ETHICS IN CONSTRUCTION INDUSTRY: PROJECT MANAGERS' CASE STUDY

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ABSTRACT

Business ethics and corporate governance have taken centre stage globally in the last decade due to the increasing unethical practices by private and public institutions. These unethical practices adversely affect the image of professionals and organisations with a resultant negative impact on the competitive advantage of the organisation. This study aims to assess factors contributing to unethical behaviours of project managers. The study was conducted in five provinces of South Africa including KwaZulu-Natal, Eastern Cape, Cape Town, Limpopo and Gauteng. The sample frame consists of construction project managers registered with South African Council for the Project and Construction Management Professions (SACPCMP) and Construction Industry Development Board (CIDB) Random sampling technique was employed in the selection of samples. A total number of thirty six questionnaires were analysed for the study. Descriptive statistics were employed for the analysis of data.

Findings include personal value, organisational culture and education are very influential factors on ethical decisions of a project manager. Furthermore, corporate value and individual values are the factors which most influence the ethical judgment of a project manager. Improving ethical practice for the professionals could improve ethical performance in construction projects and production efficiency in the construction industry in SA. Based on the findings of the study, ways to mitigate unethical conduct would be; practicing ethical conduct at all times will improve production, the levels of risk on projects will decrease and also an improvement in communication and transparency will minimize the levels of unethical conduct of the project managers in South Africa.

Keywords: Decision making, construction, ethics, project managers, unethical conducts

DECLARATION

This thesis is my own work. I have appropriately referenced the work of other people I have used. I have not allowed, and will not allow, anyone to copy my work with the intention of passing it off as his or her own work.

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DEDICATION

This thesis is dedicated to my husband, children and mother. Without your assistance and care I would not have developed the culture of continuous learning and development.

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LIST OF ABBREVIATIONS

CIDB   **- Construction Industry Development Board**

MS   **- Mean Score**

PM   **- Project Manager**

SACPCMP - South African Council of Project and Construction Managers Professional

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND

The wave of corporate scandals and financial crises globally has elicited calls from different quarters for sound corporate ethics and corporate governance in business. Enron and WorldCom are instances of global corporations that were exposed for unethical practices. The resultant effect is a lack of trust in corporations. Although the history of economic progress is rich with stories of fraud and unethical dealings, the public is however, more sensitive to them today than ever. Perhaps the ordinary citizen feels the consequences more directly (Connor, 2006).

Calls have been made for reforms to business practices to avoid such scandals. Hoo *et al.* (2008) suggested that the rising economic crime is a growing global threat to many businesses.

Elder, (2008) observes that the health of any economy depends on the ethical standards upheld by responsible business managers, leaders and entrepreneurs. Ultimately business depends on the conscience of business leaders and managers and that they should strive to become more aware of the implications of their actions (Elder, 2008 and McCausland, 2004).

There is, therefore, a global trend towards ethical business practices. World business today shows evidence of growing acceptance that business cannot be successful without sound moral values. Business needs ethics and ethics need business (Prozesky, 2001). It is believed that business success will depend among other factors on moral and ethical values. Prozesky (2001) states that business needs ethics if is to be sustainable and profitable and ethics needs successful business if it is to make a real difference to the things that trouble our conscience. He suggested that

there is a logical connection between strong moral values and human well-being. It can therefore be argued that the business world should now be seen as an epicentre of ethical creativity (Prozesky, 2007; Rossouw, 1997 and Bradley, 1998). In the increasing conscience focused marketplace of the 21st century, the demand for more ethical business practices and actions are increasing. There is a general consensus of the need to improve the ethical groundwork of organisations which are not only beneficial to them but positive to its employees too (Hero, 2003; McCausland, 2006 and Voster, 2006). Management malfeasance as seen from the corporate scandals in the business world has left unfavourable impressions about leaders, leadership and leadership authenticity (Gorge, 2003 cited by Toor *et al.*, 2007 and Al-sweity, 2013).

The construction industry is not left out of the global village; more importantly South Africa is an economy undergoing transformational and structural changes. Therefore the construction industry requires strong ethical foundations. Unethical practices have a huge impact not only on the economy but on human life. A series of unethical behaviours in the sector have been cited, such as substandard quality and specification (Liu *et al.*, 2004), collusive tendering, conflict of interest, unfair conduct, proprietary breach, bribery and environmental breach (Vee *et al.*, 2003). There have equally been criticisms of professionals in the construction sector of non-adherence to ethical standards, such as concealing construction errors and negligence. Therefore, there is a need for high level of professional conscience (Martins *et al.*, 1996) cited by (Fledderman, 1999) and leadership with good ethical behaviour in the construction sector. This is necessary because of the influence of the project leader on the team and project outcomes (Toor *et al.*, 2007).

The values which were taken for granted in the past are being strongly questioned (Rossouw, 1997). As the global business world faces this challenge of reconnecting the creation of wealth with the power of conscience (Prozesky, 2001; Spence and Rutherford, 2003 and Rossouw, 1997), the country can turn to business for wealth which can add action to ethical conviction (Prozesky, 2001; Burtis, and Bruns, 2015).

The current trend in business is that it is responsible to all its stakeholders; these being customers, employees, shareholders and investors, environment and community, and suppliers and government (Chakraborty *et al.*, 2004). It is also true that the satisfaction of key project stakeholders is the overriding measure of project success (Nicholas, 1989). To achieve these critical decisions which frequently demand ethical sensitivity, clear-cut guidelines are required.

Klien (1999) suggested that the project managers must emphasise ethical behaviour in all dealings with stakeholders and reduce or eliminate any condition likely to encourage unethical behaviour in project work. Project Managers must be innovative, make expeditious decisions which require that they are grounded in strong ethical values such as integrity, respect, trust and fairness otherwise; it could lead to unethical behaviours. The project leader affects the project processes and performance by his decisions and behaviour that are critical in every phase of the project (Aronson *et al.*, 2006).

1.2 PROBLEM STATEMENT

Project Managers face a great deal of ethical dilemmas and challenges in their decision making in form of conflict between individual values and business needs; leadership, power and politics with regards to ethics; unethical practices and unethical behaviour,

- **Conflict between individual values and business needs**
  There is no clear moral compass to guide leaders through complex dilemmas in business (Verschoor, 2005). However, by paying attention to ethics in the workplace, leaders and managers become aware of the way they should act and also realize earlier benefits such as the cultivation of strong teamwork and productivity.

- **Leadership, power and politics with regards to ethics**

  This study will seek to examine the criteria and determine whether their decision is largely influenced by norm (deontology) or perceived consequences (teleology).

- **Unethical practices**

  Deterrence of criminal acts and the early detection of ethical issues and violations will further help with the management of values associated with quality management, strategic planning and diversity management (Griseri, 1998).

- **Unethical behaviour**

  The study will also seek to verify the relationship between the ethical decision of the Project Manager, team code of conduct and project outcome.

1.3 RESEARCH QUESTIONS

- What criteria form the basis of ethical decision making among Construction Project Managers and to what extent does it determine behavioural intentions and judgments?
- What external factors (political power and leadership) influence unethical behaviour among Project Managers?
- What impact do Project Managers' ethical decisions have on the project team code of conduct in project environment?
- Is there a relationship between project team codes of conduct on project outcomes?
- What relevance does it have on Construction Project Managers in South Africa?

1.4 AIM AND OBJECTIVE

1.4.1 Aim

The aim of the study is to determine the factors contributing to unethical behaviour of project managers in the construction industry with the view to developing strategies to mitigate them.

1.4.2 Objectives

- To identify and assess theories on which ethical value systems and decision making are based.
- To identify and assess factors influencing the ethical decision of the Project Manager in South Africa construction Industry.
- To identify and assess the criteria which forms the basis of ethical judgments and behavioural intentions.
- To determine the impact of team code of conduct on project performance.
- To develop a flowchart to mitigate unethical practices in the South African construction industry.

1.5 SIGNIFICANCE OF THE STUDY

Although there has been significant research in the area of ethics, ethical decision making and business ethics, research in the ethical decision making and ethical leadership of the Project Manager in the construction industry has been limited. Research in the area of Project Management has focused more on the motivational factors and personal characteristics of the Project Manager and his/her competencies. Researchers have contended that leaders' behaviour can enhance or impede project performance (Rahman, 2008; Atuaehene, 2002; Barczak and Wilson, 2001 cited by Aronson *et al*., 2006). The strategic role and leadership of the construction Project Manager in the project environment and

importance of the sector to the economy requires a proper understanding of the ethical mind of the Project Manager and the impact on project outcomes. This lack relevant research of ethics in this sector and insignificant ethical training by the construction project manager professional body is a great motivation for this study.

The construction sector is one of the contributors of the GDP in South Africa and therefore is the agent of change and economic development. The continued growth of the sector hinges on the growth of the economy and the quality of the project leadership. The nature of the construction project team is unique. The Project Manager is the project leader and is responsible for project delivery. His/her decisions affect work behaviour and orientation and operations of the project team.

Ethical and socially responsible behaviour will play a steadily increasing role in a world of growing interdependence. Those who don't would lose their competitive edge as they betray the trust of employees, customers, government agencies and even competitors (Hickman and Silva, 1978 cited by Sudhir *et al.*, 2001).

(Griseri, 1998) observes "The new global economy we are moving into will force people to continually re-evaluate their values". Human values are the core scaffolding of the character of a human being. Every business decision reflects the presence or absence of these core values (Biery, 2001).

Corruption, fraud and other unethical behaviour hurt business and in turn affect the well-being of the society at large. The actions and decisions of Project Managers and business leaders are fundamental to reducing the impact of unethical practices.

The research will add value to decision making theory of ethics from the South African construction industry perspective and look at the broad range of factors influencing ethical decisions of Construction Project Managers and evaluating them within the confines of ethical theories and to determine what factors influence their decision making. Specifically, the research will determine the criteria for ethical judgments and behavioural intentions of these Project Managers. The study will

establish the relationship between ethical decision and performance which will be significant for academics and the construction industry.

It will add knowledge to the theory of project performance in the construction industry and increase awareness within the construction sector on the value of ethical decision and ethical leadership.

1.6 CONTEXT OF THE STUDY

Ethical theories provide the building block for the application of ethics to a specific area such as business or environment (De Villiers, 2004).

"Decisions are the coin of the realm in business" (Rogers *et al.*, 2006). Every success or failure is dependent on decision making either by the organisation, manager or individual.

Several ethical decision making models have been propounded. These ethical decision making constructs are not universal, and the differing theories could lead individuals making decisions/actions from mutually exclusive and conflicting ethical guidance (Liu *et al.*, 2004).

There are three major ethical decision making models/ theories that will be valuable to this research. Malhotra *et al.*, (1998), suggests that "some of these models have been advanced and received enthusiastically, but none have been pronounced definitive".

1.6.1 HUNT AND VITELL MODEL (1986, 1991)

In their 1986 model, Hunt and Vitell look at ethical decision making at these stages:

- Perception of ethical problem situation as trigger of decision making process
- Perception of alternatives qualified to resolve the ethical problem as well as the consequences of this action

- Evaluation of the alternatives, where the manager refers to higher moral obligation or rules (deontology) to arrive at a deontological evaluation or take a consideration of probability of consequences (teleology) for stakeholders
- The desirability of these consequences and the importance of affected stakeholders which leads to teleological evaluations.

Hunt and Vitell (1986) came out with what they call the 'heart of the model' which postulates that ethical judgments is a function of deontological and teleological evaluation. They added another intervening variable called 'intentions', the likelihood that any evaluation will be chosen. The model suggested that intentions can also be affected by teleological evaluation and may differ from ethical judgments.

A manager can perceive a particular alternative as most ethical and yet chose another alternative because of the consequences (Hunt and Vitell, 1986).

1.6.2 FERRELL AND GRESHAM MODEL (1985)

This model was denoted as 'individual decision making' construct. It implicitly includes moral evaluation and moral judgments. This relates to and has similarities with Hunt and Vitell's 'heart of the model' construct. It has some fundamental differences in that this model focused on the determinants of ethical decision making, while Hunt and Vitell (986) focused on the process (Srnka, 2004).

The model had three principal antecedents of ethical decision:

- Individual factors (values, beliefs, attitudes and intention)
- Significance of others in the organisation
- Opportunity for action – professional codes, corporate policy, reward and penalties (McDonald *et al.*, 1999).

1.6.3 TREVINO (1986)

Trevino (1986) model looks at the cognition of the individual (stage of cognitive moral development), individual moderators like locus of control of ego and situational moderators such as characteristics of work, organisational culture and immediate job context (McDonald *et al.,* 1999).

1.7 CONCEPTUAL FRAMEWORK

This study recognizes the various normative moral philosophies, including deontology and teleology as an important determinant of t h e ethical decision making process (Hunt and Vitell 1986). These models/ theories will be vital in this investigation to the determinant's ethical decision making process of Construction Project Managers in South Africa.

According to Hunt and Vitell (1986, 1991) the following will be useful in this research:

- Perception of ethical problem situation as trigger of decision making process
- Perception of alternatives qualified to resolve the ethical problem as well as the consequences of this action
- Evaluation of the alternatives, where the manager refers to higher moral obligation or rules (deontology) to arrive at a deontological evaluation or take a consideration of probability of consequences (teleology) for stakeholders and
- The desirability of these consequences and the importance of affected stakeholders which leads to teleological evaluations.

Ferrell and Gresham (1985) focus on 'individual decision making' construct. It implicitly includes moral evaluation and moral judgments. The study will focus more on these three principal antecedents of ethical decision:

- Individual factors (values, beliefs, attitudes and intention)
- Significant of others in the organisation

- Opportunity for action – professional codes, corporate policy, reward and Penalties (McDonald *et al.*, 1999).

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CHAPTER 2

LITERATURE REVIEW

2.1 OVERVIEW

This chapter articulates a historical review from previous studies to explain and identify the ethics and ethical decision of project manager in construction projects.

Ethics have an indisputable impact on the validity and financial maintainability of organizations. There is an understanding and a developing consent inside and outside the development business that corruption and other deceptive practices are endemic in the construction industry (Ameh and Odusami, 2010). Longstaff (2004) cited by Maree (2007) recommended that the domain of ethics is generally seen as a "moral scene" or a set of rules representing what is true or untrue.

Moral conduct isn't only the correct activity yet it is a need (Oyewobi *et al.*, 2011; Longstaff, 2004; referred to by Maree, 2007). Project Management is an imperative piece of the advancement of any nation. The profoundly aggressive business world has made enormous weight on the Project Managers to make progress. The weight is gotten from survival and benefit working in business associations which prompts and now and again propels the Project Managers to monitor untrustworthy practices (Mishra and Mittal, 2011). Professional ethics these days is considered as a prominent theme inside the development business (Mason, 2009). Ethical conduct in the construction industry is a subject uncommonly talked about transparently, likely on the grounds that for a great many people in construction it's the encapsulation of tossing stones at a glass house (Miller, 2011). Despite the fact that the construction industry is the key driver of ethics administration monetary development in numerous nations, the industry faces a substantial rundown of moral difficulties identified with conduct including lying, untrustworthy temporary workers, claims recreations (e.g. false claims, swelled cases), dangers, arrangement, conflicting circumstance, extortion, and professional carelessness (Ho, 2011).

Ray *et al*. (1999) determined that the essential worry of ethics is the significance and protection of proclamations about the rightness and unsoundness of activities specifically plan. Ethics in venture administration is a considerable issue and assumes a fundamental part in the success of a project.

In this part Hassim *et al*., 2010 have observed ethical conduct to be one of the significant zones in project management that has contributed to ethical issues in the project implementation. Ethics is essential as a result of it; project managers can position themselves inside the web of interrelationships among other parties in a project environment (Mondejar *et al*., 2007). Moral infringements in construction are never on the first page of the daily paper however they happen each day. As a rule, they cause genuine issues for proprietors and in addition numerous great organisations that decline to take part in the kinds of deceptive preconstruction obtainment exercises of their potential customers and general contractual workers (Miller, 2011). Vee and Skitmore, (2003) express that the business is by and large observed as risky, untrustworthy and heartless to the necessities of minority gatherings, for example, females and migrants.

2.2 CONCEPT OF ETHICS

Ethics according to the Macquarie dictionary has been defined "as a system of moral principle by which human actions or proposals may be judged good or bad or right or wrong" (KPMG, 2005). Velasquez (1998) refers to ethics as 'the activity of examining the moral standards of a society and ask how these standards apply to one's life and whether these standards are reasonable'. It involves inquiry into the nature of and grounds of morality, incorporates moral judgments, standards and rules of conduct (Taylor, 1975 cited by Chow, 2000). Ethical behaviour is not just the right thing to do but it is a necessity (Longstaff, 2004, cited by Maree, 2007).

2.3 ETHICS IN GENERAL

As indicated by Vee and Skitmore (2003), ethics by and large contain an arrangement of good standards by which human activities and proposition might be judged great or

awful, or being correct or wrong-the guidelines of direct perceived in regard of a specific class of human activities, and good standards starting at a person. Conduct that is right in one culture might be viewed as wrong in another. Indeed, even inside a similar culture, the translations might be equivocal and even opposing. Adding to this dubiousness is the way that people frequently make their own understandings of appropriate good and moral conduct (Hinze, 1993). Sinha *et al.,* (2007) articulated that ethics can't be instructed; rather what can be educated is a system for assessing moral issues and deciding. Ethics direction incorporates various measurements; accordingly, a coordinated way to deal with the structure appears to be suitable. Truth be told, ethics isn't about definition, set down the code of ethics nor build up how the code of ethics may be readied (Oyewobi *et al.*, 2011). Hassim (2010) and Pearl *et al.* (2005) state that ethics isn't just about essentially perceiving a target decent yet incorporates musings, dialect, thinking, procedures and judgment that educate the decisions individuals make in their day by day experience that influence their own prosperity and that of others. It isn't just about the way we carry on, think or act, there are likewise different components that influence the way we act either morally or dishonestly (Ayat, 2013).

In any case, Oyewobi *et al.* (2011) pronounced that ethics doesn't just perceive whether a goal is great however includes a watchful idea in settling on a feasible decision or distinguishing if the decision is correct or wrong. It's difficult to oversee moral esteems, it is an individual thing. It is about individual conduct and it is about benchmarks like quality guidelines. It's not worthy that staff act at work in any capacity they like. Further, the character of the association is seen by the clients and that impression can incorporate all shades amongst degenerate and moral. Ethics can be overseen if needed to (Holme, 2008).

2.4 CONCEPT OF BUSINESS ETHICS

Business ethics are defined as moral principles and standards that guide behaviour in the world of business (Ferrell and Fraedrich, 1991) and Galinsky (2008) describes business ethics as standards of behaviour in the workplace, as well as to customers

and partners. Business ethics is entrenched in the philosophical details of ethics (Trevino and Nelson, 1999 and Anna, 2017).

Literature on business ethics is divided in its views about motivation and the reason for business to have ethical dimension. Drawing upon Harrison (2001), there are two major schools of thoughts, firstly those who suggest that firms are profit generating institutions and therefore business ethics is yet another way to attract customers, secondly those who support corporate conscience and intrinsic motivation for the adoption of business ethics.

Business ethics is very vital as a moral compass for executive decision making in organisations. In business context, ethics influence corporate behaviour. In the popular mind, ethics is linked to honesty, integrity, trust, accountability, transparency and social responsibility (KPMG, 2005). Companies having a moral compass will leads to more effective business practice. Galinsky (2008) suggests that companies that follow certain moral codes are likely to attract better people who are willing to work harder for less compensation. The inherently greater tendency to dishonesty than honesty in a workforce means that one cannot assume that people in their organisation automatically know the difference between right and wrong. One needs to be proactive to influence them towards honesty. Moral behaviour needs to be in a supportive social infrastructure that promotes consistent behaviour. Businesses ethics is determined by the stakeholders. Acceptable behaviour within an organisation can also be right or wrong. Wood and Jones, 1995 cited by Lozano, 2005 suggested that "shareholders have great influence on corporate behaviour". External and internal stakeholders in a construction project environment such as the team, the client, the contractor, the owner organisation or suppliers, influence corporate behaviour and could impact on the outcome of a project. Trevino (1992), posits that corporate culture and organisational climate impact on moral development. The moral development is not localized to the individual members alone but to the entire project team and code of conduct (Reidenbach and Robin, 1991 cited by Vee *et al.,* 2003) The team code of conduct affects their influence and commitment to work. Two variables that affect the performance of a project team are the ethical leadership of the project

Manager and the Project environment reflected in the organisational culture and code of conduct. As an academic discipline Business Ethics is a research branch that tries to explain the phenomena from a moral view point (empirical business ethics), develop and change the practices of business life so that the human values would materialize better than before in business life (normative business ethics); and it studies the relations between the good and bad and the right and wrong and it means, applying the meta- analysis of moral conceptions, consideration of the phenomena of business life, meta ethics of business life (Takala, 2005).

Business ethics remains in the forefront of popular and academic journals as incidents that threaten the moral fibre of both private and public sector (Grell, 1993 cited by Glover *et al.,* 2002). There is a drive for managers globally to achieve sustainable and ethical business (Elci *et al.,* 2007 and Lashley, 2016). Therefore the importance of business ethics is based on the fact that businesses are playing a public role, business ethics can assist business in building a work ethos that will unify employees thereby boosting business performance and that business ethics help to overcome the discrepancy that individuals often experience between their individual values and the values pursued by business (Rossouw, 1997 and Lubbe 2017).

2.5 PROFESSIONAL ETHICS IN CONSTRUCTION INDUSTRY

A profession is an occupation in which an individual uses a scholarly aptitude in light of a set up collection of learning and practice to give a particular administration in a characterized territory, practicing autonomous judgment as per a code of ethics and in people in general premium (Uff, 2003 and Ayat, 2013). The profession has been depicted as a gathering of individuals composed to serve an assemblage of particular information in light of a legitimate concern for society (Vee and Skitmore, 2003). "Professionalism" is the ownership and self-ruling control of an assemblage of particular information, which when joined with honorific status, gives control upon its holders (Hamzah *et al.,* 2010; Mason, 2009 and Pearl *et al.,* 2005). "Profession is an occupation which requires both advanced study and mastery of a specialized body of knowledge

and undertaken to promote, ensure or safeguard some matter that noticeably affects others" wellbeing (Vee and Skitmore, 2003).

Professionals are not excluded from the basic moral practices, for example, commitments, obligations and duties - that are official on customary individuals (Johnson, 1991 and Robert, 2015) and are generally bound by an arrangement of standards, mentalities or kinds of character manners that control the way the profession is drilled. This has been named Professional Ethics (McDowell, 1991) and concerns potential issues going up against individuals from a profession or group and their effect on society (Johnson, 1991) with the suggestion that reasonableness ought to be credited to customers as well as partners and people in general (Johnson, 1991). One imperative perspective is that of irreconcilable situation, characterized as an intrigue which, if sought after, could shield professionals from meeting one of their commitments (Coleman, 1998). Another is the applicable professional right, named the "Right of Conscientious Refusal" (Martin and Schinzinger, 1996) which is the privilege of a worker to decline to share in unscrupulous lead when compelled to do as such by a business. This may happen in work or non-work circumstances and may not really include violating the law (Whitbeck, 1998). Faithful refusal might be finished by either just not taking an interest in the movement that one sees as offensive, or it might be finished with the expectation of making an open challenge that will attract thoughtfulness regarding the circumstance that one accepts isn't right (Whitbeck, 1998).

