

**TITLE**

Challenges faced by professional construction project managers in South Africa in complying with their professional code of conduct

STUDENT NAME

Learnmore Tatenda Kamanda

STUDENT NUMBER

1259499

**RESEARCH REPORT SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE BUQS7027 COURSE IN THE SCHOOL OF
CONSTRUCTION ECONOMICS AND MANAGEMENT AT WITS UNIVERSITY**

SUPERVISOR

Professor Samuel Laryea

July 2018

Declaration

I hereby declare that this project in my own work, except where due reference has been made. This research report submitted in partial fulfilment of the Master of Science degree (Building) in Construction Project Management has never been submitted before.

Signature:

Date:

Names: Learnmore Tatenda Kamanda

Table of Contents

Abstract	9
Chapter One: Introduction	
1.1 Introductory Background	10
1.2 Problem Statement	12
1.3 Research Aim	13
1.4 Specific Objectives	13
1.5 Research Question	13
1.6 Research Design and Methods	13
1.7 Scope of study	14
1.8 Structure of report	14
Chapter Two: Literature review	
2.1 What is a professional?	16
2.2 Feature of professionalism	19
2.3 Why professional bodies adopt code of conduct	23
2.4 Ethical values typically imposed on professionals by their code of conduct	26
2.5 Review on studies on the extend of compliance with Professional code of conduct	28
2.6 Challenges in complying with professional codes of conduct	31
2.7 Review on the SACPCMP code of conduct	33
2.8 Conclusion	37
Chapter Three: Research design and methods	
3.1 Research question	38
3.2 Research design	40
3.3 Research methods	50
3.4 Validity	60
3.5 Research ethics	61
3.6 Reliability and dependability	62

3.7 Replicability	63
3.8 Conclusion	64

Chapter 4 Data Collection, Presentation, Analysis and Results

4.1 Identification of the obligations imposed on construction project managers in South Africa by their professional code of conduct	65
4.2 Examination of the extent of compliance with the professional obligations specified in the code of conduct	68
4.3 Ascertaining and examining specific challenges faced by the construction project managers in complying with their professional code of conduct	75

Chapter 5 Discussion

5.1 Systematic identification of the obligations imposed on construction project managers in South Africa by their professional code of conduct	85
5.2 Examination of the extent of compliance with the professional obligations specified in the code of conduct	86
5.3 Ascertaining and examining specific challenges faced by the construction project managers in complying with their professional code of conduct	86
5.4 Member designation	90
5.5 Validation	90
5.6 Conclusion	90

Chapter 6 Conclusion and Recommendation

6.1 Identification of the obligations imposed on construction project managers in South Africa by their professional code of conduct	92
6.2 Examination of the extent of compliance with the professional obligations specified in the code of conduct	92
6.3 Ascertaining and examining specific challenges faced by the construction project managers in complying with their professional code of conduct	93

Appendices

Appendix A	SACPCMP code of conduct
Appendix B	Questionnaire template
Appendix C	Questionnaire cover letter
Appendix D	Respondent consent form
Appendix E	Interview schedule template
Appendix F	Data documents P1 to P5
Appendix G	Information sheet
Appendix H	Data matrix
Appendix G	Number of obligations per individual case

References	95
-------------------	----

List of Figures

Figure 1	Research onion	41
Figure 2	Cases compliant per individual obligation	70
Figure 3	Partially compliant cases per individual obligation	71
Figure 4	Non compliant cases per individual obligation	73
Figure 5	Percentage challenges as mentioned by participants	83

List of Tables

Table 1	Dimensions of professionalism	21
Table 2	SACPCMP code of conduct ethical value	35
Table 3	SACPCMP number of registered persons by designation	50
Table 4	SACPCMP population for member designation for this study	51
Table 5	Professional obligations imposed on SACPCMP members	52
Table 6	Professional obligations imposed on SACPCMP members	65
Table 7	Data matrix	Appendix H
Table 8	Level of compliance per individual obligation	Appendix H
Table 9	Level of compliance per individual case	Appendix H
Table 10	Percentage compliance per individual case	Appendix H
Table 11	Participants level of compliance	74
Table 12	Coding of challenges identified per respondent	76
Table 13	Challenges identified by categories	80
Table 14	SACPCMP code of conduct	85
Table 15	Challenges identified	87

Acronyms

CBE	Council for the Built Environment
ECSA	Engineering Council of South Africa
SACPCMP	South African Council for Project and Construction Management Professions

Acknowledgements

The completion of this research was because of the assistance of numerous people whose names cannot all be listed. However, I would like to express my heartfelt indebtedness to the following:

My beloved wife and family, thank you for affording me the time.

