own value system

Question 14

For you specifically, which of the above three has the highest influence on how you behave when faced with an ethical dilemma, and why do you think that is the case?

Question 15 – Understanding the decision drivers

Reflecting on your responses to the above questions, and the decisions that you have made in your current or previous roles, please select the top 3 motives that has influenced your choices from the list below.

Table 19: *Note.* Decision Drivers. Adopted from "Lew, C.C. (rev. 2010, May 31). Adcock Ingram: Decisions and Motives that Steer Acquisition, Ivey Case Teaching Note, 8B10C08"

No.	Motive	Description	Your rating
1	**Achievement**	To gain a sense of accomplishment or success.	
2	**Allegiance**	To demonstrate loyalty to your company or a cause or another person.	
3	**Alliance**	To associate yourself with another entity to act towards a common goal.	
4	**Altruism**	To follow unselfish concern for the welfare of others.	
5	**Autonomy**	To liberate yourself or your company from the influence of another person or entity.	
6	**Competiveness**	To gain or maintain victory or advantage over personal or organisational competitors.	
7	**Curiosity**	To strive to learn more about something or someone.	
8	**Growth**	To see yourself, the organisation or part thereof develop into a more meaningful or effective entity.	
9	**Organisational reputation**	To raise the esteem that the organisation has in the market place.	
10	**Material gain**	To come into possession of something material not previously possessed, for yourself or the organisation	
11	**Personal affirmation**	To affirm a personal understanding of yourself and your competencies.	
12	**Personal reputation**	To gain or improve a state of high esteem for self, including gaining respect and recognition.	
13	**Power**	To gain or strengthen influence over another entity or person.	
14	**Purpose**	To fulfil a deeper self-less meaning of existence.	
15	**Retribution**	To retaliate to someone for something wrong they have done.	
16	**Self-defence**	To protect yourself or your organisation from possible harm.	
17	**Status**	To improve your position or standing relative to another person or entity.	
18	**Stewardship**	To fulfil a fiduciary duty of taking care of what you have been entrusted with by others and for others, despite personal desires or gain.	

Question 16

Which Department do you work for? Please tick the relevant box with X?

No.	Department	
1.	Production	
2	Maintenance	
3	Human Resources	
4	Finance	
5	Planning & Development	
6	Integrated Operations	
7	Engineering	
8	Supply and Warehouse	

Question 17

What is your gender? Please tick the relevant box with X?

Male	
Female	

Question 18

What is your age group? Please tick the relevant box with X?

20 – 29	
30 – 39	
40 – 49	
50 – 59	

APPENDIX 4: DECISION DRIVERS RESULTS