Abd Rahman (2008) says a professional must be capable in all criteria for the field of work. These criteria are:

- Highest scholastic capabilities

- Expert and specific learning in the field one is practising professionally

- Excellent manual or handy and scholarly abilities in connection to one's profession

- High quality work in manifestations, items, administrations, introductions, consultancy, essential or other research, authoritative, promoting or other work

tries.

- High standard of professional ethics, conduct and work exercises while doing one's profession (as a worker, independently employed individual, endeavour, business, organization, or association)

- A sensible measure of professional working knowledge in both of the above limits in fields of work one has professional capabilities.

For Project Managers, one of the basic components of their profession is the thought of ethics and social duty (Fryer, 1997). There ought to be no contention amongst profound quality and great administration (Willouby, 1994). "It is imperative that project managers direct their work in an ethical approach". This citation from the Preamble of the Code of Ethics for Project Managers (Walker, 1989) affirms the extent of legitimate moral direct required by Project Managers.

Construction contractors are additionally anticipated that would act in a moral way. A recent study of development professionals demonstrated the huge part moral direct plays in development contracting (Badger and Gay, 1996), an obvious reality considering that individuals working in the construction industry are twice as liable to manage noteworthy damage and five times more prone to be killed, than the normal for all enterprises (Davis, 2001). Being straightforward and practical is likewise said to be a principal part of professional respectability, particularly when making cases and gauges (Johnson, 1991).

Conversely with architects, in any case, construction contractors have disrepute for exploitative conduct, the principle issue being, as per a survey led by the diary Building Research and Information (Pilvang and Sutherland, 1998), the irregular state of debate amongst proprietors and contractors. There for the most part of poor conduct has been said to have begun from the inundation of new development organizations with new individuals who need fabricating development ethics, with greediness being one of the principle factors prompting exploitative behaviour (Riteley, 1990).

The South African construction sector has witnessed a boom in construction and the

increasing use of construction project managers as project leaders and managers. To ensure professional standards, the South African Council of Project and Construction Management Professionals (SACPCMP) was established by Act No. 8 of 2000 to provide for statutory registration and regulation of project and construction managers in order to protect public interest and advance construction and project management education. While there is a professional code of conduct, there is no evidence to indicate training for its members on ethical decision making.

2.6 UNETHICAL PRACTICES

A PricewaterhouseCoopers,(2005) study put the globally reported incident of fraud by senior management at 18%. In South Africa, the report of the joint transparency international and public sector survey indicated that South Africans are pessimistic about corruption in the country. This gloomy state of affair has led to the mounting global focus on business ethics.

A lot of factors have been adduced as to influence unethical behaviour of individuals and managers. Hoffman *et al.* (1998) suggests self – interest amongst managers impinge on individual ethics and results in unethical behaviour. Kochan (2000) sees The overbearing corporate emphasis on maximizing shareholders value without regard to the effect of their actions on all stakeholders as one factor influencing unethical behaviour. Some unethical behaviour has been seen among construction professionals, such as concealing construction errors, overpricing, colluding in tendering, fraud, negligence, substandard quality and unethical professional practice. Coleman (1998) mentioned conflict of interest as one of the unethical issues that affect professional ethics and affects the discharge of obligations and responsibilities. Unethical behaviours manifest itself in white collar crime (Ivancerich *et al.* 2005), corruption (Etzion 2002 cited by Tang *et al.,* 2008), faulty research data, bribery, monopoly (Ferrell and Gresham, 1985**),** greed (Sloans, 2002 cited by Tang *et al.*, 2008**),** theft, fraud and so on. These unethical behaviours have significant negative impact on the well-being of the individual, the business and the community (Carrol, 2015).

2.7   ETHICS THEORIES

As indicated by Bradburn (2001), there are two fundamental and expansive schools of thought the extent that ethics are concerned. Teleological ethics centre on the aftereffect of the choice made as opposed to the methods used to touch base at the choice and Deontological ethics theories centre on the methods for getting the choice or result. Different perspectives have been sent which buy in to these schools of thought.
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2.7.1. Teleological Ethics Theories

The ethical egoism theory suggests that it is an agent's moral obligation to do what promotes his own good or welfare (Copp, 2006). In other words, people should act in a way that maximizes their own long term interests, that is to say, it suggests putting one's interests first. This would imply that morality is of little value and therefore implies that there is really no need to be ethical. Utilitarianism, on the other hand, proposes that one should act in a manner that would achieve or maximize good for the greatest number of people. Wainwright (2005) states that utilitarianism prizes and pursues happiness wherever it is found, including the unworthy furthermore that this theory is guided by rules, namely that everyone is deemed equal irrespective of status, race religion or intelligence, that one always has to take into account the long term consequences of any decisions made and that the "good" must be measured in total. Bradburn (2001) defines Machiavellism as a form of expediency in that one would be expected to do whatever is necessary to get the job done. Scharfstein (1995) states that the theory of Machiavellism concerns disregard of scruples of every kind of deception or force. This theory, in essence, overlooks the existence of morals and is often used when tough decisions have to be made, for example, in times of crisis.

2.7.2. Deontological Ethics Theories

The philosopher Immanuel Kant suggested that one should act according to their duty. According to Wainwright (2005) Kant argued that one's actions should ultimately be expressions of one's basic commitment to a moral law that is incumbent on all rational

beings or that one should act in such a way that "the principles of the action could become a universal law in a world which one would have to live in." Kant's view, therefore, assesses morality by examining the nature of actions rather than goals achieved. This view supports the well-known phrase "do unto others, as you would have them do unto you". The second view proposes that one should act in a way that ensures "respect for others as rational and free beings" and that one should make decisions in a large part based on this respect.

The English philosopher John Locke held the view that everybody is born with certain natural rights, which cannot be taken away and should, therefore, be used as a fundamental grounding for decision-making (Bradburn, 2001). In other words, for whatever decision that has to be made, one has to first take into account any human rights. The Harvard philosopher, John Rawls developed the concept of "justice as fairness". Rawls (2005) states that "justice as fairness" is a status quo in which agreements reached are fair. In addition, it is a state of affairs in which the parties are equally represented as moral persons and the outcome is not conditioned by arbitrary contingencies or the relative balance of social forces.

Rawls (2005) also prescribed to the idea of the "veil of ignorance" when making decisions of an ethical nature and in which one does not know how various alternatives will affect one's case and that one is then obliged to evaluate a situation on the basis of general considerations. Under this idea, Rawls (2005) assumes that one does not know one's sex, race, nationality, individual tastes, place in society, fortune in natural assets, abilities, one's aversion to risk and economic or political situation. Decisions should therefore be made on a selfless view that has not been influenced by who we are, what we know and our motivations (Rawls, 2005). In essence, this view holds that decisions must be made with a level playing field in mind.

Ronald Green developed the Neutral Omni-partial Rule-Making (NORM) theory, which requires that conduct must be publicly known and acceptable to all persons in society as the underlying principle in which moral choice is evaluated (Bradburn, 2001). Green's view was that decisions must be made not on the majority but on the free consensus of

all the people in society. According to Gasparski and Ryan (1996), this approach defines an action as right if each person might reasonably think of that action as being accepted by anyone who looked at the matter in an informed and abiding form of conduct known by everyone and open to everyone in similar circumstances. This approach takes into consideration the beliefs and feeling of all concerned after which an impartial and neutral decision is taken. Bradburn (2001) states that, this theory sees the modern day manager as a rational individual who has to balance competing claims and make normative decisions.

2.7.3 Ethical Egoism

An action is ethically right if the results of that activity are more great than negative just to the operator playing out the activity. Egoism claims that it is essential and appropriate for an action to be morally right that it maximise one's self interest (Kahane, 2014).

2.7.4 Ethical Altruism

An activity is ethically right if the outcomes of that activity are more good than ominous to everybody except the agent. The term is used as the contrary of 'self-interest' or 'selfish.'(Singer, 2015).

2.7.5 Utilitarianism

An action is ethically right if the results of that action are more great than troublesome to everybody. Additionally, an action is correct or satisfactory in the event that its augments add up to utility for the general public or for the best number of individuals (Dale *et al.*, 2011).

2.8 DETERMINANTS OF MANAGER'S ETHICAL DECISION MAKING

Although some of these factors b e l o w have been empirically proven to influence ethical decision making, due to the various cultural and environmental factors,

findings may differ. This is more so, in the recent research linking business ethics to financial performance (Webly *et al.*, 2003). Similar research in the United Kingdom and Australia could not prove a link (Inglis *et al.,* 2006). This study looks at the construction project environment in South Africa and determinants of ethical decision of the construction Project Manager, the process and the link to project performance. Major ethical theories have suggested several determinants of ethical decision making.

2.8.1 Personal values

Ferrell and Gresham (1985) cited values and attitudes as factors influencing individual decision making in their contingency model of decision making. This has been corroborated by other researchers. Individual instrumental and terminal values as initial input for model of decision making incorporating ethical values (Fritzsche, 2007). Moral value of the individual is linked to ethical decision making (Argandona, 2003, Prozesky, 2001, Coughlan, 2005 and Benjamin, 2017).

2.8.2 Perception

Hunt and Vitell (1986) in the model of ethical decision identified perception as an antecedent of ethical decision making. Other scholars have equally demonstrated empirically the link between perception and intentions in a scenario involving ethical situation (Singhapakdi, Vitell and Franke, 1993 cited by Honeycutt *et al.*, 2001). Individuals in organisation make decisions and the quality of the final choices are largely influenced by their perception (Alex, 2014). This demonstrates that perception is linked to decision making. What the manager perceives will influence his decision (Robbins, 2007; Martin, and Miguel, 2014).

2.8.3 Culture

Culture is the matrix through which societal values are entwined. Culture constitutes a complex determining factor in ethics and affects distinct stages of the process (Srnka 2004). Different cultures produce different expectations which are expressed in

distinct ethical norms and this, in turn, influences ethical decision making (Ferrell and Gresham, 1985). Goolsby and Hunt (1992) and Singhapakdi and Vitell, (1990), distinguished between individual, situational and environmental determinants of ethical decision making.

2.8.4 Income level

Vitell, Singhapakdi and Franke (1999) indicated that salary is not a variable in ethical decision model. Prahad and Harmond (2002) suggest that the vast differences in ethical values, culture, poverty and corruption across levels of the economic and income pyramid have significant inputs on a manager's ethical decision. These will be further explored in this study.

2.8.5 Age

Age has been attributed to one factor that influences the ethical behavioural intentions of managers. Kohlberg`s (1981) typology of moral development level postulates that as one moves from lower levels to higher levels, ethical decision and behaviour increases in general. This is supported by (Weber and Green, 1991). Mason and Mudrack, 1996 reported a positive relationship between age and ethical sensitivity. Further exploration of whether the age or the years of experience will be made to evaluate these positions.

2.8.6 Education

Education results in greater sensitivity to different points of view and is linked to a person's stage of cognitive moral development. The relationship between education and ethical decision making is consistent with past empirical research on business ethics (Singhapakdi, Vitell and Franke, 1999 and Wotruba, 1995). Mason and Mudrack (1996) cited a link between demographic variables of age and education with ethical decision making (Srnka, 2004).

Some other researchers have disputed the link between education and ethical decision making. They suggest that there is not necessarily a link between education and good ethical decision (Evans *et al.,* 2008; Ritter, 2006 and Weber 1990). The conflicting result requires further investigation on the part of Project Managers.

2.8.7 Diversity

South African organisations and firms have a highly diverse workforce and are now faced with issues on how to manage this diversity effectively. The amalgamation of different culture within the society having different values and value systems makes management more cumbersome and difficult (Frederick, 2002 and Pereboom, 2014). The workforce diversity has important implications for management practice. It had a significant impact on the decision of managers particularly to ensure that the differences are recognized when decisions are made. Diversity can lead to good ethical decision making if positively managed as it can greatly increase creativity and innovation in organisation as well as improve decision making (Ishtiyaque, 2018). The South African business environments are becoming highly diversified and are likely to have significant impact on the ethical decision of the Project Managers.

2.8.8 Gender

Beltramini *et al.* (1984) suggested that business practices would significantly be affected by the increasing participation of women in the workforce. In a research, Singhapakdi *et al.* (1999) found that women have more ethical intentions than men. The influx of women in the workforce of South Africa and the government policy to empower women will change the dynamics of the workplace. Since Franke, *et al.* (1997) suggested an established role of women in ethical perception; this study will look at the impact of   gender on ethical decision among South African small business managers and verify the proposition that women have more ethical intentions than men.

2.8.9 Organisational culture

Organisational culture refers to shared beliefs by members of an organisation (Coughlan, 2005). Organisational ethical climate can influence individual ethical decision making (Navran, 1997; Morris, 1997; Schwepker *et al.,* 1997, Verbeke, *et al.*, 1996; Wu, 2002 and Marina 2014). Trevino (1986) and Schminke (2001) referred t o organisational culture as situational moderators on the factors influencing ethical decision making. Srnka (2004) terms organisational culture as an ecological factor of the nearer social condition that impacts moral basic leadership. Moral basic leadership is depicted in principle and research as a procedure containing a few phases, every one influenced by various individual, ecological, and situational factors (for review, see Bartlett, 2003; Loe, Ferrell, and Mansfield, 2000 and Conrad, 1993). Rest (1986) depicts the procedure of basic leadership as a four-part demonstrate in which an ethical specialist should first perceive the ethical issue, influence an ethical judgment, to put moral segments, with the person's state of mind about moral dilemmas being directed by separately and situational based mediators. A few authors created models that endeavour to clarify and expound on the insights engaged with moral thinking and assessment (e.g. Hunt and Vitell, 1986; Leidtka, 1991; McDevitt, Giapponi, and Tromley, 2007; Ferrell and Gresham, 1985; Ferrell, Gresham, and Fraedrich, 1989; Dubinsky and Loken, 1989). Hunt and Vitell's (1986) sense-making model plots two general psychological stages: a stage of perception, in which the decision maker sees the moral issues, the accessible options, and the normal results of choices; and a phase of deontological and utilitarian assessments and judgment. As per this model, the primary sense-making stage is influenced by individual experience, hierarchical culture, and the more extensive social condition. The broad research on the procedure of moral basic leadership for the most part affirms the contribution of relevant and individual factors in this procedure (Liedtka, 1991; Hunt and Vitell, 1986, Trevino, *et al.,* 1986, 1992, 2005 and Kelly and Elm, 2003). More vital with the end goal of the proposed look into is the finding that the ethical decision-making process starts with acknowledgment of the ethical components of an issue (Rest, 1986; Jones, 1991; Ferrell and Gresham, 1985 and Trevino, 1986). This stage is dependent upon a few variables, for example, the ethical force of the issue (Jones, 1991 and Zimmerman,

2015), distinctive individual moral overviews (Forsyth 1980; Douglas *et al.*, 2001; Forsyth, 1992 and Vitell and Paolillo, 2004), and natural impacts (Weber and Gillespe, 1998 and Kelly and Elm, 2003). A few examinations regard this first stage as the view of the moral issue (Hunt and Vitell, 1986) or the encircling of the circumstance (Liedetka, 1991). Each deliberative ethical decision model likewise contains a moment, moral assessment or judgment organize which is influenced by a few components, including the apparent significance of ethics (Singhapakdi, Vitell, Rallapall, and Kraft, 1996), the conceivable models or contents for activity accessible to look over, and the apparent sturdiness of various activities inside the pertinent setting (Hunt and Vitell, 1986 and McDevitt *et al.*, 2007).

2.9   FACTORS INFLUENCING ETHICAL DECISION

There are various factors that influence the ethical decision of a project manager. Following are the discussion of factors identified from Mwaponda (2009) regarding factors influencing ethical standards of managers and various authors have agreed on these factors.

2.9.1. Values

Values are stable evaluative beliefs that guide personal preferences to particular outcomes or courses of action in a wide range of situations (McShane and Glinow 2008). Values provide a "moral compass" that directs individual motivations and also individual decisions and actions. In many ways, values can be used to define individuals as well as corporate entities and they tend to be relatively stable and enduring. Jones (2004) states that, values are general criteria standards or guiding principles that people use to determine which types of behaviours, events, situations and outcomes are desirable or undesirable. Robbins; Odendaal and Roodt (2007) contend that values represent basic convictions that a specific mode of conduct or end state of existence is personally or socially preferable to an opposite or converse mode of conduct or end state of existence. They argued that values influence individual perceptions, attitudes and finally behaviour. In essence, this definition shows that values have a judgmental

element, that is to say, individuals will assess what is good or bad, right or wrong based on the values they hold.

Values are intimately connected with ethical and moral codes and determine what people think ought to be done (Brown, 1998). Brown (1998) further states that, values and beliefs are part of the cognitive sub-structure of an organisational culture, thereby tying individual values to the behaviour of the organisation as a whole. He pointed out that given this view, individuals and organisations that valued integrity and openness would, therefore, believe that they and others should act likewise because it is the "right thing to do". There are two types of values, terminal values and instrument values. Terminal values generally refer to end states or destinations, for example, what one wants to achieve in a lifetime or in the case of an organisation, in the long-run. Instrument values refer to preferred modes of behaviour or in other words the means by which the terminal values will be achieved.

Values may also be grouped into personal or individual values, shared or group values, organisational values and societal or community values. In a corporate entity, values are usually set-up into a value system or a hierarchy of value preferences. This hierarchy is usually developed from individual and group experiences, socialisation norms, religious influences and the specific traditions of the community to which one belongs. The values that have an ethical component are generally referred to as moral values and may include values such as honesty, reliability and truthfulness. The other values are generally competence values that focus on achievement, ambitions and intellect amongst others.

2.9.2 Individual Values

Most of an individual's ethical development occurs before entering an organisation and are usually learnt very early in life. The influence of family, church, community, and school will determine individual values. McShane and Glinow (2008) mention that there are three qualities that one has to possess to make effective ethical decisions. The first is the ability to recognize ethical issues as they arise and thereafter to reason through the ethical consequences of any decisions made. The second is the ability to look at

alternative points of view and decide what is right in a particular set of circumstances or put differently, the ability to reframe the issue. The third is the ability to deal with ambiguity and uncertainty or in other words, the ability to make a decision based on the best information available.

Haslam (2007) states that the most popular psychological model of values was developed by Schwartz and is based on studies covering the observation of values of thousands of respondents in a wide variety of countries. In the Schwartz model (Figure 2.1), the values are grouped into four generic and opposing approaches. The first approach which covers universalism and benevolence is described as self-transcendence or the motivation to promote the welfare of others and nature. Self-transcendence is opposed to the second approach, which is known as self-enhancement. This is where one is motivated by self-interest and covers power, achievement and hedonism. The third approach is that of openness to change or the motivation to pursue innovative ways covering self-direction, stimulation and hedonism. These are opposed to the fourth approach, which covers the values of conformity, tradition and security. These values are known as conservation values or the motivation to maintain the status quo.
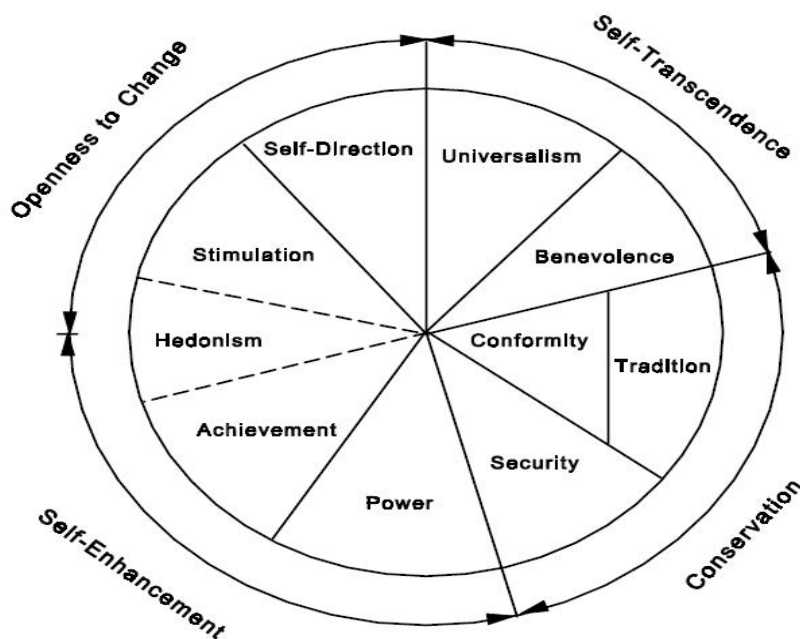
Fig 2.1: Schwartz Values Model – a psychological model of values based on observation (Bilsky, W., Jehn, K. A., 2002)

2.9.3. Corporate Values

Davis (2003) notes that corporate values serve as the defining elements around which norms, symbols, rituals and other cultural activities revolve and that values help employees form a social identity that provides meaning and connectedness. Corporate values are shared values that develop trust and link individuals in an organisation together. In order that these values are adhered to, they have to be stated as both corporate objectives and individual values. These values will then also form part of the identity of the organisation by which an organisation is known throughout its business areas. Different corporate entities and their respective leaders will have different sets of values that are to be applied to their specific business situations.

Davis (2003) further identifies four types of corporate values. The first group is core values, which are deeply ingrained principles that guide an employer's actions because they serve as cultural cornerstones. Aspirational values are the second group and these are the values a company needs to succeed but that the organisation currently lacks, for example, to carry out a new strategy. The third set is referred to as permission-to-play values, which reflect the minimum behavioural standards, required of any employee. The last set of values is accidental values, which arise spontaneously, take root over time, and would usually reflect the common interests and personalities of employees.

The core, aspirational and permission-to-play corporate values tend to be espoused. In other words, they are theoretical or ideological values. They tend to be those that are usually socially acceptable and represent those values the corporate entity would desire the employees to use or apply. The values that individuals practice are referred to as the enacted values and tend to be the same as accidental values. These values are relied upon most to guide decisions and actions in the corporate body. The challenge then for the organisation is, therefore, to drive at achieving a congruence of values in order to ensure that ethical decisions, guided by the core and aspirational values of the organisation, are made by the managers and employees of the organization (Zimmerman, 2016).

2.9.4 Moral Reasoning

Values alone do not determine one's actions. One's behaviour is also controlled by organisational and social culture, by the influence of significant other people in one's life and moral reasoning. Frederick (2002) states that Kohlberg developed the moral development theory, which is concerned with how people judge what is morally right, out of a study covering 58 males over a 12 year period. Kohlberg found that the moral reasoning abilities of individuals develop through an invariant or fixed sequence of hierarchical stages.

The theory holds that moral reasoning has six identifiable developmental stages, categorized in three stages (Table 2.1). Development through the stages results from cognitive disequilibrium that results when one's current thinking is challenged. Accordingly, one's reasoning becomes more independent as one develops through the stages. At the higher reasoning stages, decisions are more ethical because thinking is more consistent with the ethical principles of justice and rights. The ethical nature of the decision that one would make will be dependent on the level and stage of moral development of the individual.

The first level is Pre-conventional Morality or the self-centered level. Here the emphasis is on consequences rather than the principle and is teleological in approach. The second level is the Conventional Morality or conformity level and the third is the Post-Conventional or Principled Level. The nature of ethical decision that one would make will be dependent on the level and stage of moral development of the individual. According to Frederick (2002), Level 1 moral reasoning has an emphasis on consequences rather than the principle and tends to be "clear-cut in that either the decision is right or wrong or good or bad. In stage 1, the "Punishment-Obedience Orientation", the individual focuses on the physical consequences of an action and seeks to avoid punishment. In stage 2, the "Instrumental Relativist Orientation", the individual has a concern for personal satisfaction but a sense of duty also develops and the individual may consider the needs of others by repaying a favour.

Table 2.1 Kohlberg's Theory of Moral Development (Balbach, L., 1998)

Level One: **Pre-conventional** **Morality**	Stage 1: Punishment-Obedience Orientation
	Stage 2: Instrumental Relativist Orientation (Individualism, Instrumentalism, and Exchange)
Level Two: **Conventional** **Morality**	Stage 3: Good Boy-Nice Girl Orientation
	Stage 4: Law and Order Orientation
Level Three: **Post-Conventional** **Morality**	Stage 5: Social Contract Orientation
	Stage 6: Universal Ethical Principle Orientation

Table 2.1 indicate that in Level 2 moral reasoning the individual internalizes moral norms of important social groups and focuses on being loyal to the social order, that is to say, doing the right thing or what most people would do. Stage 3 is the "Good Boy-Nice Girl Orientation" where the individual perceives good as that which pleases others and is approved by them. In Stage 4, the "Law and Order Orientation", the individual sees their rightful behaviour as consisting of doing one's duty, showing respect for authority, maintaining the given social order and fulfilling agreed upon duties. Frederick (2002) asserts that research in business ethics has placed most business managers at

this level. In Level 3 moral reasoning, the individual has progressed beyond making decisions in order to identify with others' expectations and the individual makes decisions more autonomously. These decisions will usually be carefully reasoned and based upon principles of justice and rights. Stage 5 is the "Social Contract Orientation", where the individual may consider breaking or changing a law if it creates the greatest good for society. In Stage 6, the "Universal Ethical Principle Orientation", the individual identifies with decision making based on conscience in accordance with a self-chosen ethical principle that appeals to logical completeness.

2.9.5 Moral Intensity of the Situation

McShane and Glinow (2008) contend that three factors generally influence the ethical conduct of the organisation. First is what is referred to as moral intensity of a decision, second, the ethical sensitivity of the decision maker and finally the significant influences surrounding the decision as represented in Figure 2.2 below.
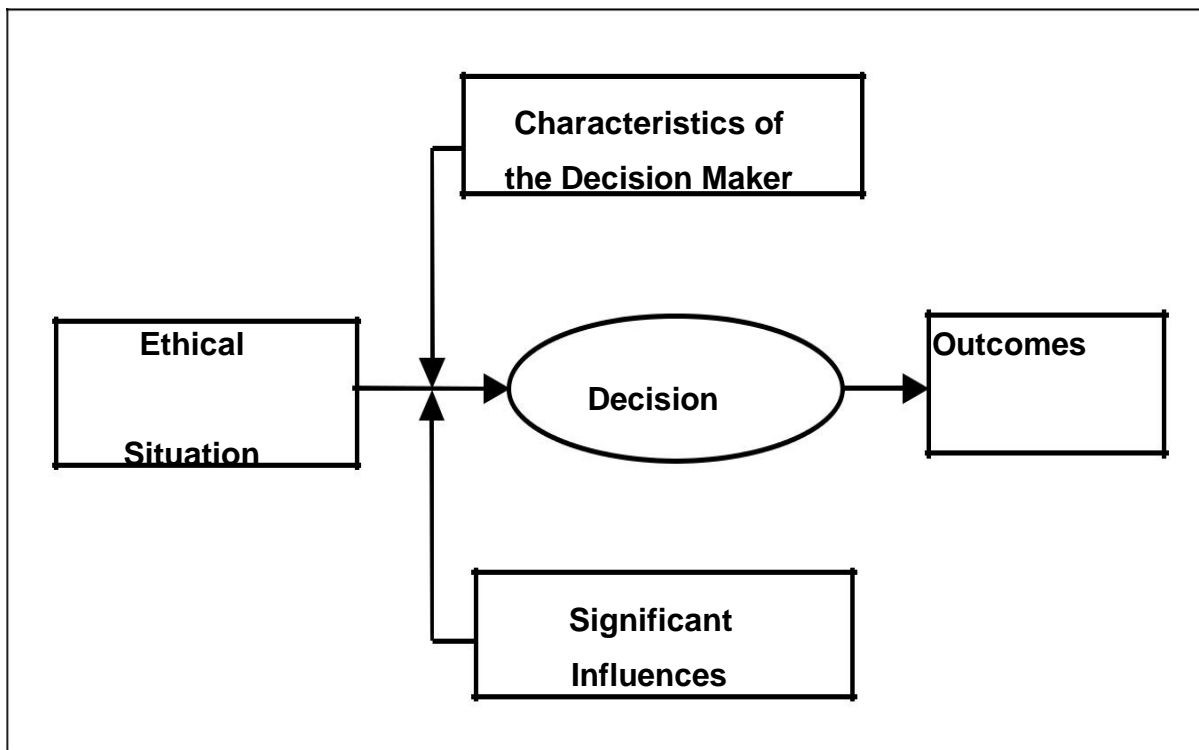
Fig 2.2 General Framework for Ethical Decision Making Process (Chonko, 2006)

Moral intensity relates to the ethical situation (Figure 2.2) in that it is part of the context related factors of significant influences and the term "moral intensity" refers to the degree to which a particular issue demands the application of ethical principles in a particular ethical situation. According to Crane and Matten (2003) the concept of moral intensity incorporates the idea that the relative importance of the ethical issue would itself have some bearing on the process that decision makers go through. He states that there are six factors that influence moral intensity.

The first is the "magnitude of consequences" which represents the expected sum of harms or benefits for those impacted by the problem, action or decision. If the effects are significant then the moral intensity of the decision maker should be higher. The next factor is the "social consensus" or the degree to which other people are in agreement over the ethical position of the problem, action or decision. The moral intensity of a specific issue should be higher if it is deemed unethical by others.

The "probability of effect" factor is the third factor. This represents the likelihood that the harms or benefits are actually going to happen. Where the possibility that the harms or benefits will materialize exists, the moral intensity shall be higher than where there is only an abstract possibility. Fourth, is the "temporal immediacy" factor, which relates to the speed with which the consequences of a decision are likely to occur. Where the outcomes are likely to take longer, the moral intensity of the problem, action or decision will be much lower.

The factor of "proximity" is the fifth factor to be considered. This factor relates to the feeling of social, psychological, cultural or physical closeness, of the decision maker and those who are likely to be impacted by the decision. The final factor is that of "concentration of effect" which assesses whether the impact will be concentrated on a few individuals or if the effects will be spread lightly over a large number of individuals. If one has a high degree of control over the decision, there is also a likelihood of a higher moral intensity. Other elements of the ethical situation may include opportunity, ethical decision history and moral intensity of the situation.

2.9.6 Ethical Sensitivity of an Individual

Jones and Bos (2007) state that ethical sensitivity is an ability to recognize that a particular situation poses an ethical dilemma. Ethical sensitivity also embodies intolerance towards unethical behaviours and a disposition to do the right thing. Jones and Bos (2007) also state that ethical sensitivity derives from experience generally and, further, out of experience in relationships and out of responsibility to others. Ethical sensitivity is therefore related to the characteristics of the decision maker (Figure 2.2).

Ethical sensitivity is a personal characteristic, which is a level of responsiveness or measure of a person's ability to determine whether a particular issue will raise an ethical dilemma. Persons with high ethical sensitivity have been identified as people who in many cases tend to have greater information on the issue at hand and tend to have higher empathy, that is to say, they tend to be more understanding of and ability to enter into other's feelings. The characteristics of the decision maker may include such factors as achievement motivation, need for affiliation, ego strength, locus of control, knowledge, experience, risk taking and possibly Machiavellianism.

2.9.7 Situational Influences

Situational influences relate to the context related factors of the significant influences (Figure 2.2), where context relates to the organisational context in which one is working that has an impact on ethical decision making. Specifically, the term situational influences relates to expectations and demands placed on individuals within the work environment that are likely to influence their perceptions of what is the morally right course of action to take (Crane, and Matten, 2004). There are three main factors, that is to say, systems of reward, authority and bureaucracy.

Crane and Matten (2003) state that there is considerable evidence to suggest that employee's ethical decision making is influenced by the systems of reward that they see operating in the workplace. Systems of reward relate to the fact that people are likely to do what they are rewarded for. An example is an organisation that gives commissions to the sales team. This motivates them to increase sales but may also motivate them to

act unethically to continue obtaining the commissions. In such an environment, adherence to ethical principles and standards are also less likely to be maintained unless individuals are motivated to do so by incentives.

The concept of authority suggests that people do what they are told to do, or what they think they have been told to do. Managers, therefore, have an influence on their subordinate's ethical behaviour by setting an example. Many individuals tend to look up to their superiors to determine what types of behaviour pass as ethical in the workplace. Despite this, the manager may behave in a way that leaves little option but for the employee to behave unethically. An example is a manager giving an employee a task that is extremely difficult to accomplish within the given deadline. The employee may be tempted to complete the work in an unethical manner.

Bureaucracy is a type of formal organisation based on rational principles, characterized by detailed rules and procedures, impersonal hierarchical relations, and fixed division of tasks (Crane and Matten, 2003). These characteristics lead to a number of negative effects on ethical decision making through suppression of moral autonomy, instrumental morality, distancing and denial of moral status. Suppression of moral autonomy covers situations where the employee is hidden from the challenge of making a moral decision by just following the prescribed rules and regulations. In addition, because organisations deploy employees for effectiveness in the pursuit of organisational goals, employees are only likely to exercise moral authority if there is conformity to rules established for achievement of those goals. This is referred to as instrumental morality. In larger organisations the effect of the decision may be very distant from the decision maker thereby shielding them from consequences of their actions. This is known as distancing. In some organisations, there is an effect of denial of moral rights. This is where the organisation has divided up the tasks in pursuit of efficiencies to the point that the totality of individuals as moral beings is lost. The organisation would, for example, refer to employees by human resource numbers in a database or refer to customers as a collection of traits represented by variables in a database. Significant influences on the ethical decision making process may further include the organisation, work, the law, economics, professionalism, technology and significant others in the individual's life,

that is to say, customers, peers, immediate supervisor, top managers, family, friends and other "opinion leaders".

2.9.8 Social Influences

In the work environment, social impact may take a collection of structures, for instance, offering data, endeavouring to convince, proposing a specific strategy, asking for some help, requesting something, or showing how something ought to be done (Oberlechner, 2007). Thusly, one can drastically impact others' moral basic leadership. Like situational impacts, social impacts are part of the critical impacts influencing ethical decision making (Figure 2.2). A portion of the particular types of social impact are compulsion, control, influence and assistance.

Compulsion limits the opportunity of the affected person. It is normally communicated as a risk to deny the other of something fundamental. Influence utilizes controversies and discourse to change the demeanours or conduct of someone else while help endeavours to amplify opportunity of decision of the impacted individual by making assets and data accessible. Control can take an assortment of structures. Ecological control is an adjustment in the options accessible in the earth of the individual being impacted. It leaves the other individual a decision; however the accessible contrasting options to the individual are lessened. This strolls from mystic control through which one would constrain the data made accessible to others and endeavours to change their inspirations

2.9.9 Impression Management

According to Oberlechner (2007), impression management is the term used to refer to when people aim to control the impressions that others have of them. Ethical impression management is used to define actions and events for others in ways that shed an ethically favourable light on oneself. The specific methods include reputation tactics and remedy tactics. When people use reputation tactics, they try to create a particular ethical image of themselves among others. They may engage in such strategies as

associating themselves with other persons or outcomes that they know to be perceived as ethical. Remedy tactics are used to remove or improve unethical impressions others may have of someone after that person has done something unethical. If caught in unethical behaviour, a person may engage in such verbal strategies as self-justification, excusing oneself, or apologizing. Self-justification of behaviour attempts to portray the behaviour as legitimate while an excuse aims at minimizing the professional's personal responsibility for the behaviour.

2.10   Ethical Judgments and Behavioural Intentions.

The linkage amongst judgment and behavioural intentions, characterized as a person's goal to act unquestionably, has been proposed in decision-making models (Jones, 1991 and Rest, 1986). Judgment, generally utilized as the most well-known marker of a mentality and its prescient legitimacy of consequent behavioural expectations, is a focal point of the theory of cognitive dissonance (Festinger, 1957). As per this theory, individuals are sound leaders who make progress toward consistency in all that they do. Subsequently, a consistency amongst state of mind and conduct is favoured on the grounds that it eases pressure and uneasiness coming about because of the contention of having an attitude– conduct irregularity (Festinger, 1957 and Manata, 2016).

The theory of reasoned action (Ajzen and Fishbein, 1980) and additionally theory of planned behaviour (Ajzen, 1991) both set that behavioural expectations are anticipated by states of mind, subjective standards and saw behavioural control. In a meta-logical audit of the review of arranged conduct, the mean relationship of conduct and behavioural goal was accounted for to be 0.49 (Armitage and Conner, 2001). In general, these theories share a typical guideline of the consistency of conduct and the judgments going before it. As such, if an activity is judged as ethical, one will probably frame an expectation to perform it. On the other hand, if an activity is judged as unscrupulous, one is less inclined to shape an expectation to participate in the activity.

Past research demonstrated that ethical value had the biggest effect on accounting for self-revealed behavioural aims over an assortment of situations (e.g. Cruz *et al.*, 2000

and Reidenbach and Robin, 1990). This finding has been so broadly recorded in business ethics writing that a few investigations have compared this measurement to moral judgment (e.g. Barnet and Valentine, 2004). Mixed discoveries exist concerning the relative impact of relativism and contractualism on behavioural goals. For instance, while contractualism was found to have the slightest logical energy of behavioural aims in a few studies (e.g., Reindenbach and Robin, 1990); it was found to have more effect than did relativism in bookkeeping situations (e.g. Cruz *et al.,* 2000).

Hunt and Vitell (1986) have characterized ethical judgments as "the conviction that a specific option is the most moral option." Based on this definition, ethical judgments require recognizing the most moral decision of optional choices. Moreover, they proposed that alternative options must be weighed with each other. Interestingly, it has been proposed by Rest (1986) that ethical judgments might be solitary. His meaning of ethical judgment as mental develop that describes a procedure by which an individual decides activity in a specific circumstance is correct and another activity isn't right. Like Hunt and Vitell, Rest invalidates the moral judgment settling on process as one decision among alternatives in any circumstance.

The former meanings of ethical judgments contrast from that of Hunt and Vitell (1986) as another imperative trademark. At the point when entirely read, they recommend a kind of twofold nature to ethical judgments. That is individuals judge ethicality as either "right or wrong" (Rest, 1986), "moral or exploitative" (Schwepker, 1999), or "great or terrible" (Valentine and Rittenburg, 2004 and Feldman, 2016). In view of the Hunt– Vitell model, Sparks and Pan (2010) characterize ethical judgment as a person's close to home assessment of how much some conduct or strategy is moral or dishonest.

2.10.1 Issue importance

Individual judgment is affected by the perceived importance of a problem (Robin, et al., 1996). Kreie and Cronan (2000) suggest that, where there are policies and procedures within organisations they are more likely to positively affect their behaviour in their

study, Issue importance has a considerable negative effect on attitude in the context of ethical judgments.

2.10.2 Materialism

Richins and Dawson (1992) characterize materialism as "the significance attributed to the proprietorship and securing of material products in accomplishing real life objectives or wanted states, and they conceptualize material esteems as including three spaces: the utilization of belonging to judge the achievement of others and oneself, the centrality of belonging in a man's life, and the conviction that belonging and their obtaining lead to bliss and life fulfilment." Materialism is unequivocally related to utilization, more so than some other identity quality, and the basic thought of materialism is the significance one joins to common belonging and the conviction that procurement of material belonging is a definitive wellspring of joy and life fulfilment (Ahuvia and Wong 2002; Belk 1985; Richins and Dawson 1992; Richins and Rudmin 1994; Sirgy 1998). Centrality recommends that individuals scoring high on materialism make possessions the focal point of their lives. The quest for bliss and fulfilment factor recommends that belonging are crucial to the person's prosperity (Muncy and Eastman, 1998).

2.11 IMPACT OF TEAM CODE OF CONDUCT ON PROJECT PERFORMANCE

The choice of a Project Manager influences the success or failure of the project. This is because the Project Manager is the single point of responsibility, who integrates and co-ordinates all the contributions of the team and guides them to successful completion of the project (Burke, 2006, Toor *et al.,* 2007). Project manage is responsible for organising the operational team in order to achieve the project delivery objectives of the scope, time, cost and quality (Burke, 2006). Lee (2008), cited the importance of the ethical leadership of the Project Manager in the project teams. They administer, improve efficiency, and control to ensure project objectives are achieved and balances between the ethical issues of the team, such as stakeholders` management, risk management, The orientation of the Project Manager will determine whether the team will have a buy-in to the project strategy

of the leadership or not. Toor, *et al.* (2007), pointed out that "the increasing emphasis on project management systems have elicited need for professionals with better management, leadership skills in construction projects, rather than technical, this is because leaders with positive values and practical high level of moral ethical standards are what is needed for project performance. Ethical leaders have clear value and are purposeful and establish quality relationships with team members. Such strong ethical leadership is vital to get the support of the professional teams. Leadership requires the rightness of the leader's action in relationship with the team members. The main motivating influence is the behaviour of the leader (Gonzalez, *et al.*, 2002).

The evaluation of the factor influencing project success and performance on the activities of the project manager has concentrated more on the technical and psycho- emotive factor without due consideration of the implication of ethical decision as an important determinant of project success, team code of conduct and resource management.

2.11.1 Quality

Human factors are the causative factor of the majority of quality-related issues. The issue of professional ethics plays an important role in quality-related problems in a construction project (Hamzah *et al.*, 2010). The industry has a reputation for poor quality and service, a bad safety record, and a history of broken promises and sharp practice (Tow and Loosemore, 2009). Unethical behaviour by the construction industry parties impacts the quality of projects (Hamzah *et al.*, 2010). Due to this unethical behaviour by the construction industry parties, there is a big impact on the quality of the project (Hassim *et al.*, 2010).

Hamzah *et al.,* (2010) mentions that quality is dependent on ethical behaviour, whereby quality and ethics have a common care premise which is to do right things right and it is a proven way to reduce costs, improve competitiveness, and create customer satisfaction. It is apparent that low ethical standards among construction professionals will lead to quality problems. Increase in unethical behaviour will see a consequential decline in the quality of project performance.

2.11.2 Time

Actual progress has to match or beat planned progress (Chan, 2001). All significant stages of the project must finish no later than their scheduled dates. Late completion of a project will not please the project sponsor, to say the least. Consistently failing to keep delivery promises cannot enhance the contractor's market reputation. Further, any project that continues to use resources beyond its planned finish date can have a knock-on effect and disrupt other projects that are either in progress or waiting to follow.

2.11.3 Cost

Every project should be controlled against detailed cost budgets to ensure that the expenditure authorized in its contract is not exceeded (Rad, 2002). Failure to follow the team code of conduct will reduce profits and the return on the capital invested, with risk of a more serious (even terminal) financial outcome in extreme cases. Even when there is no profit motive, strict attention to cost budgets and financial management is usually vital. A project might have to be abandoned altogether if funds run out before completion, in which case the money and effort already invested become forfeit and must be written off.

2.11.4 Company image

It is very difficult to build a company image, so it is vital to ensure that you are always in line with the team code of conduct in order for the image of the company to always be in a good state. There are even more fundamental reasons why quality is not an objective that can be downgraded or compromised. This becomes clear if we accept Juran's definition of quality as a service or product that is 'fit for the purpose for which it was intended' (Juran and Godfrey, 1999). No project manager should contemplate a result that is not 'fit for purpose'. Therefore 'quality' is not negotiable.

2.11.5 Safety

Safety performance of the construction industry still needs improvement. Hon *et al.* (2012) conducted an empirical study to investigate the difficulties of implementing safety practices in the repair and maintenance sector in Hong Kong. Should the team code of conduct be neglected, employees will be at risk of not knowing what the health

and safety requirements are (Lam, 1997; cited by Hung, 2012).

2.11.6 Scope

The lack of complying with the team code of conduct will lead to uncontrolled changes or continuous growth in a project's scope. This phenomenon can occur when the scope of a project is not properly defined, documented, or controlled. It is generally considered a negative occurrence. To avoid this from happening Project Managers should not make changes without proper impact analysis, and without reviewing schedule and cost implications. Project scope has been considered by other studies as additional factors that can yield a delay in a project if it's done in a correct manner (Ling *et al.,* 2004).

2.11.7 Reduction of Profit

Kennedy (2003) contends that unethical conduct negatively affects the profit of a construction project. Furthermore, their study reveals that not adhering to the code of conduct may have an impact on the performance of projects. These factors affect particular projects where Project Managers engage in unethical conducts.

2.11.8 Shareholders Value Decreases

A code of ethics on its own won't necessarily affect your work practices. Without implementation by your company, you might not even be aware of your company's ethics code. Traditionally, marketing activities focus on success in the product marketplace. Increasingly, however, top management requires that marketing view its ultimate purpose as contributing to the enhancement of shareholder returns (Day and Fahey, 1988). There is a possibility of a shareholder value decreasing, should the project manager engage in unethical conduct.

2.11.9 Levels of Risk on a Project

There are internal risks, arising from within the organisation, that are controllable and ought to be eliminated or avoided, should a code of conduct be adhered to. These risks could derive from illegal, unethical, incorrect, or inappropriate actions and the risks from breakdowns in routine operational processes by Project Managers. To be sure, companies should have a zone of tolerance for defects or errors that would not

cause severe damage to the enterprise and for which achieving complete avoidance would be too costly (Mohammad, 2012). But in general, companies should seek to eliminate these risks since they get no strategic benefits from taking them on. A project manager paying a bribe to secure projects may produce some short-term profits for the company, but over time such actions will diminish the company's value. This risk category is best managed through active prevention: monitoring operational processes and guiding people's behaviours and decisions toward desired norms.

2.12   CONCLUDING REMARKS FOR LITERATURE REVIEW

This chapter provides a broad background for the research on the unethical conduct, its causes and the impact of these behaviours. The study focuses on major topics that are important to the study. Firstly, the researcher defined ethics as the discipline dealing with what is good and bad and moral duty and obligation. Secondly, unethical behaviour among professionals was identified. A discussion on ethics in business was followed by previous literature that identified unethical conduct prevailing in the construction industry. Unethical behaviours have been noticeable to be extensive and their impact have been predicted to have an unfavourable impact in the construction industry as a whole if there are no measures in place to halt them from spreading.

CHAPTER 3
RESEARCH METHODOLOGY

3.1   OUTLINE

This chapter discusses the methodology which is used in this research. The methodology includes information about the research design, population, sample size, data collection, questionnaire design, questionnaire content, instrument validity, pilot study, and the method of processing and analyzing the data. The main instrument for data collection was questionnaire assessing the perceptions of respondents.

3.2 DEFINITION OF RESEARCH

Leedy and Ormrod (2014) define research as a method during which data is collected, analysed and taken employing a systematic manner thus to better recognize a sensation that is of interest to the researcher with provable facts.

3.3 RESEARCH DESIGN

The study was based on descriptive research method because it is used to assess the behaviour, characteristics, opinion of a specified group, or population and detail the account of prevailing conditions. It provides accurate description of the data variables (Leedy *et al*., 2005)

3.4 SOURCE OF DATA

3.4.1 Primary
Primary data was collected through questionnaires. Questionnaires are normally paper-and-pencil instruments that the respondent finishes. Questionnaires can be managed by means of mail and request the respondents to mail it back or given out in gatherings whereby a sample of respondents is requested to complete a sequence of questions.

3.4.2 Secondary

This data was sourced from literature, books, academic journals, periodicals. A literature study using this data source of information was undertaken with the aim of establishing, assembling and integrating theory with regard to the determinants of the ethical decision of the construction project manager, identifying the criteria in the decision process and the relationship between the ethical decision of the project manager and project performance.

3.5 RESEARCH METHODS

A combination of quantitative and qualitative data collection was used for the study.

Questionnaires, random sampling was employed to collect data for this study, targeting construction project managers. It was self-administered to a selected sample of construction Project Managers members of the South African Council of Project and Construction Management Professionals (SACPCMP) and Project Managers working for companies registered with the (CIDB) construction industry development board.

3.5.1 Quantitative Approach

A quantitative approach is most applicable for the study because the intention of the research involves explaining of various factors influencing the ethical decision of a project manager in construction industry, the criteria that form the basis of ethical judgements and behavioural intentions also the impact of unethical behaviours of project managers, furthermore to develop a method that will assist in mitigating the unethical conducts of project managers. Leedy et al (2014) guides that when the time available for the field work is short, the quantitative approach is proper hence the quantitative approach was chosen

3.5.2 Qualitative Approach

Qualitative approach has been employed in this research. To illustrate the purpose, descriptive and explanatory methods were used. The results of qualitative methods are more descriptive and the findings can be drawn relatively easy from the data. Leedy and Ormrod (2014) states that qualitative method is one of the simplest ways of conducting research as case study involves a deep dive and thorough understanding of the data collection methods. Leedy and Ormrod (2014) indicate that when you choose qualitative approach for the research study, the research must be able to serve one or more of the following purposes:

Descriptive – they can reveal the multifaceted nature of certain situations, settings, processing, relationships, systems or people.

Interpretation – they enable the researcher to gain new insights about a particular phenomenon

Verification – they allow the researcher to test the validity of certain assumptions, claims, theories or generalization within real world context.

Evaluation – they provide a means through which a researcher can judge the effectiveness of particular policies, practices or innovations.

3.5.3 Mixed Method

The use of mixed method for this study is because of its way that engages the utilization of qualitative and quantitative method to address a single research question (Kumar, 2005). Fellows and Liu (2003) also attest to that furthermore, they state that such combination is often pleasantly powerful to grasp insights and results

3.6   POPULATION AND SAMPLING

The category of respondents is private sector which consists of respondents from the South African Council for the Project and Construction Management Profession and Construction Industry Development Board stemming from the fact that building construction technology processes in South Africa are the same. Five provinces were

selected to represent the entire country as a sample for the study. These include the Eastern Cape, Gauteng, KwaZulu-Natal, Limpopo, and Western Cape.

3.6.1 Sample

A sample in research is a subset of a population that is used to represent the entire group as a whole. The researcher can use the results obtained from the sample to make a summary about the entire population.

3.6.2 Sampling designs

There are two major sampling approaches recognized by (Leedy, *et al*., 2014):

- Probability, and
- Non-probability sampling approaches.

Probability sampling is the type which allows each part of the population to be represented in the sample.

A probability random sampling method was employed for the selection of the sample. This allows each potential member of the frame to be selected.

3.6.3 Sample frame

The composition of sample frame is presented in Table 3.1.

Table 3.1 Composition of the private sectors sample frame

Composition	Number
SACPCMP	2804
CIDB (Project Managers working for companies registered with CIDB)	16

3.6.4 Sample size

When the sample is large in size, the chances for the mean and standard deviation to be representative of the population's mean and standard deviation are high. For selecting the sample size Leedy, *et al.* (2014) has advised the researchers to try and maximize the sample size by following the guidelines below:

- For small populations with fewer than 100 people or other units, there is little point in sampling, survey the entire population;
- If the population size is around 500, 50% of the population should be sampled; If the population size is around 1 500, 20% should be sampled, and
- Beyond a certain point (at about 5 000 units or more), the population size is almost irrelevant and a sample size of 400 should be adequate.

3.6.5 Non-probability sampling

In non-probability sampling, isolated components of the population are not equally represented and members of the population have minor or no chance of being sampled.

3.6.6 Sample stratum and sample selection

The sample stratum and selection of sample size are discussed together. They are discussed based on the Project Managers in the construction industry.

Sample – Project Managers

Project Managers have a very large population. Therefore, it will not be feasible to survey all of them in the country. In order to achieve fair representation, SACPCMP and CIDB in the Eastern Cape, Western Cape, Gauteng, Limpopo and KwaZulu-Natal were selected. The questionnaires were administered via email, hand delivered and through conferences. These are also provinces in which the use of construction project managers and the activity is high or on the average.

The sizes of each sample stratum within the total population for Project Managers are represented in Table 3.2.

Table 3.2 Project Managers sample size

Chapter	Population	Sample size
Gauteng	1739	347
Limpopo	196	100
Eastern Cape	575	287
KwaZulu-Natal	748	374
Western Cape	586	293
Total		1401

3.7   STRUCTURE OF QUESTIONNAIRE

The questionnaires were structured in two sections. This first section relates to demographic data using dichotomous and multiple choice single response scales. The second consists of study variables regarding the ethical decision making faced by the construction project manager.

Closed-ended questions were quantitatively analysed while open-ended questions were qualitatively analysed. The questions were phrased with a possible response continuum linked to a five-point Likert scale (1=strong disagree to 5 = strong agree), and open and closed ended questions.

To have a quality communication instrument, the respondents were encouraged to provide accurate responses, encouraged to provide adequate the amount of information, discouraged from not responding to any question, discouraged from discontinuing the participation. A positive attitude about survey participation was instilled in the respondents.

The questionnaire content was developed from existing literature on the topic. The questionnaire design, for example, the wording of the measurement questions, order, type, and instructions were well structured. In order to have a quality communication

instrument the following was accomplished (Cooper and Schindler, 2001), the list of respondents was obtained from the (SACPCMP) register and through various construction companies registered with (CIDB).

3.8   DATA RECORDING

An adequate data conditioning and analysis using statistical data techniques was undertaken. This provides a perspective and a set of tools to search for clues and patterns. The results were interpreted and presented as descriptive and inferential statistics.

Data processing included editing and coding. Editing implies checking and correcting the data gathered in a systematic way to ensure accuracy and completeness. The coding process includes identifying and categorizing of each response on a data processing format with convenient title or symbol.

3.9   DATA INTERPRETATION AND ANALYSIS

All statistical results are interpreted on the basis of the research theory.
The following descriptive and inferential statistical tools were applied to data conditioning and analysis which includes percentages, mean scores, standard deviation, Cronbach's alpha coefficient and factor loading, with the support of using the SPSS statistical package.

3.9.1 Descriptive Statistics

Descriptive frequency statistics: This data analysis tool revealed the respondents' perception levels. It is useful for inspecting the range of responses and their repeated occurrence.

The mean is defined as a measure selected in such a way that the sum of unconventionality from it is zero (Montgomery and Runger, 2007). The MS is succeeding by allocating numerical values to respondents‟ rating of factors, which can

be, for example: very high (5 points), high (4 points), moderate (3 points), low (2 points), and very low (1 point). The mean score (MS) for each factor is then calculated using the following equation:

$$MS = \sum \frac{(f \, xs)}{N} \quad 1 \leq MS \leq 5 \ldots\ldots\ldots \quad (i)$$

Where: MS = mean score

N = the total number of responses concerning that factor

S = the score given to each factor by the respondents and ranges depending on the ordinal scale in use (1 − 5).

F = the frequency of respondents rating (1 − 5) for each factor

The t-test was used to test for any agreement in the ranking of the individual factors between various groups of variables, at a 5% level of significance.

3.9.2 Inferential Statistics

The inferential analysis was employed to analyze the summarised scores of responses from the primary survey respondents to reveal the actual support for the topic.

The location of 'unsure' responses in the midpoint of the scale may be justified in that the respondents are considered to be neither convinced nor not-convinced, as they are considered as they are neutral.

	1	2.6	3.4	5
	Weak		moderate	strong
Support	Low		average	high
Opinion	negative/minor		neutral	positive/major
Score	0 - 29		30 - 69	70 - 100
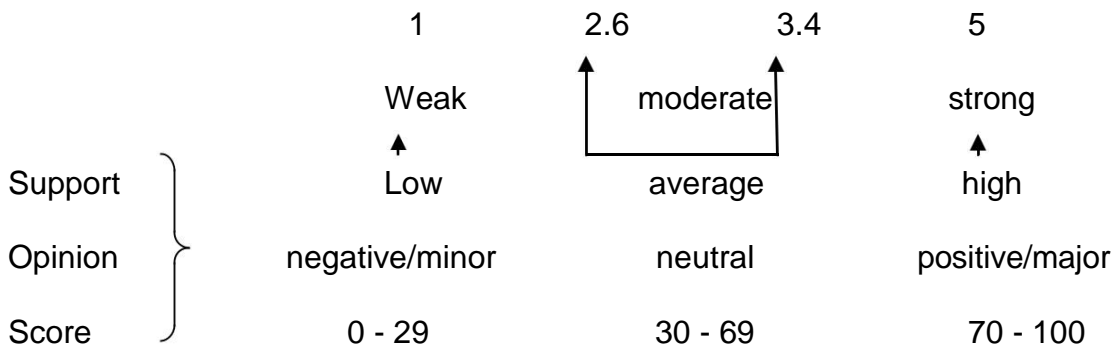
Figure 3.1: Scoring of responses on the Likert scale

Figure 3.1 is an example of how the summated score of one of the sub-problems responses was calculated.

[(1 responses x 1) + (1 responses x 2) + [(0 responses x 2.5) + (16 unsure responses

x 60 responses x 5

3)] + (23 responses x 4) + (19 x 5)]

= 79.3%

Inferential statistical techniques enable judgments, conclusions, estimations and predictions to be made from the data collected.

3.9.3 Section Analysis

The section that follows analyses the scoring patterns of the respondents per variable per section. The results are first presented using summarized percentages for the variables that constitute each section. Results are then further analysed according to the importance of the statements.

3.9.4 Factor Analysis

Factor analysis is a factual strategy whose primary objective is information diminishment. A run of the mill utilization of factor analysis is in study inquire about, where an analyst wishes to speak to various inquiries with few theoretical variables. Factor analysis can be utilized to set up whether the three measures do, truth be told, measure a similar thing. Provided that this is true, they would then be able to be consolidated to make another variable, a factor score variable that contains a score for every respondent on the factor. Factor procedures are pertinent to an assortment of circumstances.

3.9.5 Kaiser-Meyer-Olkin (KMO)

Kaiser-Meyer-Olkin (KMO-measure of sampling adequacy) Test is a quantity of how suited your data is for Factor Analysis. The test measures sampling adequacy for each variable in the model and for the complete model. The statistic is a measure of

the proportion of variance among variables that might be common variance. The lower the proportion, the more suited your data is to Factor Analysis.

KMO returns values between 0 and 1. A rule of thumb for interpreting the statistic:

- KMO values between 0.8 and 1 indicate the sampling is adequate.
- KMO values less than 0.6 indicate the sampling is not adequate and that remedial action should be taken.
- KMO Values close to zero means that there are large partial correlations compared to the sum of correlations. In other words, there are widespread correlations which are a large problem for factor analysis.

If two variables share a common factor with other variables, their partial correlation (a_{ij}) will be small, indicating the unique variance they share.

$a_{ij} = (r_{ij} \bullet 1, 2, 3, \ldots k)$

$KMO = (\Sigma\Sigma\ r^2\ ij) / (\Sigma\Sigma\ r^2\ ij + (\Sigma\Sigma\ a^2\ ij)$

If $a_{ij} \cong 0.0$ the variables are measuring a common factor, and $KMO \cong 1.0$

If $a_{ij} \cong 1.0$ the variables are not measuring a common factor, and $KMO \cong 0.0$

Table 3.3: Interpretation of the KMO as characterized by Kaiser, Meyer, and Olkin

KMO Value	Degree of Common variance
0.90 to 1.00	Marvelous
0.80 to 0.89	Meritorious
0.70 to 0.79	Middling
0.60 to 0.69	Mediocre
0.50 to 0.59	Miserable
0.00 to 0.49	Unacceptable

3.9.6 Bartlett's test of sphericity

Calculates the determinate of the matrix of the sums of products and cross-products (S) from which the inter correlation matrix is derived. The determinant of the matrix S is converted to a chi-square statistic and tested for significance. The null hypothesis is that the inter-correlation matrix comes from a population in which the variables are non-

collinear (i.e. an identity matrix) and that the non-zero correlations in the sample matrix are due to sampling error.

<u>Chi-square</u>

$$\chi_2 = -[(n-1) - 1/6 (2p+1+2/p)] [\ln S + p\ln(1/p) \Sigma l_j]$$
p = number of variables, k = number of components, l_j = jth eigenvalue of S
df = (p - 1) (p - 2) / 2

3.10   VALIDITY AND RELIABILITY

Leedy and Omrod (2014) highlight validity and reliability as two factors that are vitally important when considering the measurement of data:

Validity is used to determine whether research measures what it intended to measure and to approximate the truthfulness of the results. This refers to the functionality of the tool and accuracy of the reading by the instrument and reliability is a way of assessing the quality of the measurement procedure used to collect data hence the information collected from the responses were analysed with SPSS rendition 24.0

Reliability reflects the extent of error of a result. It is concerned about being accurate. Leedy *et al.*, (2005) state that the measuring instrument must be consistent. Therefore, reliability is about the question: with what accuracy does the measurement, test account or questionnaire measure what it is intended to measure?

3.11 CONCLUSION SUMMARY

This chapter articulates the main methodologies used in foregoing studies and the technique used in this research which is questionnaire survey in order to achieve the required objectives.

CHAPTER 4

STATEMENT OF FINDINGS, INTERPRETATION AND DISCUSSION OF THE PRIMARY DATA

4.1 PREVIEW

This section displays the outcomes and talks about the discoveries acquired from the questionnaires in this study. The survey was the essential apparatus that was utilized to gather information and was conveyed to 1401 respondents. The information gathered from the reactions were analysed with SPSS rendition 24.0. The outcomes will show the engaging insights as diagrams, cross classifications and different figures for the quantitative information that was gathered. Inferential systems incorporate the utilization of relationships and chi-square test esteems; which are deciphered utilizing the p-values.

4.2 RESPONSE TO QUESTIONNAIRES

Three questionnaires were used for the study - two main questionnaires, and a validation questionnaire.

4.2.1 Response to phase one questionnaire
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Table 4.1: SACPCMP Project Managers response rate

Chapter	Sample size (No.)	Questionnaires received (No.)	Response rate (%)
Eastern Cape	287	11	3.8
Gauteng	347	12	3.5
KwaZulu-Natal	374	23	6.1
Limpopo	100	6	6.0
Western Cape	293	8	2.7

Table 4.2: CIDB Project Managers response rate

Chapter	Sample size (No.)	Questionnaires received (No.)	Response rate (%)
KwaZulu-Natal	16	9	56.3

Questionnaire success rate = Questionnaires received × 100 ÷ (questionnaires administered - returned questionnaires).

$$60 × 100 ÷ 1\ 401 = 4.3\%$$

The questionnaire response rate for phase 1 is 4.3%. Based upon the number of questionnaires received, the response rate can be deemed sufficient for the statistical analyses that are to be conducted.

4.3   THE RESEARCH INSTRUMENT

The research instrument consisted of 49 items, with a level of measurement at a nominal or an ordinal level. The questionnaire was divided into 5 questions which measured various themes as illustrated below:

- Biographical data
- Effectiveness of theories on which ethical value systems and decision making are based in the South African construction industry
- Determinants of manager's ethical decision making
- Factors influencing ethical judgments of a project manager
- Factors impacting the unethical behaviour of a project manager on projects

4.3.1 Response rate

The following steps were taken in order to improve the response rate:

- The respondents were assured of anonymity;
- The covering letter made a kind appeal to the respondents;
- The length of the questionnaire was kept to a minimum for a study of this magnitude, and

- Phone calls were constantly made to remind respondents to complete the questionnaire.

4.4 DEMOGRAPHIC DATA OF RESPONDENTS TO PHASE 1 OF THE QUESTIONNAIRE

This section designates the demographics of the respondents surveyed in this research. It reveals their experience, expertise, age, the kind of organisation they work for and their status.

Section A: Biographical Data

4.4.1 Respondents age distribution

This section summarizes the biographical characteristics of the respondents.

Table 4.3: Age distribution of respondents.

			Please indicate your gender		Total
		Age distrribution	Female	Male	
Please indicate your age (years)	25 - 30	Count	5	6	11
		% within Please indicate your age (years)	45.5%	54.5%	100.0%
		% within Please indicate your gender	33.3%	13.3%	18.3%
		% of Total	8.3%	10.0%	18.3%
	31 - 40	Count	9	14	23
		% within Please indicate your age (years)	39.1%	60.9%	100.0%
		% within Please indicate your gender	60.0%	31.1%	38.3%
		% of Total	15.0%	23.3%	38.3%
	41 - 50	Count	0	7	7
		% within Please indicate your age (years)	0.0%	100.0%	100.0%
		% within Please indicate your gender	0.0%	15.6%	11.7%
		% of Total	0.0%	11.7%	11.7%
	> 50	Count	1	18	19
		% within Please indicate your age (years)	5.3%	94.7%	100.0%
		% within Please indicate your gender	6.7%	40.0%	31.7%
		% of Total	1.7%	30.0%	31.7%
Total		Count	15	45	60
		% within Please indicate your age (years)	25.0%	75.0%	100.0%
		% within Please indicate your gender	100.0%	100.0%	100.0%
		% of Total	25.0%	75.0%	100.0%

Table 4.3 reveals the overall frequency of respondent's age, the ratio of males to females is 1:3 (25.0%: 75.0%).

Within the age category of 31 to 40 years, 60.9% were male. Within the category of males (only), 31.1% were between the ages of 31 to 40 years. This category of males between the ages of 31 to 40 years formed 23.3% of the total sample. Respondents that were over the age of thirty predominate in the sample investigated at (82%). It can be concluded that respondents that make up the survey sample are mature, have a high probability of being responsible, and sufficiently experienced.

4.4.2 Sector distribution

Table 4.4: Respondents' sector distribution

Sector	Frequency	Percent
Private	23	38.3
Public	37	61.7
Total	60	100.0

Table 4.4 presents the sector in which the respondents worked in. There were marginally more respondents working in public (61.7%) compared to private (38.3%). Their views suggested recommendations to both public and private organisations.

4.4.3 Location of a project

The figure below reflects the respondent's 5 provinces selected for this research.
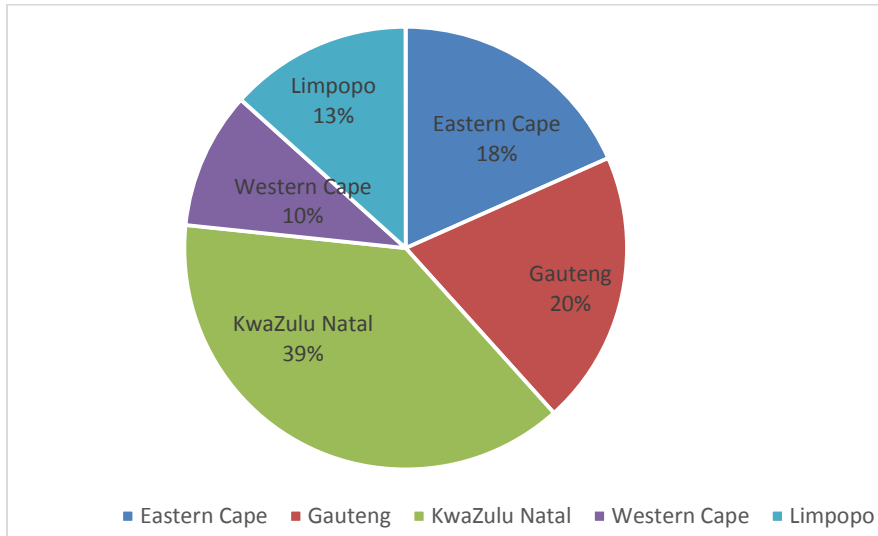
Fig 4.1: Location of a project.

Figure 4.1 presents the location in which the respondents were operating in. KwaZulu-Natal predominates (39%), followed by Gauteng (20%), the Eastern Cape (18%), Limpopo (13%) and Western Cape (10%). It is observed that almost all provinces in the country were involved in the data gathering, which implies that the results can be generalised throughout the country.

4.4.4 Number of years of organisation

Table 4.5: presents the number of years of organisation

N	Minimum	Maximum	Mean	Std. Deviation
58	10	135	22.24	17.318

On average, organisations have been around for more than 20 years. This is a useful statistic as it indicates that respondents have been with companies that have had a fair degree of experience in the field also organisations might have undertaken enough projects and had experienced staff to enable them to answer the questions contained in the questionnaire regarding the industry.

4.4.5 Education levels of the respondents.
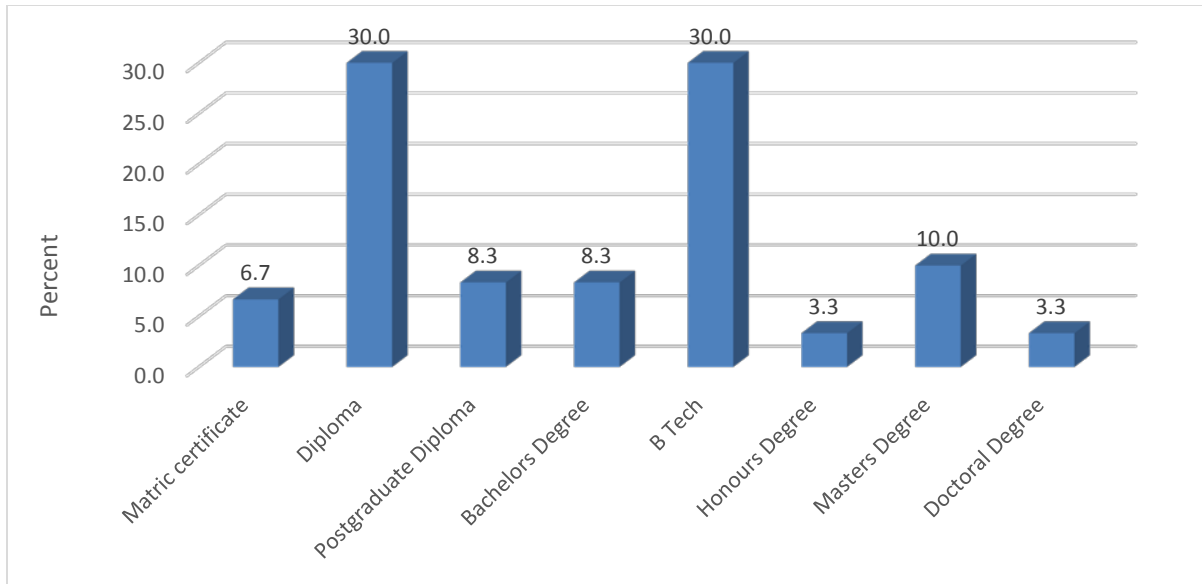
Fig. 4.2: Highest formal qualification of respondents

Figure 4.1 indicates the highest academic qualification of the respondents. At the overall level, the majority (93.3%) of respondents have a post-school qualification. Sixteen percent of the respondents had a post-graduate degree. Thirty percent of the respondents have bachelor's degrees and national diplomas, and they both dominate in the sample, followed by master's degrees (10%). Respondents with the B. Tech qualification rank the same as postgraduate diplomas (8.3%). Doctoral and honours degrees ranked last at (3.3%).This is a useful statistic as it indicates that a fair proportion of the respondents have a higher qualification. This indicates that the responses gathered would have been from an informed source.

4.4.6 Respondents professional category

Table 4.6: Category of respondents' professions

Professional	Frequency	Percent
Project manager	56	93.3
Quantity Surveyor	4	6.7
Total	60	100.0

Table 4.6 indicates that Project Managers (93.3%) as the main focus was on them and the (6.7%) of quantity surveyors are registered with the SACPCMP as professional Project Managers.

4.4.7 Respondents status in their organisations
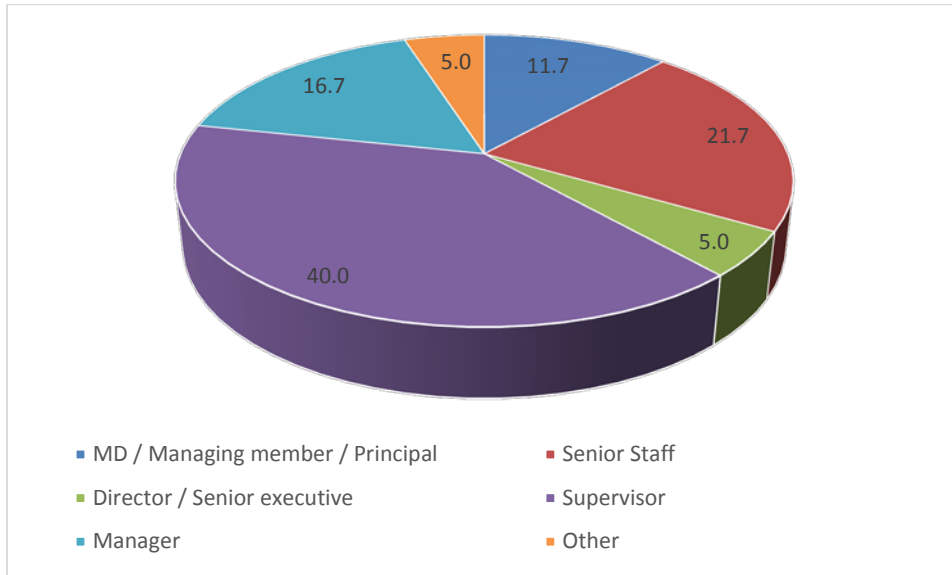
Figure 4.3: Respondents' status in their organisations

The majority of the respondents (40.0%) were supervisors, followed by senior staff (21.7%), managers (16.7%) and managing directors (11.7%). This shows that most of the respondents were knowledgeable and experienced enough to give more reliable responses.

4.4.8 Mean value for the number of years of experience

Table 4.7: The mean value for the number of years of experience

N	Minimum	Maximum	Mean	Std. Deviation
60	0.00	7	3.8500	2.14575

Table 4.8 presents the mean value for the number of years of experience in the building construction industry. The mean for the number of years of experience is seven years. This implies that respondents might have been involved in a number of projects and is

experienced enough to answer the questions contained in the questionnaire concerning the construction industry.

4.4.9 Status of Professionalism with SACPCMP and CIDB
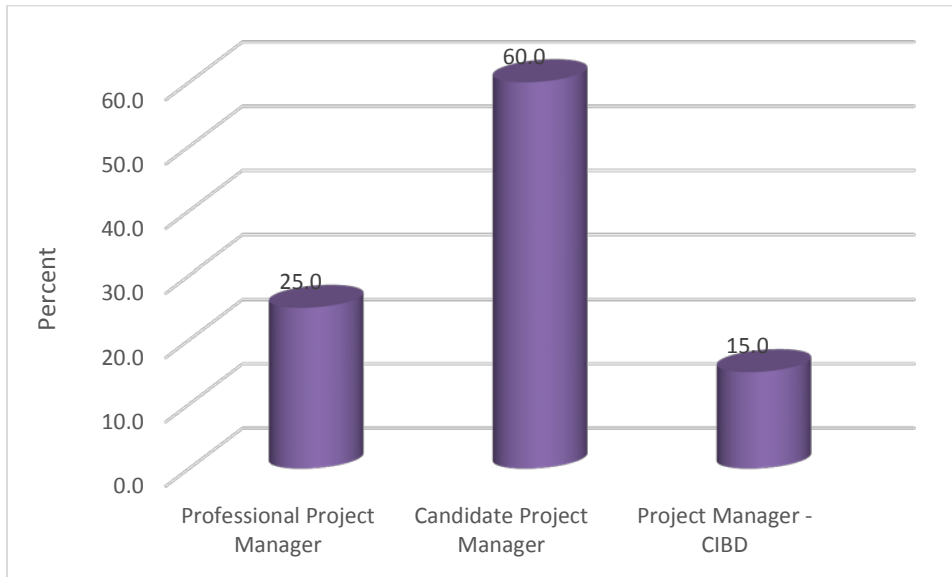
Figure 4.4: Status of Professionalism with SACPCMP and CIDB

Significantly more respondents were Candidate Project Managers (60.0%) with Project Managers CIBD forming the smallest group (15.0%).

4.5   RELIABILITY STATISTICS

The two most important aspects of precision are **reliability** and **validity**. Reliability is computed by taking several measurements on the same subjects. A reliability coefficient of 0.60 or higher is considered as "acceptable" for a newly developed construct.
The table below reflects the Cronbach's alpha score for all the items that constituted the questionnaire.

4.5.1 Cronbach's Alpha Score

Table 4.8: Present Cronbach's Alpha Score

	N of Items	Cronbach's Alpha
Effectiveness of theories on which ethical value systems and decision making are based in the South African construction industry	8	0.548
Determinants of manager's ethical decision making	9	0.655
Factors influencing ethical judgments of a project manager	6	0.799
Project performance factors	9	0.865
Factors impacting the unethical behaviour of a project manager	5	0.644

Table 4.8 Presents the Cronbach's alpha scores. The reliability scores for all sections exceed the recommended Cronbach's alpha value of 0.600 for a newly developed construct. This indicates a degree of acceptable, consistent scoring for these sections of the research. Only the first section has a marginally lower score.

4.6   FACTOR ANALYSIS

The matrix tables are gone before by an abridged table that mirrors the consequences of KMO and Bartlett's Test. The necessity is that Kaiser-Meyer-Olkin Measure of Sampling Adequacy ought to be more noteworthy than 0.50 and Bartlett's Test of Sphericity under 0.05. In all occurrences, the conditions are fulfilled which takes into account the factor analysis system.

Factor analysis is done only for the Likert scale items. Certain components divided into finer components. This is explained below in the rotated component matrix tables 4.10 to 4.14.

4.6.1 KMO and Bartlett's Test

Table 4.9: KMO and Bartlett's Test

	Kaiser-Meyer-Olkin Measure of Sampling Adequacy	Bartlett's Test of Sphericity		
		Approx. Chi-Square	Df	Sig.
Effectiveness of theories on which ethical value systems and decision making are based in the South African construction industry	0.644	42.060	28	0.043
Determinants of manager's ethical decision making	0.627	101.386	36	0.000
Factors influencing ethical judgments of a project manager	0.759	110.173	15	0.000
Project performance factors	0.787	219.492	36	0.000
Factors impacting the unethical behaviour of a project manager	0.620	55.952	10	0.000

Table 4.9 present the KMO and Bartlett's test, all of the conditions are satisfied for factor analysis. That is, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy value should be greater than 0.500 and Bartlett's Test of Sphericity sig. value should be less than 0.05.

4.6.2 Rotated Component Matrix

Table 4.10: Rotated Component Matrix

Rotated Component Matrix[a]

Effectiveness of theories on which ethical value systems and decision making are based in the South African construction industry	Component		
	1	2	3
Teleological	-0.154	0.183	0.784
Deontological	0.025	0.033	0.864
Egoism	0.670	-0.387	0.161
Utilitarianism	0.756	0.000	-0.038
Machiavellism	0.786	0.163	-0.228
Hunt and Vetell	0.592	0.519	-0.071
Ferrell and Gresham	-0.010	0.823	0.149
Trevino	0.015	0.778	0.105

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 5 iterations.

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Table 4.11: Rotated Component Matrix

Rotated Component Matrix[a]

Determinants of manager's ethical decision making	Component		
	1	2	3
Personal value	-0.152	0.788	0.133
Perception	0.208	0.745	-0.130
Societal Culture	0.101	0.777	0.168
Income level	0.781	0.198	-0.175
Age	0.753	0.163	-0.061
Education	0.589	0.074	0.430
Diversity relative to workforce	0.548	0.035	0.495
Gender	0.644	-0.242	0.073
Organisational culture	-0.113	0.109	0.902

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 5 iterations.

Table 4.12: Rotated Component Matrix

Rotated Component Matrix[a]

Factors influencing ethical judgments of a project manager	Component	
	1	2
Individual value	0.864	0.070
Corporate value	0.871	0.119
Moral reasoning	0.748	0.406
Situational influences	0.380	0.743
Social influences	0.084	0.785
Impression management	0.090	0.822

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 3 iterations.

Table 4.13: Rotated Component Matrix

Rotated Component Matrix[a]

Project performance factors	Component	
	1	2
Affect the Quality of a product	0.411	0.612
Time to complete the project	0.027	0.897
Cost performance	0.259	0.800
Compromising of safety	0.222	0.756
Company image fades	0.704	0.412
Scope of the project changes	0.685	0.466
Reduction of Profit	0.597	0.139
Shareholder value decreases	0.847	0.008
The level of risk on a project increases	0.775	0.234

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 3 iterations.

Table 4.14: Rotated Component Matrix

Rotated Component Matrix[a]

Factors impacting the unethical behaviour of a project manager	Component	
	1	2
The quality of construction industry in SA	0.782	0.028
Production efficiency in the construction industry	0.873	0.125
Unethical behaviour can be gained from work	0.707	0.074
Organisation that includes unethical items in its contracts in SA	0.595	-0.164
Improving ethical practice for the professionals could improve ethical performance in construction projects in SA	0.025	0.983

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 3 iterations.

With reference to the tables 4.10 to 4.14 above:

- The principle component analysis was used as the extraction method, and the rotation method was Varimax with Kaiser Normalization. This is an orthogonal rotation method that minimizes the number of variables that have high loadings on each factor. It signifies the interpretation of the factors.

- Factor analysis/loading show inter-correlations between variables.

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- Items of questions that loaded similarly imply measurement along a similar factor. An examination of the content of items loading at or above 0.5 (and using the higher or highest loading in instances where items cross-loaded at greater than this value) effectively measured along the various components

It is noted that the variables that constituted the various sections loaded along 2 or 3 components (sub-themes). This means that respondents identified different trends within the section. Within the section, the splits are colour coded.

4.7   ANALYSIS OF PHASE 1 QUESTIONNAIRE

Questionnaires were used in the collection of data. A five-point Likert scale adjoined with "Unsure" and "Does not" options were used to measure the perceptions of professionals within the building construction industry in South Africa.

Tables 4.15 to Table 4.18 indicate the perceptions of respondents relative to ethics and the ethical decision of project managers in the construction industry in terms of MS ranging between 1.00 and 5.00. MSs were calculated for each statement to enable an interpretation of the percentages relative to each point on the response scale. Given that there are five points on the scale, and that $5 - 1 = 4$, the ranges were determined by dividing 4 by 5 which equates to 0.8. Consequently, the ranges and their definitions are as follows:

- > 4.20 ≤ 5.00 between a near major to major/major influence;
- > 3.40 ≤ 4.20 between moderate influence to a near major/near major influence;
- > 2.60 ≤ 3.40 between a near minor to moderate influence/moderate influence;
- > 1.80 ≤ 2.60 between a minor to near minor influence/near minor influence, and
- > 1.00 ≤ 1.08 between a minor to near minor influence.

4.7.1 Effectiveness of theories

Table 4.15: Effectiveness of theories on which ethical value systems and decision making are based in the South African construction industry

Factor	Response (%)								Mean Score	Std. Deviation	Rank
	Unsure	Does not	Minor..Major								
			1.00	2.00	3.00	4.00	5.00				
Ferrell and Gresham	30.0	8.3	0.0	6.7	25.0	21.7	8.3	3.51	0.64202	1
Trevino	36.7	5.0	0.0	6.7	23.3	23.3	5.0	3.46	0.71139	2
Egoism	23.3	6.7	1.7	8.3	21.7	35.0	3.3	3.43	0.85946	3
Utilitarianism	26.7	6.7	0.0	5.0	30.0	30.0	1.7	3.43	0.67511	4
Deontological	28.3	6.7	0.0	3.3	38.3	18.3	5.0	3.38	0.87481	5
Teleological	26.7	5.0	0.0	1.7	50.0	11.7	5.0	3.29	0.95468	6
Hunt and Vetell	31.7	6.7	1.7	11.7	23.3	20.0	5.0	3.24	0.86992	7
Machiavellism	30.0	6.7	3.3	6.7	28.3	23.3	1.7	3.21	0.81684	8

Table 4.15 presents the effectiveness of theories on which ethical value systems and decision making are based in the South African construction industry. It is prominent that all of these factors are above the mean score of 3. This indicates that the factor has a moderately high influence on the ethical decision of a project manager in South Africa. *Ferrell and Gresham* have the highest rating. (MS=3.51) This is proportional to individual decision making, which will impact on the personal status of an individual. Next to Ferrell and Gresham is *Trevino* (MS=3.46).This looks at the cognition of the individual such as ego, the locus of control and situation moderation as they all impact on organisation culture*. Egoism* came third (MS=3.43) this suggest that it is an agent's moral obligation to do what promotes his own good or welfare. In other words, people should act in a way that maximise their own long term interest. The least rated factors are *Hunt and Vetell* (MS=3.24), suggesting that a project manager can perceive a particular alternative as most ethical and yet chose another alternative because of the consequences and *Machiavellism* (MS=3.21), it is evident that Project Managers would be expected to do whatever necessary to get the job done, in essence, it overlooks the existence of morals which leads to Project Managers having to commit an unethical conduct in the organisation.

4.7.2 Factors influencing the ethical decision of a project manager

Table 4.16: Factors influencing the ethical decision of a project manager in South African

Factor	Response (%)							Mean Score	Std. Deviation	Rank
	Unsure	Does not	Minor..Major							
			1.00	2.00	3.00	4.00	5.00			
Personal value	0.0	0.0	1.7	1.7	26.7	38.3	31.7	3.97	0.90135	1
Organizational culture	0.0	0.0	1.7	1.7	31.7	36.7	28.3	3.88	0.77487	2
Education	0.0	0.0	1.7	0.0	30.0	46.7	21.7	3.87	0.90779	3
Age	0.0	0.0	3.3	6.7	35.0	30.0	25.0	3.67	1.12734	4
Societal Culture	1.7	0.0	0.0	10.0	35.0	35.0	18.3	3.63	1.03607	5
Perception	1.7	1.7	0.0	6.7	38.3	41.7	10.0	3.57	0.81233	6
Diversity relative to workforce	3.3	0.0	1.7	5.0	35.0	46.7	8.3	3.57	0.79719	7
Income level	0.0	0.0	6.7	15.0	35.0	26.7	16.7	3.32	1.21865	8
Gender	1.7	0.0	10.0	18.3	25.0	30.0	15.0	3.22	0.90370	9

Table 4.16 presents the factors that influence the ethical decision of a project manager. It is noted that all of these factors are above the mean score of 3. This indicates that the factor has a moderately high influence on the ethical decision of a project manager in South Africa. *Personal value* (MS=3.97) has the most rating. This is comparative to attitude and behaviours, which will impact on the personal reputation of an individual. Next to personal value is *organisational culture* (MS=3.88).The organisation has a great impact on how one behaves. Employees are often under a lot of pressure to follow the conducts of the organisation even if they are not ethical because they fear losing their jobs. *Diversity* relative to the workforce was among the least rated factors in the list (MS=3.57). This can be acknowledged that diversity does not have a significant impact on the decision of a project manager because the differences are recognized when decisions are made in the organisation. *Income level* (MS=3.32) illustrates clearly that income level does not necessarily have a significant input on a project manager's ethical decision and *gender* (MS=3.03) intimates that gender is not necessarily the deterrent of one having to commit an unethical conduct in the organisation.

4.7.3 The criteria that form the basis of ethical judgements and behavioural intentions

Table 4.17: The criteria that form the basis of ethical judgements and behavioural intentions of a project manager in South African construction industry

Factor	Unsure	Does not	Minor...Major					Mean Score	Std. Deviation	Rank
			1.00	2.00	3.00	4.00	5.00			
Corporate value	0.0	0.0	1.7	3.3	28.3	25.0	41.7	4.02	0.99873	1
Individual value	0.0	0.0	1.7	5.0	26.7	30.0	36.7	3.95	0.99986	2
Situational influences	1.7	0.0	1.7	6.7	25.0	36.7	28.3	3.85	1.10098	3
Moral reasoning	1.7	0.0	1.7	10.0	28.3	21.7	36.7	3.83	0.97933	4
Social influences	1.7	0.0	6.7	5.0	26.7	40.0	20.0	3.63	1.08116	5
Impression management	3.3	1.7	5.0	8.3	43.3	28.3	10.0	3.32	0.96655	6

Table 4.17 presents the criteria that form the ethical judgement and behavioural intentions. It is noteworthy, that all of these factors are above the mean score of 3. This indicates that the factor has a moderately high influence on the ethical judgements and behavioural intentions of a project manager in South Africa because the consequences of unethical behaviors could adversely affect the reputation of the organization or individual working for the organization. *Corporate value* (MS=4.02) has the most rating. This can be attributed to the fact that the corporate values of an organisation are those that assist in the sustenance of the organisation. Next to corporate value is the *individual value* (MS=3.95). This is relative to approach, people and relation cultivation, which influence the repeat of business; therefore, the individual values reflect how one or a project manager fulfils the duties or responsibilities assigned to him or her, in order for the project to be a success. The least rated factors is *impression management* (MS=3.32). This is relative to one trying to impress another by portraying to be good whereas he or she is engaged in unethical acts that have a possibility of a project not being completed on time.

4.7.4 The impact of unethical behaviour of Project Managers

Table 4.18: The impact of unethical behaviour of Project Managers on project delivery

Factor	Response (%)							Mean Score	Std. Deviation	Rank
	Unsure	Does not	Minor..Major							
			1.00	2.00	3.00	4.00	5.00			
Affect the Quality of a product	0.0	0.0	5.0	8.3	20.0	25.0	41.7	3.90	1.18893	1
Cost performance	0.0	0.0	1.7	10.0	20.0	43.3	25.0	3.80	1.06246	2
The level of risk on a project increases	8.3	0.0	6.7	6.7	16.7	33.3	28.3	3.76	0.98806	3
Time to complete the project	0.0	0.0	3.3	10.0	25.0	36.7	25.0	3.70	1.18558	4
Reduction of Profit	5.0	0.0	3.3	8.3	25.0	36.7	21.7	3.68	1.19313	5
Compromising of safety	1.7	0.0	5.0	11.7	26.7	25.0	30.0	3.64	0.93723	6
Company image fades	5.0	0.0	6.7	10.0	23.3	30.0	25.0	3.60	1.03782	7
Scope of the project changes	3.3	0.0	3.3	5.0	35.0	38.3	15.0	3.59	1.11060	8
Shareholder value decreases	6.7	0.0	6.7	8.3	31.7	30.0	16.7	3.45	1.18577	9

Table 4.18 presents the impact of unethical behaviours of Project Managers. It is notable that all of these factors are above the mean score of 3. This indicates that the factor has a moderately high influence on the unethical behaviours of a project manager in South Africa. *Quality* that is adversely affected by the unethical behaviour of a project manager has the highest rating of (MS=3.90). This can be endorsed by the fact that quality is dependent on ethical behaviour, whereby quality and ethics have a common care premise which is to do right things right and it is a proven way to reduce costs, improve competitiveness, and create customer satisfaction. After quality is *cost* performance (MS=3.80). It is practical a project might have to be abandoned altogether if funds run out before completion due to unethical conducts, in which case the money and effort already invested become forfeit. Cost performance is followed by *the level of risk* on a project increases (MS=3.78). This is tangible that risks could arise from illegal, unethical, incorrect, and inappropriate actions by project managers the best way would be for companies to seek ways to eliminate these risks since they get no strategic benefits from taking them on. The least rated factors are the *scope* of the project (MS=3.59), Making changes without proper impact analysis, and without reviewing

schedule and cost implications has a negative impact on a project and the *shareholder value* (MS=3.45),this is relative to the decline of shareholder value should the project manager engage in unethical acts.

CHAPTER 5

DEVELOPMENT OF A FLOWCHART FOR ELIMINATING UNETHICAL CONDUCTS IN CONSTRUCTION

5.1   INTRODUCTION

The development of a flowchart for this study is an approach to develop a complete understanding of the disciplinary procedures for unethical conducts in the building industry, the actions of project managers and the influence that unethical conduct has on project outcome. Based on the results obtained from the questionnaire survey, unethical behaviour of professionals in the constructions sector of the South African construction industries has been established. It is suggested that quality of a product becomes adversely affected by the unethical behaviour of project managers, cost performance, the level of risk on a project increases and time to complete the project are the leading factors of impact of the unethical behaviour of project managers on project delivery; also corporate value and individual value are the prominent factors for ethical judgements and behavioural intentions of project managers. This has been recognized in the previous chapter under tables 4.17 and 4.18. Therefore the flowchart proposes an intervention in combating unethical conduct which harms the business and well-being of professionals in the construction industry.

Ethics is characterized as an arrangement of standards that controls both the profound quality and conduct of people in their everyday practice. Professional ethics credit moral duty to a person as well as to all experts rehearsing in a specific profession (Suen, *et al.,* 2007; Bayles, 1989 and Wasserman *et al.*, 2000). Carey and Doherty (1968) express that it consequently tied up with more handy ideas and desires from the general population, enveloping issues, for example, skill, duty and readiness to serve the general population. The selection of moral standards and the requirement of gauges move toward becoming issues of expanding significance to society as the quantity of profession increase and the workplace turn out to be more ethically delicate in light of the fact that the believability of the whole profession is jeopardized when breaches of moral conduct happen. Brien (1998) feels that the issue looked by any expert group is the means by which to manage itself adequately to legitimize its freedom, while

guaranteeing that the customers of its individuals, and society in general, advantage from the profession's and the individual expert's activities, as opposed to turning into their casualties.

Morton (2008) characterizes the construction industry as every one of those organizations included specifically in the outline and development of building ventures. The construction industry prides itself on being the supplier and facilitator of worldwide physical advancement through the arrangement of framework, labour advancement, asset work, settled capital arrangement and improvement of the GDP (Hillebrant 2000). Relatively every profession has its codes of ethics to give a structure to landing at great ethical decisions. A proposed framework to mitigate unethical conducts in the construction industry was developed, particularly for Project Managers.

5.2 CODES OF ETHICS AND CONDUCTS FOR CONSTRUCTION PROJECTS

In Code of Ethics of Project Management Institute, ethical characters like trustworthiness, responsibility, fairness, honesty, integrity, dignity are found.

It seems that the selection of ideas and words depends on the goals and cultures of organisations. To develop an ethical framework that will mitigate the unethical conducts of a project manager, a code of ethics should be first presented (Fleddermann, 1999). The suggested approach is to introduce a framework that guards the disciplinary procedure related to unethical acts of ethics and conduct for projects in accordance with corporate codes and industry codes. Codes of ethics are general guidelines to ethical decision-making and codes of conduct specify actions in the workplace. Below is the code of conduct that a professional must subscribe to as per Commission for Conciliation Mediation and Arbitration (CCMA) rules and regulations:

5.2.1 Client Service

Serve the clients with honesty, integrity and objectivity. Provide his or her services with competence using reasonable care, skill and diligence consistence with the interests of the client and the applicable standard of care.

5.2.2 Representation of Qualifications and Availability

To only accept assignments for which he or she is qualified by his or her education, training, professional experience and technical competence, and must assign staff to projects in accordance with their qualifications and commensurate with the services to be provided.

5.2.3 Standards of Practice

To furnish the services in a manner consistent with the established and accepted standards of the profession and with the laws and regulations that govern its practice.

5.2.4 Fair Competition

The project manager must represent the project experience accurately to the prospective clients and offer services and staff that he/she is capable of delivering. He/she must develop the professional reputation on the basis of the direct experience and service provided, and must only engage in fair competition for assignments.

5.2.5 Conflicts of Interest

Project Managers must endeavour to avoid conflicts of interest and disclose conflicts which may impair his/her objectivity or integrity.

5.2.6 Fair Compensation

The Project Managers must negotiate fairly and openly with the clients in establishing a basis for compensation, and is obliged to charge fees and expenses that are reasonable and commensurate with the services to be provided and the responsibilities and risks to be assumed.

5.2.7 Release of Information

Project Managers must only make statements that are truthful, and keep information and records confidential when appropriate and protect the proprietary interests of the clients and professional colleagues.

5.2.8 Public Welfare

They must not discriminate in the performance of the Services on the basis of race, religion, national origin, age, disability, or sexual orientation and must not knowingly violate any law, statute, or regulation in the performance of professional services.

5.2.9 Professional Development

He/she must continue to develop the professional knowledge and competency as Construction Project Manager, and contribute to the advancement of the construction and program management practice as a profession by fostering research and education and through the encouragement of fellow practitioners.

5.2.10 Integrity of the Profession

Project Managers must avoid actions which promote their own self-interest at the expense of the profession, and must uphold the standards of the construction management profession with honour and dignity.

5.3   MANAGING ETHICS FOR CONSTRUCTION PROJECT

Current endeavours in overseeing ethics in construction frequently work as confined exercises or measures that are connected in a receptive mode to the events/occasions that influence the notoriety of the organization. The focal contention inside is this, the administration of every ethical issue within construction needs to mirror the entire life-cycle of activities and in addition the associations that work in the industry. The reason is guarantee that the three basic inquiries on ethics are adequately investigated by

within construction at all the different choice levels and phases of the venture life-cycle. The three key basic inquiries address the key foundations of straightforwardness, effect, and decency for assessing ethical issues and are drawn out beneath.

ETHICAL ISSUES	**CRITICAL QUESTIONS**
Transparency	Do I consider others knowing what I have chosen?
Effect or Effect	Who does my choice effect or hurt?
Fairness	Would my choice be thought decently by those Influenced?

5.3.1 Life Cycle Ethics Management

The industry is normally project based and exceedingly asset escalated. As construction projects are profoundly asset concentrated, powerful usage of work, material and gear are basic to the whole undertaking process (Hauck and Rockwell, 1996). Additionally, parties engaged with construction projects are different with various business objectives, for example, contractors, architects, engineers, temporary worker, subcontractors, providers or project managers. Regularly these confounded relations prompt claims and debate. In this way, ethical situations and irreconcilable circumstances can happen all through the project life cycle. The suggested approach is to develop a flowchart with the view to minimise the unethical conducts within the construction industry

5.4 PROPOSED FLOWCHART FOR ETHICS

Based on table 4.18 which assesses the impact of unethical behavior of project managers on project delivery has revealed that the quality of a product gets unfavorably affected due to unethical behavior. Cost performance and the level of risk on a project also increases and that indicates the impact that unethical practices have on project delivery in the South African construction industry. Therefore the flowchart proposes an intervention in combating unethical conduct which harms the business and well-being of professionals.

Figure 5.1 shows the proposed flowchart for mitigating the unethical conducts of Project Managers in the building industry.
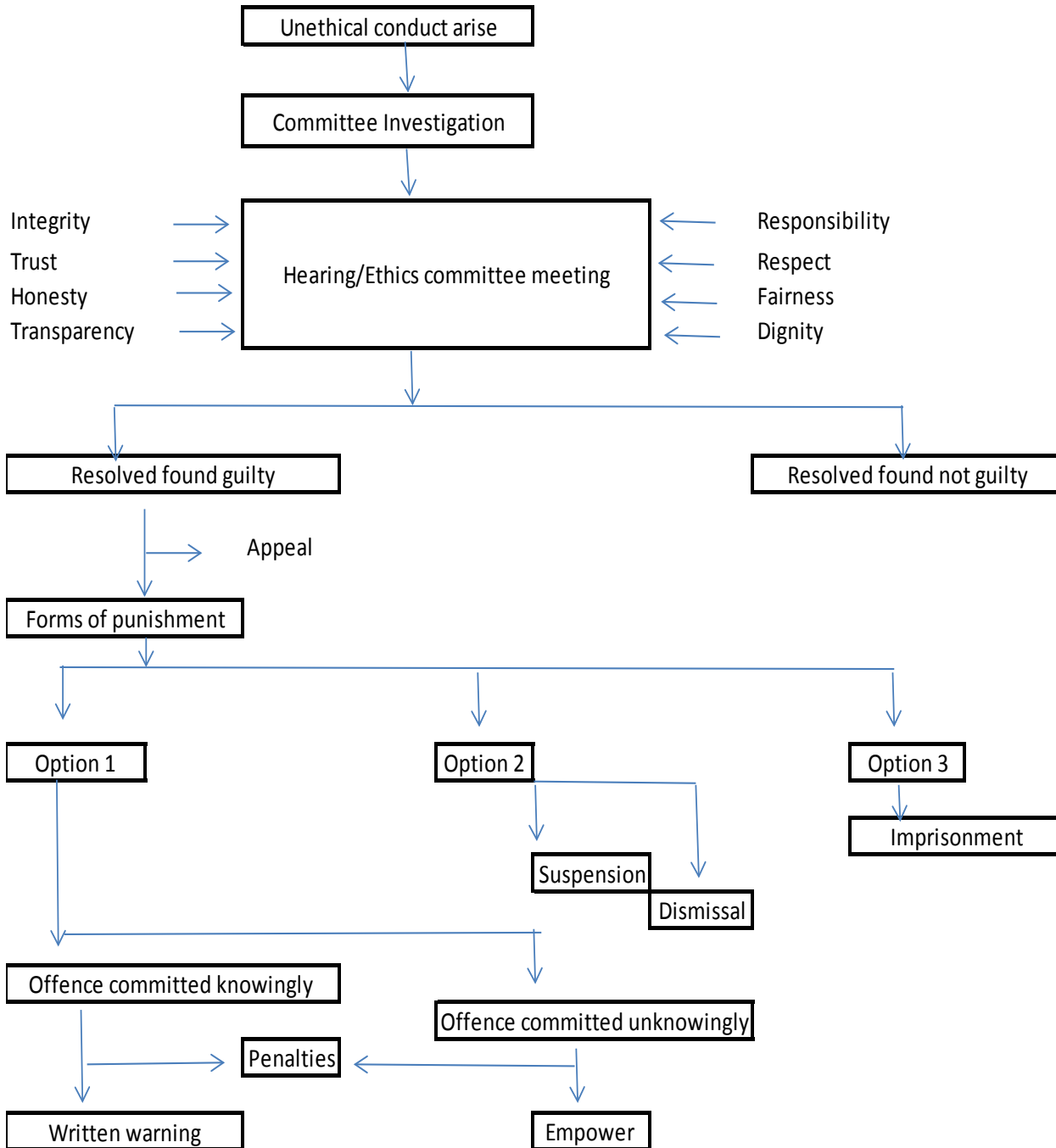
Figure 5.1: Flowchart for the mitigation of Unethical Conduct in the Construction Industry

5.5   Elements establishing the Flowchart

In conjunction with the preceding chapters that provided theories and empirical findings, the purpose of this section is to discuss in detail the elements that constitute the proposed flowchart for mitigating the unethical conduct by project managers in the construction industry.

Figure 5.1 presents the steps to follow when an unethical issue arises. The investigation committee is given 30 days or longer to investigate the case, depending on its complexity. If it is evident that an unethical conduct has occurred, the Project Manager will then have to attend a hearing session organized by the ethics committee.

The committee consisting of 3 to 6 members should determine the best approach to address the situation without affecting the smooth running of the business, notwithstanding the fact that integrity, trust, honesty, transparency, responsibility, respect, fairness and dignity is vital at all times during the hearing.

After the meeting, the committee should resolve the issue and determine whether the project manager is found guilty of an unethical act or not. If the project manager has been found not guilty, the matter will then be terminated. However, if he/she has been found guilty there are several forms of punishment that will be imposed on him/her. After the project manager has been found guilty, he/she is given an opportunity to appeal, he/she has to submit the appeal to the ethics committee no later than 14 days after the decision had been made. Below are three forms of punishment that will be imposed for unethical conducts:

Option 1 - will be in the form of a "first written warning" to the unethical project manager as a penalty and the duration for the "first written warning" should be given. The suggested provisional period for this stage is 15 days from receipt of the first written warning provided that the offence has been committed knowingly. If the offence had been committed unknowingly, then the organisation must empower this project manager in the form of offering training, conducts or counselling sessions.

Option 2 - at this stage, the penalty imposed on the project manager is suspension or dismissal.

Option 3 - is imprisonment depending on the seriousness of the unethical act. This is because unethical conduct could lead to criminal/illegal activities. Such criminal/illegal activities should also be reported directly to the police or to other equivalent authorities.

5.6   VALIDATION OF THE FLOWCHART

A survey was conducted amongst professionals in the building construction industry in order to validate the flowchart presented (Table 5.1). A total of twenty-four professionals representing various professions relative to the building construction industry were surveyed using the validation questionnaire. These professionals are building inspectors, quantity surveyors and project managers. The mean score (MS), percentage frequency and test of means difference were employed in the analysis of the data. To enable interpretation of the MS, the MS range used during the interpretation of means of data from the first phase questionnaire analysis were used.

5.7   DATA PRESENTATION AND ANALYSIS

Below is a presentation of data and its analysis for flowchart validation.

5.7.1 Demographic profile of respondents regarding

It should be noted that all analyses of the demographic data in the phase 1 questionnaire also applied to the Phase 2 data (which is framework validation). Hence, the researcher reports only on the demographic data in the Phase 2 questionnaire in this section.

5.7.1.1 Phase 2 questionnaire: Sector distribution

Table 5.1 indicates that 92% of the respondents are from the public sector, while 8% are from the private sector. Their views suggested recommendations to both public and private organisations.

Table 5.1: Phase 2 respondents' sector distribution

Sector	Frequency	Percentage frequency (%)
Public	22	92
Private	2	8

5.7.1.2 Phase 2 questionnaire: Years of establishment of organisation

The mean number of years organisations have been established is 19 years. It is an indication that they may have handled many projects.

5.7.1.3 Phase 2 questionnaire: Gender

Fifty percent (50%) of the total samples were males and 50% females (Figure 5.2). This reveals that more women entrance into the profession.
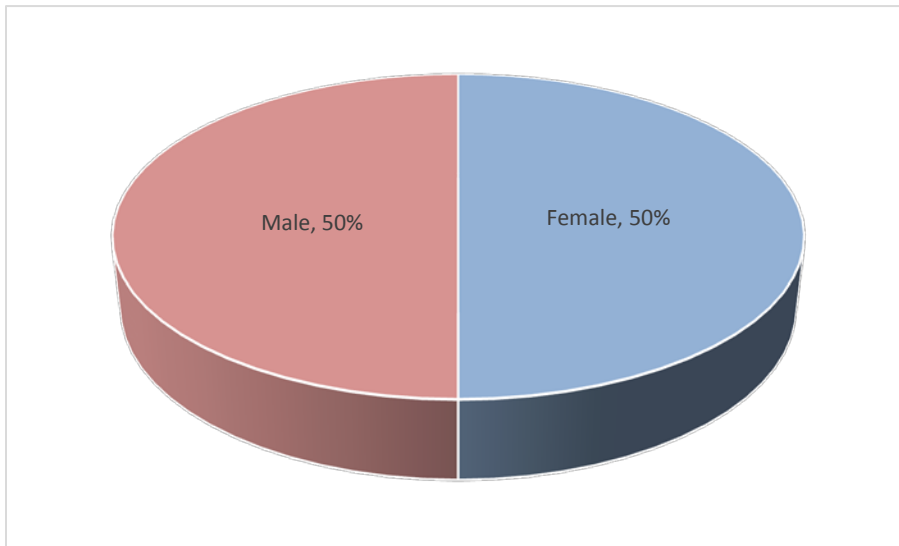
Figure 5.2: Gender distribution of respondents

5.7.1.4 Phase 2 questionnaire: Respondents' age distribution

Table 5.2 indicates that respondents, whose ages fall within the age group 31-40 years, predominate (58.3%). The second largest age group represented is 25-30 years (29.2%), followed by the age groups of 41-50 (8.3%) and under 25 years (4.2%).

Table 5.2: Phase 2 respondents' age distribution

Age group (years)	Frequency	
	No.	Percentage
Under 25	1	4.2
25-30	7	29.2
31-40	14	58.3
41-50	2	8.3
Over 50	-	-

5.7.1.5 Phase 2 questionnaire: Respondents' highest formal qualifications

Figure 5.3 presents the highest formal qualifications of respondents. National Diplomas (54%) predominate, followed by B Tech (42%), and Honours Degree (4%).
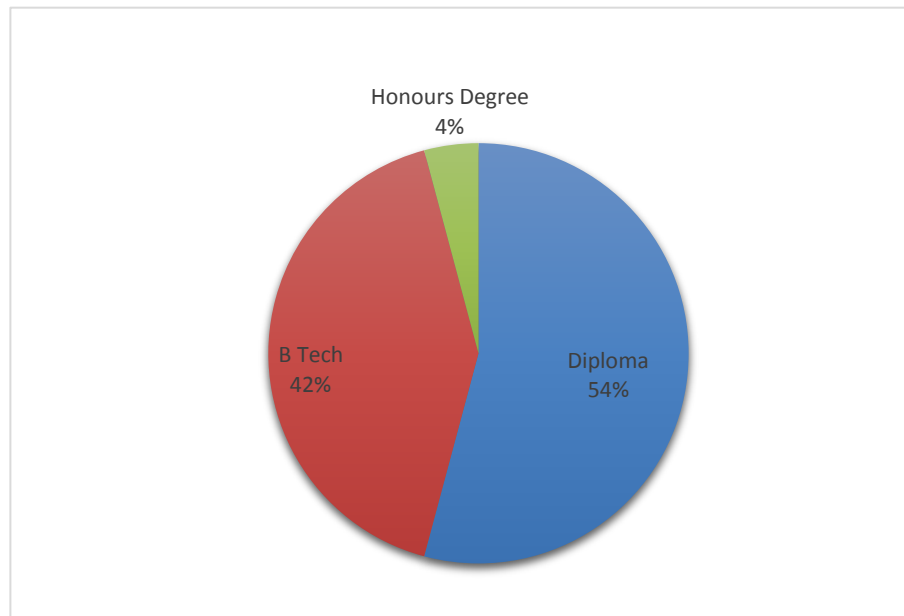
Figure 5.3: The highest formal qualifications of respondents

5.7.1.6 Phase 2 questionnaire: Respondents' profession

Table 5.3. Present the professions of respondents. Building Inspectors predominate (75%), followed by Project Managers (8.3%), Quantity Surveyors, Senior Manager, Intern and Technician each has a 4.2% representation. It is observed that almost all professionals in the industry were involved in the second phase data gathering, which indicates that a wealth of experience was assessed.

Table 5.3: Respondents' profession

Profession	Frequency	
	No.	**Percentage**
Building Inspectors	18	75.0
Project manager	2	8.3
Quantity Surveyor	1	4.2
Senior Manager	1	4.2
Intern	1	4.2
Technician	1	4.2
Total	24	100

5.7.1.7 Phase 2 questionnaire: Respondents' status

Supervisors/Foreman (95.8%) in terms of the status of respondents (Table 5.4). Directors/Senior executives constitute (4.2%) of the population sampled.

Table 5.4: Respondents' status in the organization

	Frequency	Percent
Supervisor / Foreman	23	95.8
Senior executive	1	4.2
	24	100.0

Table 5.4: Respondents' status in organisation

5.7.1.8 Phase 2 questionnaire: Respondents' years of experience

Most of the respondents have been involved in construction specifically residential (Figure 5.5). 45.8% of respondents have been in construction for 6-10 years, followed by 41.7% which has 11-15 year experience in the construction industry.16-20 year experience has 8.3% whereas 0-5 years has 4.2%.
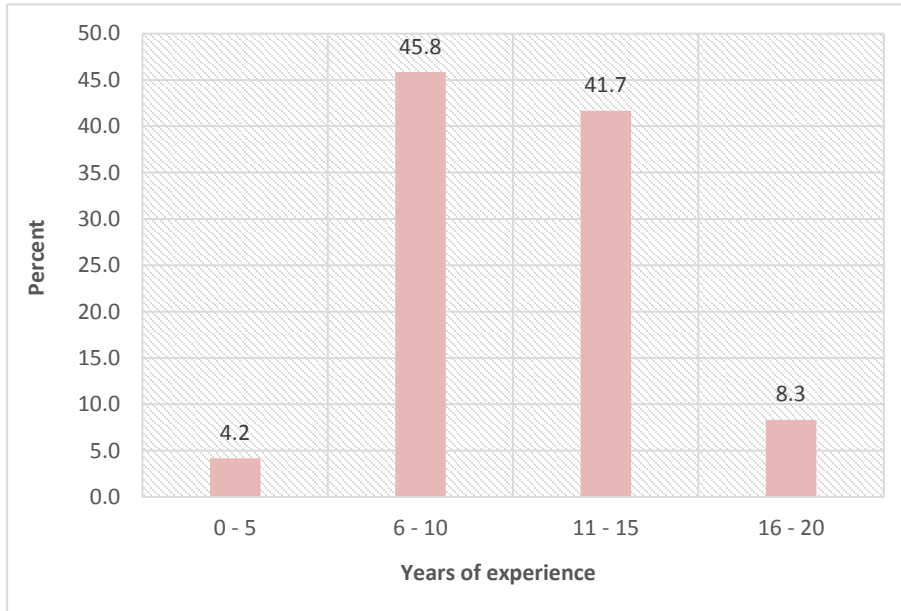
Figure 5.4: Respondent's years of experience

5.7.2 Cronbach's alpha

Table 5.5: Cronbach's α for validation data

	N of Items	Cronbach's Alpha
Factors relative to disciplinary hearing	5	0.362
Forms of punishment related to unethical conduct	6	0.049

The tables 5.5 represent the Cronbach's Alpha; the reliability scores are low > 0.70 for this construct. This is due to the following reasons:

- The construct is newly developed and needs to be piloted more extensively.
- The sample number is very small.
- There are small numbers of statement per theme.

5.7.3 Mean scores for factors relative to disciplinary hearing

Table 5.6: Mean scores according to factors relative to disciplinary hearing

| Factor | Response (%) | | | | | | | Mean Score | Rank |
| | Unsure | Does not | Not effective................................Very effective | | | | | | |
			1.00	2.00	3.00	4.00	5.00		
Transparency	0.0	0.0	0.0	0.0	8.3	41.7	50.0	4.42	1
Respect	0.0	0.0	0.0	0.0	8.3	45.8	45.8	4.38	2
Honesty	0.0	0.0	0.0	0.0	8.3	50.0	41.7	4.33	3
Fairness	0.0	0.0	0.0	0.0	4.2	62.5	33.3	4.29	4
Dignity	0.0	0.0	0.0	0.0	12.5	50.0	37.5	4.25	5
Responsibility	0.0	0.0	0.0	0.0	20.8	37.5	41.7	4.21	6
Trust	0.0	0.0	0.0	0.0	16.7	45.8	37.5	4.21	7

Table 5.6 presents the intervention factors relative to disciplinary hearing of unethical conduct by Project Managers in the construction industry. It is noteworthy, that all of these factors have a mean score of ≥3. This indicates that the factors have a moderately high influence on the correction of unethical conduct of project managers in South Africa. Among the intervention factors at the disciplinary stage, *transparency* has the most rating of (MS=4.42). This indicates that it is the most effective intervention factor in addressing unethical conducts and transparency in terms of financial impacts on project delivery in the South African construction industry. Followed by *respect* (MS=4.38), this is also rated as a very influential factor in reassuring that unethical conduct are eliminated in the construction industry by ensuring that time to complete project is fulfilled and the deadlines are met. Promoting respect in the workplace helps to improve project managers or employee's productivity and performance which will enhance the construction industry as a whole. *Honesty* is third rated factor that can positively improve the unethical conduct in the construction industry at the disciplinary stage with (MS=4.33). Honesty should be seen at all times because honesty does not only merely make a happy workplace and a respected company but it also makes companies more successful and the profit on project increases. Followed by *fairness* with (MS=4.29). Fairness in the construction industry should be taken very seriously because when all parties are acting in good faith, the industry operates at maximum efficiency and project delivery increases. Next is *dignity* with (MS=4.25). Being treated with dignity in the workplace is often what employees require the most and they will be

motivated, then the result which is project outcome will improve. The ideology of *ubuntu* incorporating respect, dignity togetherness and mutual support, can be extended to the entire construction industry (Rwelamila et al. 1999). The least rated factors are responsibility and *trust* (MS=4.21), it is one's responsibility to be responsible at all times in order for the project to be a success. The lack of trust in construction by project participants can lead to the unsuccessful completion of a construction project.

5.7.4 Mean scores relative to forms of punishment

Table 5.7: Mean scores according to forms of punishment related to unethical conduct

Factor	Response (%)							Mean Score	Rank
	Unsure	Does not	Not effective....................Very effective						
			1.00	2.00	3.00	4.00	5.00		
If committed knowingly project manager gets a written warning	0.0	0.0	0.0	0.0	0.0	58.3	41.7	4.42	1
Lose their jobs and go to prison	0.0	0.0	0.0	0.0	12.5	37.5	50.0	4.38	2
Suspension	0.0	0.0	0.0	0.0	29.2	45.8	25.0	3.96	3
Dismissal	0.0	0.0	0.0	4.2	37.5	37.5	20.8	3.75	4
If committed unknowingly project manager will be empowered	0.0	0.0	0.0	4.2	41.7	33.3	20.8	3.71	5

Table 5.7 presents the forms of punishment relative to the unethical conduct of Project Managers in the construction industry. It is evident that all of these factors are above the mean score of 3. This reveals that the factors have a moderately high influence on the punishments related to the unethical conduct of project managers in South Africa. If an act is *committed knowingly a project manager gets a written warning*, has the most rating of (MS=4.42), this is termed as negligence, which has an adverse effect on project delivery, This could tarnish the image of the company, lead to collapse, abandonment, and ultimately the competitive power of a company. Therefore, unethical conduct committed knowingly must be greatly punished depending on the level of misconduct. Followed by a *loss of job and imprisonment* (MS=4.38), severely unethical conduct must be eradicated and this form of punishment will set an example to the ones who commit such act. The least rated factor under forms of punishment is, *act committed unknowingly project manager will be empowered* (MS=3.71). It is not

encouraged to punish a project manager who unknowingly commits an unethical act because he or she might be lacking some skills. As an organisation it is its responsibility to ensure that their staff does not lack skills because that may lead the company into disrepute.

5.7.5 T-test for the developed flowchart

Table 5.8: T-test results for intervention factors

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	One Sample T-Test (cut off = 3)
Dignity	24	3.00	5.00	4.25	0.68	0.000
Fairness	24	3.00	5.00	4.29	0.55	0.000
Honesty	24	3.00	5.00	4.33	0.64	0.000
Respect	24	3.00	5.00	4.38	0.65	0.000
Responsibility	24	3.00	5.00	4.21	0.78	0.000
Transparency	24	3.00	5.00	4.42	0.65	0.000
Trust	24	3.00	5.00	4.21	0.72	0.000
If committed knowingly project manager gets a written warning	24	4.00	5.00	4.42	0.50	0.000
If committed unknowingly project manager will be empowered	24	2.00	5.00	3.71	0.86	0.001
Dismissal	24	2.00	5.00	3.75	0.85	0.000
Suspension	24	3.00	5.00	3.96	0.75	0.000
Lose their jobs and go to prison	24	3.00	5.00	4.38	0.71	0.000

Table 5.8 presents the results of T-test conducted regarding the various intervention factors. In order to enable the grouping of intervention categories as presented in Table 5.3, a T-test was conducted to determine the statistical significance between intervention factors. All of the p-values are < 0.05; this means that mean scores were significantly more in line with "Very Effective". These indicate that the various interventions are effective relative to the elimination of unethical conducts of professionals' in the Building Construction Industry in South Africa.

CHAPTER 6

SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1   RESEARCH SUMMARY

Despite various laws and code of ethics regarding professional practices in the construction industry, some ethical misconduct is still prevalent. Notable among them are personal values, organisational culture, corporate value and individual value to secure their jobs notwithstanding the fact that quality is being compromised and the level or risk of a project increases.

While there are many different ways of contesting unethical conduct, most project managers are not implementing any such measures. As a result, the promotion and modelling of honest behaviour and good governance are decreasing significantly. Bribery and corruption practices in the Construction Industry in South Africa are expected to increase in the future unless stakeholders implement preventive measures or treat the threat seriously.

The annual report on corruption watch revealed that unethical conducts are indeed affecting the development of the construction industry in South Africa to a significant extent. It also highlighted the fact that bribery and corruption could easily be detected by putting in place internal controls, such as internal auditing processes, investigation by a third party and external audit reviews, apart from studying individual behaviour patterns, such as unexplained or long working hours, real or imagined grievances against an employer organisation.

Unethical Acts in companies with all other elements of business must be managed by competent personnel; otherwise, the consequences of such misconducts will be deadly to both individuals and organisation.

Approaches for fighting unethical conducts must be constantly reinforced and supported by codes of conduct and ethics management courses attended by project managers in organisations.

Other plans which could be used to limit unethical conducts would be:

- Model behaviour by senior executives/management to encourage project managers to behave in a similar manner;
- Following the developed flowchart for any unethical conduct and imposing the forms of punishment on the flowchart.
- Making use of monitoring and evaluation processes, open communication lines and promotion of whistleblowing.

New applicants (project managers) for employment should be screened prior to staff appointment.

It is therefore mandatory upon project managers in South Africa to develop a culture within their organisations, which recognizes the damaging effects of unethical conducts in terms of reduced profitability, job insecurity and quality of a project.

6.2 Conclusions relative to questionnaire phase one

Respondents agreed that personal value, organisational culture and education are very influential factors on ethical decision of project managers; culture of the organisation is a direct reflection of the personal value of the project manager. Project managers must be aware of the dangers of unethical conducts and be willing to do something about them including committing to personal change. Education has a direct impact on reducing unethical conduct, the more you educate project managers about ethical issues the more they engage in ethical conducts. Corporate value and individual values are also factors which most influence the ethical judgments of a project manager regarding ethics, should corporates deliberately connects values to operations the chances of project success are

very high. Ferrell and Gresham, Trevino and Egoism appear to be very effective theories on which ethical value systems and decision making are based by project managers in the construction industry regarding ethics and ethical conducts, Improving ethical practice for the professionals could improve ethical performance in construction projects and production efficiency, Quality, cost containment and risk in the construction industry in SA. Based on the finding of the study, ways to mitigate unethical conduct would be; practicing ethical conduct at all times to improve production, the levels of risk on projects will decrease and improvement in communication and transparency will minimise the levels of unethical conducts of the Project Managers in South Africa.

6.3 Conclusions relative to validation of the flowchart

Respondents recognized that transparency in terms of finance; respect and honesty are very influential factors and have a resultant effect on level of production and ultimately the delivery of projects in the South African construction industry. Enforcing accountability for unethical conducts and acknowledging the good behavior will be beneficial to mitigate the unethical behaviors.

The implementation of the forms of punishment related to unethical conducts is observed to be an option to curb the scourge of unethical conducts in South African construction industry. When an unethical act is committed knowingly a penalty of a written warning is highly recommended, suspension, loss of job and imprisonment are highlighted as the most appropriate way to reduce unethical conduct which can also lead to project failures.

6.4 Recommendations

The recommendations for this study are divided into two, namely recommendations originating from the questionnaires (Phase 1 and 2) and the validation of the model.

6.5 RECOMMENDATION relative to questionnaire phase one

Based on the findings, it is concluded that personal value, organisational culture and education are dominant factors on ethical decision of project managers. Therefore, project managers' should accept contracts with the objective of fulfilling all requirements in accordance with the needs and best interests of the employer. Construction project managers should not attempt to influence the actions of consultants or officials by encouragements of any sort and/or engage in unfair or unethical practices in order to perform unethical acts and to promote their own interest.

The study has also revealed that corporate value and individual values are factors which most influence the ethical judgments of a project manager regarding ethics. It is recommended that all interested stakeholders in the construction industry must develop both their managerial and technical competencies relative to their specific areas of operation within the construction industry or corporates. Nobody should be able to tempt them into exploring opportunities for unethical acts.

Unethical conduct would be reduced if issues which render the construction industry could be disposed to fraudulent practices. The professional bodies such as SACPCMP and CIDB should work together with the government to solve this ethics crisis. With more parties seriously involved in handling these matters; the unethical conduct by the project managers can be reduced and Quality will improve, cost containment will also increase and risk in the construction industry becomes moderated.

Ferrell and Gresham, Trevino and Egoism theories should be enforced at all times, because the study has revealed that individual decision making and moderators and putting company's interest first in order to achieve the best rest results is a very important tool in order to receive compliance in relation to unethical acts in the construction industry. Programmes to make sure that professionals are always equipped with training on ethical conducts are required so that characteristics,

responsibilities, and behaviour as ethical professionals are practised. Motivation, incentives, bonuses and training are some examples that can be used to ensure that the project managers are always aware of ethical conduct in their practices.

Social media's role in promoting an ethical society is more relevant today. It can play a very important role in overcoming ethical dilemmas. Publicly promoting a dialogue on these issues will ensure the information spreads to the society. In this regard, their training and awareness are of dominant importance.

6.6 Recommendations from the validation of the flowchart

Based on the findings, it is recommended that ethics and ethical decision be taught at tertiary level so that when the students get to the field they are already equipped with the knowledge and understanding regarding unethical conducts.

The forms of punishment are also highly recommended to be a guard line so that unethical conduct is punished appropriately in order to eliminate unethical conducts which leads to delays and projects failures in South African construction industry.

The lack of training on ethical issues is a factor which possibly contributes to an increase in unethical acts in the construction industry in South Africa. Therefore, the building construction professionals' should be trained regularly on ethics. This topic presents an opportunity for further research.

It is recommended that the developed model should be used in resolving unethical issues in the Building Construction Industry in South Africa. This will afford reduction or elimination of unethical issues in the construction industry.

6.7 Recommendations for further studies

It is, therefore, recommended that the phases of this research, with reference to the flowchart, which are promoted as possible solutions, should be investigated further in the South African construction industry.

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Appendices

Appendix 1

Steve Biko Campus
Department of Construction Management
and Quantity Surveying
Tel: 031 373 2585
AyodejiA@dut.ac.za

31 March 2017

Dear Madam / Sir

Re: Ethics in the Construction Industry (Construction Project Managers case study)

The questionnaire survey is part of a research project aimed at meeting the requirements for Master of Technology (Construction Management) at the Durban University of Technology, carried out to:
Assess theories on which ethical value systems and decision making are based.
Assess factors that influence the ethical decision of the Project Manager in South Africa construction Industry.
Assess the criteria that form the basis of ethical judgments and behavioural intentions.
Determine the Impact of team code of conduct on project performance and
Develop a flowchart to mitigate unethical practices in the South African construction industry.

Kindly complete the accompanying questionnaire and note that your anonymity is assured. Solutions to unethical conducts by construction project managers on construction projects in South Africa will unfold from your response.

We would appreciate it if you would undertake to complete the questionnaire and return it by 01 October 2017 to: 31 October 2017

1 Fernleigh road
19 Fernwood Estate
Kloof
3610
or email to: thobekaka@nhbrc.org.za

Should you have any queries please do not hesitate to contact Ms T Kahlela at 083 699 3070 or 081 591 0326

Thanking you in advance for your response.

_____
T. Kahlela

Mtech (Construction Management) student
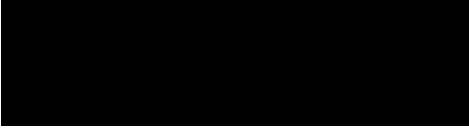
Dr. A.O Aiyetan, PhD (Construction Management)
Supervisor and Mtech Co-ordinator
Department of Construction Management and Quantity Surveying

Research Questions

QUESTIONNAIRE TYPE I
Section 1: DEMOGRAPHIC DATA
A *ORGANISATIONAL*

1.   **In what sector do you work?**
      □ Private sector   □ Public sector
2.   **Location of Project**: ……………………………………………………………..……
3.   **Name of organization**: ……………………………………………………..………
4.   Please indicate the actual number of years your organisation has been involved in
      construction?

B *PERSONAL*
5.   **Please indicate your gender**
      □ Female   □ Male
6.   **Please indicate your age:**
      □ Under 25 years   □ 41-50 years
      □ 25 - 30 years   □ Over 50 years
      □
        31 - 40 years

7.   **Please indicate your highest formal qualification:**

Matric certificate		Honour's Degree	
Diploma		Master's Degree	
Postgraduate Diploma		Doctoral Degree	
Bachelor's Degree		Other (Please specify)	
B Tech		Other (Please specify)	

8.   **Kindly indicate from below the category of construction profession you belong to.**

Architect		Builder		Client		
Engineer		Quantity Surveyor		Construction Manager		
Project manager						

9.   **Please indicate your status in the organization:**

MD / Managing member / Principal		Senior Staff	
Director / Senior executive		Supervisor	
Manager		Trainee / Intern	
Other (Please specify)			

10.   Kindly indicate your actual years of experience in the building construction industry
      ………………………………………………………………………………………………

0-5 Years		5 – 10 Years		10 - 15 Years		15 – 20 Years	

20 – 25 Years		25 – 30 Years		30 Years and above	

SECTION 2: MAIN QUESTIONNAIRE

13.   On a scale of 1 (Low) to 5 (High), rate how effective are theories on which ethical value
      systems and decision making are based in the South African construction industry.
      (Please note the 'unsure' (U) and 'Does not' (DN) options)

Level of effectiveness	U	DN	Low……….................……High				
			1	2	3	4	5
Teleological	U	DN	1	2	3	4	5
Deontological	U	DN	1	2	3	4	5
Egoism	U	DN	1	2	3	4	5
Utilitarianism	U	DN	1	2	3	4	5
Machiavellism	U	DN	1	2	3	4	5
Hunt and Vetell	U	DN	1	2	3	4	5
Ferrell and Gresham	U	DN	1	2	3	4	5
Trevino	U	DN	1	2	3	4	5

On a scale of 1 (minor) to 5 (major), rate these factors which influence the ethical decision of Project Managers in South African construction Industry. (please note the 'unsure' (U)
14. and 'Does not' (DN) options)

	Determinants of manager's ethical decision making	U	DN	Minor ....Major				
				1	2	3	4	5
14.1	Personal value	U	DN	1	2	3	4	5
14.2	Perception	U	DN	1	2	3	4	5
14.3	Societal Culture	U	DN	1	2	3	4	5
14.4	Income level	U	DN	1	2	3	4	5
14.5	Age	U	DN	1	2	3	4	5
14.6	Education	U	DN	1	2	3	4	5
14.7	Diversity relative to workforce	U	DN	1	2	3	4	5
14.8	Gender	U	DN	1	2	3	4	5
14.9	Organizational culture	U	DN	1	2	3	4	5
14.10	Other:_____							
14.11	Other:_____							

16. On a scale of 1 (minor) to 5 (major), rate the Impact of team code of conduct of project managers on project performance in SA.construction industry. (Please note the 'unsure' (U) and 'Does not'(DN) options)

	Project performance factors	U	DN	Minor..........................Major				
				1	2	3	4	5
16.1	Affect the Quality of a product	U	DN	1	2	3	4	5
16.2	Time to complete the project	U	DN	1	2	3	4	5
16.3	Cost performance	U	DN	1	2	3	4	5
16.4	Compromising of safety	U	DN	1	2	3	4	5
16.5	Company image fades	U	DN	1	2	3	4	5
16.6	Scope of the project changes	U	DN	1	2	3	4	5
16.7	Reduction of Profit	U	DN	1	2	3	4	5
16.8	Shareholder value decreases	U	DN	1	2	3	4	5
16.9	The level of risk on a project increases	U	DN	1	2	3	4	5
16.10	Other:_____							
16.11	Other:_____							

15 On a scale of 1 (minor) to 5 (major), rate these criteria that form the basis of ethical judgments and behavioural intentions of project managers in the South African construction industry. (Please note the 'unsure' (U) and 'Does not' (DN) options)

	Factors influencing ethical judgments of a project manager	U	DN	Minor.....................Major				
				1	2	3	4	5
15.1	Individual value	U	DN	1	2	3	4	5
15.2	Corporate value	U	DN	1	2	3	4	5
15.3	Moral reasoning	U	DN	1	2	3	4	5
15.4	Situational influences	U	DN	1	2	3	4	5
15.5	Social influences	U	DN	1	2	3	4	5
15.6	Impression management	U	DN	1	2	3	4	5
15.7	Other:_____							
15.8	Other:_____							

17 On a scale of 1 (minor) to 5 (major), please rate the impact of unethical behavior on the following statements (Please note the 'unsure' (U) and 'Does not' (DN) options).

	Factors impacting the unethical behavior of a project manager	U	DN	Minor....................Major				
				1	2	3	4	5
17.1	The quality of construction industry in SA	U	DN	1	2	3	4	5
17.2	Production efficiency in the construction industry	U	DN	1	2	3	4	5
17.3	Unethical behavior can be gained from work	U	DN	1	2	3	4	5
17.4	Organization that include unethical items in its contracts in SA	U	DN	1	2	3	4	5
17.5	Improving ethical practice for the professionals could improve ethical performance in construction projects in SA	U	DN	1	2	3	4	5
17.6	Other:_____							
17.7	Other:_____							

19. Do you have any comments in general regarding ways of reducing or eliminating unethical behavior of project managers on projects?

………
……….....
………
………
………
………..

Please record your details below to facilitate contacting you, in the event that a query should arise. Please note that the data provided in this questionnaire will be treated in the strictest confidence.

ORGANISATION _____

ADDRESS _____

_____

_____

_____

CONTACT PERSON _____

PHONE _____

FAX _____

MOBILE _____

E-MAIL _____

Thank you for your contribution to efforts directed towards improving ethics and ethical behaviors of project managers in South African construction industry.

© March 2017 Ms. T.Kahlela

Appendix 2

Steve Biko Campus
Department of Construction
Management and Quantity Surveying
Tel: 031 373 2585
AyodejiA@dut.ac.za

01 October 2017

Dear Sir/ Madam

Re: Validation of effectiveness of code of ethics with the view to mitigate the unethical conducts of project managers in South African construction industry.

The flowchart is the completion of the research into ethics in construction a case study for project manager

This flowchart has been developed with the view to mitigate the unethical conducts of project managers in the construction industry.

We would be grateful if you would complete the accompanying questionnaire. Please note that your anonymity is assured. The framework will assist to mitigate the unethical conducts and will be assessed from your response and improve the reliability of the research findings.

We would be grateful if you would endeavour to complete the questionnaire and return it by 30 November 2017 to 15 December 2017.

1 Fernleigh Road
19 Fernwood Estate
Kloof
3610
or per facsimile to: (086) 520 4803
Att: Ms T Kahlela

Should you have any queries please do not hesitate to contact Ms T Kahlela at 083 699 3070 or per e-mail: thobekaka@nhbrc.org,za

Thanking you in advance for your response.

_____
T Kahlela
Masters (Construction Management) student

_____
Dr. A.O Aiyetan, PhD (Construction Management)
Supervisor and Mtech Co-ordinator
Department of Construction Management and Quantity Surveying

FLOWCHART TO MITIGATE UNETHICAL CONDUCT IN CONSTRUCTION INDUSTRY

```
                        ┌─────────────────────────┐
                        │  Unethical conduct arise │
                        └────────────┬────────────┘
                                     ↓
                        ┌─────────────────────────┐
                        │  Committee Investigation │
                        └────────────┬────────────┘
                                     ↓
Integrity  →    ┌────────────────────────────────────┐    ←  Responsibility
Trust      →    │                                    │    ←  Respect
Honesty    →    │   Hearing/Ethics committee meeting │    ←  Fairness
Transparency →  │                                    │    ←  Dignity
                └────────────────┬───────────────────┘
          ┌──────────────────────┴───────────────────────────┐
          ↓                                                   ↓
┌─────────────────────────┐                    ┌─────────────────────────────┐
│  Resolved found guilty  │                    │  Resolved found not guilty  │
└────────────┬────────────┘                    └─────────────────────────────┘
             │──────→  Appeal
             ↓
┌─────────────────────────┐
│  Forms of punishment    │
└────────────┬────────────┘
  ┌──────────┴───────────────────────────────────────┐
  ↓                         ↓                         ↓
┌──────────┐          ┌──────────┐            ┌──────────┐
│ Option 1 │          │ Option 2 │            │ Option 3 │
└────┬─────┘          └────┬─────┘            └────┬─────┘
     │                ┌────┴────┐                  ↓
     │                ↓         ↓          ┌─────────────────┐
     │         ┌────────────┐   │          │  Imprisonment   │
     │         │ Suspension │   │          └─────────────────┘
     │         └────────────┘   ↓
     │                    ┌────────────┐
     │                    │ Dismissal  │
     │                    └────────────┘
     ↓
┌──────────────────────────────┐
│  Offence committed knowingly │
└──────────────┬───────────────┘
               │         ┌─────────────────────────────────┐
               │         │ Offence committed unknowingly   │
               │──→ ┌──────────┐ ←──┘
               ↓    │ Penalties│          ↓
┌──────────────────┐└──────────┘   ┌──────────┐
│ Written warning  │               │ Empower  │
└──────────────────┘               └──────────┘
```

QUESTIONNAIRE TYPE II

Section 1: DEMOGRAPHIC DATA

A ORGANISATIONAL

1. In which province do you work?

- □ Eastern Cape
- □ Gauteng
- □ KwaZulu-Natal
- ☐ Limpopo
- ☐ Western Cape

2. Name of Project:

……………………………………………………………….……

3. Name of organization:

.…………………………………………………………..…

…………………………………………………………………

B PERSONAL

4. Please indicate your gender

- □ Female　　　　　□ Male

5. Please indicate your age:

- □ Under 25 years'
- □ 25 - 30 years
- □ 31 - 40 years
- □ 41-50 years
- □ Over 50 years

6. Please indicate your highest formal qualification:

	Tick		Tick
Matric certificate		Honour's Degree	
Diploma		Master's Degree	
Postgraduate Diploma		Doctoral Degree	
Bachelor's Degree		Other (Please specify)	
B Tech		Other (Please specify)	

7. Please indicate your status in the organisation:

	Tick		Tick
Director/ Managing member / Principal		Buyer	
Senior executive / Manager		Supervisor / Foreman	
Site Agent / Clerk of Works		Trainee / Intern	
Other (Please specify)			

8. Kindly indicate your actual years of experience in the construction industry

- □ 0 - 5 years
- □ 6 - 10 years
- □ 11 - 15 years
- □ 16-20 years
- □ 21- 25 years
- □ 26- 30 years

SECTION 2: MAIN QUESTIONNAIRE

B. CODE OF ETHICS

1.: On a scale of 1 (not effective) to 5 (very effective), with reference to the flow chart, at the hearing stage, kindly rate these intervention factors as they indicate unethical conduct of construction project managers in South African construction industry. (Please note the 'unsure' (U) and 'Does not' (DN) options).

	Factors relative to disciplinary hearing	U	DN	Not effective…………....…Very effective				
				1	**2**	**3**	**4**	**5**
1.1	Dignity	U	DN	1	2	3	4	5
1.2	Fairness	U	DN	1	2	3	4	5
1.3	Honesty	U	DN	1	2	3	4	5
1.4	Respect	U	DN	1	2	3	4	5
1.5	Responsibility	U	DN	1	2	3	4	5
1.6	Transparency	U	DN	1	2	3	4	5
1.7	Trust	U	DN	1	2	3	4	5

2. On a scale of 1 (most inappropriate) to 5 (most appropriate), based on the flow chart, rate how appropriate are these forms of punishment if imposed to project manager for unethical conducts in South African construction industry. (Please note the 'unsure' (U) and 'Does not' (DN) options).

	Forms of punishment related to unethical conducts	U	DN	Not effective…………....…Very effective				
				1	**2**	**3**	**4**	**5**
2.1	**Option 1**							
2.1.1	If committed knowingly project manager gets a written warning	U	DN	1	2	3	4	5
2.1.2	If committed unknowingly project manager will be empowered	U	DN	1	2	3	4	5
2.2	**Option 2**							
2.2.1	Dismissal	U	DN	1	2	3	4	5
2.2.2	Suspension	U	DN	1	2	3	4	5
2.3	**Option 3**							
2.3.1	Lose their jobs and go to prison	U	DN	1	2	3	4	5

Please note that the information provided in this questionnaire will be treated in the strictest confidence.

ORGANISATION

_____

ADDRESS   _____

                           _____

                           _____

                           _____

CONTACT PERSON   _____

PHONE   _____

FAX   _____

MOBILE   _____

E-MAIL   _____

Thank you for your contribution to the Ethics in Construction by Project Managers.

Ms.   T.   Kahlela

APPENDIX 3 – CONFERENCE PAPER

Dear Thobeka

Re: Ethics in Construction Industry: A Case Study of Project Managers

Congratulations on the acceptance of your paper for the 10th CIDB Postgraduate Conference to be held in Port Elizabeth, South Africa. I shall send the tentative program of the conference to you next month. In the meantime, please consider the following:

•   If you have not submitted your camera ready paper [final paper], please do so by 9 February 2018. This deadline shall not be extended. Only papers mined from the Easy Chair system on the 10th of February shall form part of the final programme of event. Please upload your paper in its final form with all author identifiers as an MS Word document (.doc only). Please follow the ARCOM paper template. Please pay special attention to fonts, margins, and please eliminate section numbering. The ARCOM paper template is available from:
https://view.officeapps.live.com/op/view.aspx?src=http://www.arcom.ac.uk/-docs/conf/arcom-model-2015.doc

•   If you have submitted your final paper, but are yet to register, please do so immediately.

•   Registration is a requirement for the inclusion of your paper in the conference proceedings. Registration is available from:

•   https://view.officeapps.live.com/op/view.aspx?src=http://www.cut.ac.za/wp-content/uploads/2017/08/10th-cidb-PG-Conference-Registration-Form-v30-November-2017.doc

•   Papers for Authors who fail to register by 9th of February 2018 would be withdrawn from the program and proceedings.

•   Registration is mandatory for the inclusion of your paper in the proceedings – at least one author per paper should register for the conference.

•   Payment should be expedited immediately after registration. If you think there may be an issue with your payment reaching us on time, please contact Mrs Mariana Botes as indicated in the registration form.

•   Full conference registration and details can be found at:

•   http://www.cut.ac.za/cidb-postgrad-conf/#registrationform

•   If you have already registered and paid your fee, receipt that is done manually shall be issued as soon as possible.

•   As you begin to plan your travel to Port Elizabeth, South Africa, please note that the conference opening will be on Sunday evening 25 February at 18:00 with the welcome reception.

•   The tentative agenda circulated next week.

•   Please make your accommodation arrangements individually. There are links and suggestions from the conference website via:

•   http://www.cut.ac.za/cidb-postgrad-conf/#accommodation

Presentations

•   Papers in similar themes shall be grouped together in sessions.

•   Presentation of each paper is for 10 minutes. The time limit is strict so that all authors would have equal chance. For each session, there shall time for questions and discussions.

•   Slides (in a format of your choice) are compulsory. Slides shall be uploaded before the start of each session by the Chair of the session.

•   Please do not exceed 8-10 slides as too many of them could ruin the presentations/sessions. If you have general inquiries regarding papers, invitation letter for visa purposes, conference program, please contact the local hosts or browse through the information available on: http://www.cut.ac.za/cidb-postgrad-conf/

Regards, Prof E

ETHICS IN CONSTRUCTION INDUSTRY: A CASE STUDY OF PROJECT MANAGERS

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Business ethics and corporate governance has taken centre stage globally in the last decade due to the increasing unethical practices by private and public institutions. This unethical practices adversely impact on the image of professionals and organisation with a resultant negative impact on competitive advantage of the organisation. This study aims to assess factors contributing to unethical behaviours of project managers. The study was conducted in five provinces of South Africa i.e. kwaZulu-Natal, Eastern Cape, Western Cape, Limpopo and Gauteng. The sample frame consists of construction project managers registered with SACPCMP. Random sampling technique was employed in the selection of samples. A total number of thirty six questionnaires were analysed for the study. Descriptive statistics was employed for the analysis of data. Findings include societal culture, personal value, perceptions are very influential factors on ethical decision of a project manager also corporate value and individual values are the factors which most influence the ethical judgement of a project manager regarding ethic. Based on the finding of the study, ways to mitigate unethical conduct would be; practising ethical conduct at all times will improve production, the levels of risk on projects will decrease and also improvement in communication and transparency will minimise the levels of unethical conducts of the project managers in South Africa.

Keywords: Decision making, construction, ethics, unethical conducts.

INTRODUCTION

The wave of corporate scandals and financial crisis globally has elicited calls from different quarters for sound corporate ethics and corporate governance in business. Enron and WorldCom are instances of global corporations that got burst due to unethical practices. The resultant effect is low trusts in corporations. Although the history of economic progress is rich with stories of fraud and dastardly dealings, the public are however, more sensitive to them today than ever. Perhaps because the ordinary citizen feel the consequences more directly (Connor, 2006).

Calls have been made for reforms to business practices to avoid such scandals. Hoo et al (2008) suggested that the rising economic crime is a growing global threat to much business. Elder, (2008) comments that the health of any economy depends on the ethical standards upheld by responsible business managers, leaders and entrepreneurs. Ultimately business depends on the conscience of business leaders and managers and they should strive to become more aware of the implications of their actions (Rob Elder, 2008).

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There is therefore, a global trend towards ethical business practices. World business today shows evidence of growing acceptance that business cannot be successful without sound moral values. Business needs ethics and ethics needs business (Prozesky 2001). It is believed that business success will depend among other factors but on moral and ethical values. Management misconduct as have been seen from the corporate scandals in the business world has left unfavourable impression about leaders, leadership and leadership authenticity (George, 2003 cited Toor, et al, 2007).

The Construction industry is not left out of the global village, more importantly South Africa is an economy undergoing transformational and structural changes. Therefore requires strong ethical foundation. Unethical practices have a huge impact not only on the economy but on human life. Series of unethical behaviours in the sector have been cited, such as substandard quality and specification (Liu, et al, 2004), collusive tendering, conflict of interest, unfair conduct, proprietary breach, bribery and environmental breach (Vee et al., 2003). Therefore, there is a need for high level of professional conscience and leadership with good ethical behaviour in the construction sector.

LITERATURE REVIEW

Factors influencing the ethical decision of a project manager

Personal values
Values and attitudes as factors influencing individual decision making in their contingency model of decision making. This has been corroborated by other researchers. 'Individual instrumental and terminal values as initial input for model of decision making incorporating ethical values'(Fritzsche, 2007). Moral value of the individual is linked to ethical decision making (Argandona, 2003 and Coughlan, 2005)

Perception
Hunt and Vitell, (1986), in the model of ethical decision, identified perception as an antecedent of ethical decision making. Other scholars have equally demonstrated empirically the link between perception and intentions in a scenario involving ethical situation (Singhapakdi, Vitell and Franke 1999 cited Honeycutt, et al 2001) Individuals in organization make decisions and the quality of the final choices are largely influenced by their perception. This demonstrates that perception is linked to decision making. What the manager perceives will influence his decision (Robbins, 2007)

Culture
Culture is the matrix through which societal values are entwined. Culture constitutes a complex determining factor in ethics and affects distinct stages of the process (Srnka 2004). Different culture produce different expectations which are expressed in distinct ethical norms and this in turn influence ethical decision making. Goolsby and Hunt (1992) distinguish between individual, situational and environmental determinants of ethical decision making.

Income level
Vitell, Singhapakdi and Franke (1999) indicate that salary is not a variable in ethical decision model. Prahalad and Harmon (2002) suggest that the vast differences in ethical values, culture, poverty and corruption across levels of economic and income pyramid have significant inputs on manager's ethical decision.

Age

Age has been attributed as one factor that influences the ethical behavioural intentions of managers. Kohlberg`s (1981) typology of moral development level postulates that as one moves from lower levels to higher levels, ethical decision and behaviour increases in general. This is supported by (Weber and Green, 1991). Mason and Mudrack, 1996 report a positive relationship between age and ethical sensitivity. Further exploration on whether the age or the years of experience will be made to evaluate these positions.

Education
Education results in greater sensitivity to different points of view and is linked to a person's stage of cognitive moral development. The relationship between education and ethical decision making is consistent with past empirical research on business ethics (Singhapakdi, Vitell and Franke 1999). There is a link between demographic variables of age and education with ethical decision making (Srnka, 2004). Some other researchers have disputed the link between education and ethical decision making. They suggest that there is not necessarily a link between education and good ethical decision (Evans et al, 2006, Ritter, 2006 and weber 1990). The conflicting result requires further investigation on the part of Project Managers.

Diversity
A highly diverse workforce may be face with issues on how to manage this diversity effectively. The amalgamation of different culture within the society having different values and value systems makes management more cumbersome and difficult (Johnson 1991). The workforce diversity has important implication for management practice. It had significant impact on the decision of managers particularly to ensure that the differences are recognized when decisions are made. Diversity can lead to good ethical decision making if positively managed and can greatly increase creativity and innovation in organization as well as improved decision making.

Gender
Business practices would significantly be affected by the increasing participation of women in the work force. In a research, Singhapakdi et al (1999) found that women have more ethical intentions than men. The influx of women in the work force of South Africa and the government policy to empower women will change the dynamics of the workplace. Since Franke et al (1997) suggested an established role of women in ethical perception, this study will look at the impact of gender on ethical decision among South African Small business managers and verify the proposition that women have more ethical intentions that men.

Organizational culture (Team)
Organizational culture refers to shared beliefs by members of an organization (Coughan, 2005). Organizational ethical climate can influence individual ethical decision making (Wu, 2002). Affected by different individual, environmental, and situational variables (Bartlett, 2003).

The criteria that form the basis of ethical judgements and behavioural intentions
The linkage between judgment and behavioural intentions is defined as an individual's intention to act in a certain way that has been postulated in ethical decision-making models (Jones, 1991). Judgment is usually used as the most common indicator of an attitude and its predictive validity of subsequent behavioural intentions is a central focus of the theory of cognitive dissonance (Festinger, 1957). According to this theory, people who are rational decision makers strive for consistency in everything they do. Therefore, a consistency

between attitude and behaviour is preferred because it helps alleviate stress and anxiety resulting from the conflict of having an attitude–behaviour inconsistency (Festinger, 1957).

Individual Values
Most of an individual's ethical development occurs before entering an organization and are usually learnt very early in life. The influence of family, church, community, and school will determine individual values. McShane & Glinow (2008) states that as an individual, there are three qualities that one has to possess to make effective ethical decisions. The first is the ability to recognize ethical issues as they arise and thereafter to reason through the ethical consequences of any decisions made.

Corporate Values
Davis (2003) notes that corporate values serve as the defining elements around which norms, symbols, rituals and other cultural activities revolve and that values help employees form a social identity that provides meaning and connectedness. Corporate values are shared values that develop trust and link individuals in an organization together. In order that these values are adhered to, they have to be stated as both corporate objectives and individual values. These values will then also form part of the identity of the organization by which an organization is known throughout its business areas.

Moral Reasoning
Values alone do not determine ones actions. One's behaviour is also controlled by organizational and social culture, by the influence of significant other people in one's life and moral reasoning. Fredrick (2002) states that Kohlberg developed the moral development theory, which is concerned with how people judge what is morally right, out of a study covering 58 males over a 12 year period. Kohlberg found that the moral reasoning abilities of individuals develop through an invariant or fixed sequence of hierarchical stages.

Situational Influences
Crane and Matten (2003) state that there is considerable evidence to suggest that employee's ethical decision making is influenced by the systems of reward that they see operating in the workplace. Systems of reward relates to the fact that people are likely to do what they are rewarded for. An example is an organization that gives commissions to the sales team. This motivates them to increase sales but may also motivate them to act unethically to continue obtaining the commissions. In such an environment, adherence to ethical principles and standards are also less likely to be maintained unless individuals are motivated to do so by incentives.

Social Influences
In the workplace, social influence may take a variety of forms, for example, offering information, attempting to persuade, suggesting a certain course of action, requesting a favour, ordering something, or demonstrating how something should be done (Oberlechner, 2007). In this way, one can radically influence others' ethical decision making. Like situational influences, social influences are part of the significant influences affecting ethical decision making .Some of the specific forms of social influence are intimidation, manipulation, persuasion and facilitation.

Impression Management

According to Oberlechner (2007), impression management is the term used to refer to when people aim to control the impressions that others have of them. Ethical impression management is used to define actions and events for others in ways that shed an ethically favourable light on oneself. The specific methods include reputation tactics and remedy tactics.

Factors impacting the unethical behaviours of a project manager

The choice of a Project manager influences the success or failure of the project. This is because the Project Manager is the single point of responsibility, which integrates and coordinates all the contributions of the team and guides them to successful completion of the project (Burke, 2006 and Toor, et al 2007:1). Several authors have listed factors that contribute to unethical behaviours, they are, Hamzah et al., (2010), Tow and Loosemore, (2009), Hamzah et al. (2010), Hassim et al. (2010) and Kennedy, (2004).The factors are: adversely affect the quality of a product cost performance, the level of risk on a project increases, time to complete the project, reduction of profit and compromising of safety.

RESEARCH METHODOLOGY

The sample frame for the study consisted of project managers in Eastern Cape, Gauteng, KwaZulu Natal, Limpopo and Western Cape Provinces, registered with SACPCMP. Research instrument was a questionnaire. Simple statistical tools, such as the mean score, percentages and frequencies were used to analyse data obtained. The quantitative research approach was employed. For selecting samples, recommendations from Leedy and Omrad (2014) were applied. The probability sampling technique was employed for sample selection. A random sampling technique was employed. The research instrument was administered to respondents by means of the email. These were received through the same means. A total of 36 responses were received. The respondents were from both public and private sector: (22%) Eastern Cape, (25%) Gauteng, (25%) KwaZulu Natal, (6%) Limpopo and (22%) Western Cape. They had an average of 40 years working experience with the majority being males (83%) and females (17%). Most (33%) of the respondents were over the age of 50, followed by 31 years to 40 years (30.5%), followed by ages between 25 to 30 years (19.4%), and 41 to 50 years age bracket (16.7%) respectively. The highest formal qualification was diplomas (33.3%), followed by Master's degree (16.7%) and B.Tech (11.1%) respectively and lastly other related qualifications (5.6%). Majority (52.8%) of respondents were Candidate Project Managers registered with SACPCPMP followed by Professional Project managers (47.2%). Most (27.8%) of the respondents were supervisors followed by owners of the businesses, i.e. Directors, Managing Members or Principals (19.4%), followed by senior staff (16.6%), next were managers (13.9%), and lastly were directors and other (i.e. lectures) (8.3%) respectively.

Findings

The tables below present the results of the data analyses and interpretation thereof
Table 1: Factors influencing the ethical decision of a project manager in South African.

S/No	Determinants of manager's ethical decision making	Mean Score	Ranking
1	Societal Culture	4.3	1
2	Personal value	4.1	2
3	Perception	3.9	3
4	Age	3.8	4
5	Income level	3.8	5
6	Education	3.4	6

7	Diversity relative to work force	3.4	7
8	Organizational culture	3.4	8
9	Gender	3.03	7

Table 1 presents the factors that influence the ethical decision of a project manager. It is noted that all of these factors are above the mean score of 3. This indicates that the factor has a moderately high influence in the ethical decision of a project manager in South Africa. Societal culture (MS=4.30) has the most rating. This can be recognized by the fact that culture is the background through which societal values are entwined hence the cultural values play an important role in determining the project manager's ethical decision making in the organisation. Next to societal culture is Personal value (MS=4.1).This is comparative to attitude and behaviours which will impact on personal reputation of an individual. The least rated factors is gender (MS=3.03). This is animated that gender is not necessarily the deterrent of one having to commit an unethical conduct in the organisation.

Table 2: The criteria that form the basis of ethical judgements and behavioural intentions

S/No.	Determinants of manager's ethical decision making	Mean Score	Ranking
1	Corporate value	4.02	1
2	Individual Value	3.95	2
3	Situational influence	3.85	3
4	Moral Reasoning	3.83	4
5	Social influences	3.63	5
6	Impression management	3.32	6

Table 2 presents the criteria that form ethical judgement and behavioural intentions. It is noteworthy, that all of these factors are above the mean score of 3. This indicates that the factor has a moderately high influence in the ethical judgements and behavioural intentions of a project manager in South Africa because the consequences of unethical behaviours could adversely affect the reputation of the organization or individual working for the organization. Corporate value (MS=4.02) has the most rating. This can be attributed to the fact that the corporate values of an organisation are those that assist in the sustenance of the organisation. Next to corporate value is individual value (MS=3.95). This is relative to approach, people and relation cultivation, which influence the repeat of business therefore the individual values reflects how one or a project manager fulfils the duties or responsibilities assign to him or her, in order for the project to be a success. The least rated factors is impression management (MS=3.32). This is relative to one trying to impress another by portraying to be good whereas he or she is engaged in unethical acts that have a possibility of a project not being completed on time.

Table 3: The impact of unethical behaviours of project managers on projects

S/No.	Factors impacting the unethical behaviour of a project manager	Mean Score	Ranking
3.1	Adversely affect the Quality of a product	3.90	1
3.2	Cost performance	3.80	2
3.3	The level of risk on a project increases	3.76	3
3.4	Time to complete the project	3.70	4
3.5	Reduction of Profit	3.68	5
3.6	Compromising of safety	3.64	6
3.7	Company image fades	3.60	7
3.8	Scope of the project changes	3.59	8
3.9	Shareholder value decreases	3.45	9

Table 3 presents the impact of unethical behaviours of Project Managers. It is notable that all of these factors are above the mean score of 3. This indicates that the factor has a moderately high influence in the unethical behaviours of a project manager in South Africa. Quality that

is adversely affected by the unethical behaviour of a project manager has the highest rating of (MS=3.90). This can be endorsed by the fact that quality is dependent on ethical behaviour, whereby quality and ethics have a common care premise which is to do right things right and it is a proven way to reduce costs, improve competitiveness, and create customer satisfaction. After quality is cost performance (MS=3.80). It is practical a project might have to be abandoned altogether if funds run out before completion due to unethical conducts, in which case the money and effort already invested become forfeit. Cost performance is followed by the level of risk on a project increases (MS=3.76). This is tangible that risks could arise from illegal, unethical, incorrect, and inappropriate actions by project managers the best way would be for companies to seek ways to eliminate these risks since they get no strategic benefits from taking them on. The least rated factors are the scope of the project (MS=3.59), Making changes without proper impact analysis, and without reviewing schedule and cost implications has a negative impact on a project and the shareholder value (MS=3.45),this is relative to the decline of shareholder value should the project manager engage in unethical acts.

DISCUSSION

The findings of this study corroborates with finding of other studies with respect to most factors of the study. Firstly, the most influencing factor for ethical decision is societal culture in this study, which is similar to the finding of Aberlechner (2001) that conclude that societal influence such as persuasion, suggestion and asking for favour influence ethical decision making. Perosnal values were found to influence ethical decision making. Similarly, Fritzsche (2007) in his study found personal values linked to ethical decision making and Mason and Madrack (1996) report that there exist a positive relationship between age and ethical decision making, the was the third most influencing factor relatively. Secondly, regarding factors for ethical judgement, corporate and individual values were found to be the most influential in this study. These agree with the findings of the following: Davis (2003) says that norms, symbols, rituals and other cultural activities centred on corporate values, while Glinow and McShane (2008) three factors influences and individual's ethical judgement, namely, ability to recognise it, ability to think through it and ability to make good judgement. And thirdly, one major impact found relative to this study of unethical decision behaviour is adverse quality of product. These finding ties with one of the finding of Hamzah et al. (2010) that say human factors play an important role in quality related problems in construction projects.

CONCLUSIONS

Respondents agreed that societal culture, personal value and perception are very influential factors on ethical decision of project managers; culture of the organisation is a direct reflection of the personal value of the project manager. Project managers must be aware of the dangers of unethical conducts and be willing to do something about them including committing to personal change. Education has a direct impact on reducing unethical conduct, the more you educate project managers about ethical issues the more they engage in ethical conducts. Corporate value and individual values are also factors which most influence the ethical judgments of a project manager regarding ethics, should corporates deliberately connects values to operations the chances of project success are very high. Improving ethical practice for the professionals could improve ethical performance in construction projects and production efficiency, Quality, cost containment and risk in the construction industry in South Africa.

ACKNOWLEDGEMENT

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