Dr Samuel Laryea, my Research supervisor, I appreciate your insightful and valuable guidance. The SACPCMP Team and the research participants, without you this research was not going to be.

Above all, praise be to the All powerful, the Author of all knowledge and wisdom, YHWH. My Hallelujah belongs to you!

Abstract

Empirical evidence has revealed prevalence of unethical practices in the Construction industry. These malpractices results in project failures. On the contrary, successful delivery of construction and infrastructure projects brings physical development which promotes economic growth and improves the country's Gross domestic product. For that reason, professional codes of conduct are established as a deterrent to unethical behaviour. The debate whether the adoption of professional codes of conduct bear improved results remains ongoing. Although literature has identified non-compliance to the codes of conduct as one of the factors leading to such malpractices, little is known about challenges facing construction professionals in complying with their code of conduct. This study answered the question, "what challenges do construction project managers in South Africa face in complying with their code of conduct?"

Interpretivism research philosophy and an inductive approach to theory development was adopted. The investigation is conducted to study professional construction project managers registered with SACPCMP in the category of professional construction managers and professional construction project managers. A systematic review of the SACPCMP code of conduct identified 39 obligations imposed on professional construction project managers by their code of conduct. An internet based questionnaire survey was used to examine the extent of compliance with these 39 professional obligations, followed by semi structured face to face individual interviews to identify challenges. The interview transcripts were analysed using thematic analysis technique.

Results of the questionnaire survey showed that 76% of the participants fully comply with all 39 obligations. 12 out of the 72 respondents of the questionnaire survey admitted to being non compliant to certain obligations of their code of conduct. 10 out of 72 respondents did not respond to certain obligations. 10 out of the 12 respondents who admitted to being non-compliant participated in the face to face semi structured interviews. The findings of the semi structured interviews revealed the following challenges, obedience to authority, peer pressure, low moral awareness, time constraints, breach of confidence, act of kindness and socio political pressure.

Chapter 1

Introduction

1.1 Introductory Background

The construction industry is classified as one of the most unethical industries worldwide; this has drawn criticism in recent years. Research conducted in different countries which includes South Africa (Bowen, Pearl and Makanjee 2005), Hong Kong (Fan and Fox, 2005), Nigeria (Adeyinka, Jagboro and Ojo, 2015), USA (FMI/CMAA 2004 and Jackson 2004/2005), Australia (Vee and Skitmore 2003) and Ghana revealed a prevalence of unethical practices. Vee and Skitmore (2003) examined construction ethics and revealed a trend of unethical practices which include conflict of interest, unfair conduct, bribery, collusive tendering, fraud, negligence and violation of environmental ethics. These malpractices results in project overrun, time and budget constraints, customer dissatisfaction, poor quality of work, non compliance to safety standards and un-finished projects.

The idea of professionalism aim to control how work is executed by workers in any occupation directed towards high quality service to others, concern for others, respect for the rule of law and commitment to excellence. Professionalism can be established by the formation of professional associations or organisations which abide to a code of conduct. A code of conduct prescribes how professionals (members of the association) are to pursue their common ideal. Professional bodies use the code of conduct to promote and enforce good ethical practices by setting ethical standards, rules or obligations for their members to follow.

Construction industry through the provision of infrastructure stimulates physical development which catalyses economic growth by allowing efficient delivery of goods and services, this improves gross domestic product (Omole, 200; Hillebrandt, 2000).The construction sector in any country's economy employs a significant fraction of the nation's workforce which is between 2 to 10% (Abdul-Rashid and Hassan, 2005). The South African case is no exception. According to Pearl, Bowen and Makanjee 2005, South Africa is a Third World and First world country where poverty and affluence exist together. Unemployment and poverty alleviation is

one of the key challenges that the present day government is fighting. Thus, construction industry is principal means by which government plans to fight unemployment through Infrastructure investment which is a key driver of economic growth. In order for the client organisations to achieve their goals, projects should be managed and delivered in the most efficient manner possible. Construction professionals should administer their duties with due diligence and care because their actions have effect on lives and properties of the general public. Issues of the construction sector affects a wide spectrum of population which includes local authorities, councils, client organisations, professionals, suppliers, manufacturers, contractors, sub-contractors, general public, government representatives, the business fraternity and users of public infrastructure to mention but a few. Ethical behaviour of construction professionals is essential for an industry that has been negatively stigmatized with poor ethical conducts (Tow and Loosemore, 2009).

Empirical research have shown that there is unethical practices between project owners, funding agencies or project sponsors, consultants, contractors, subcontractors and so on (Tahir and Amjad, 2013). Nkando, 2000 assessed competencies of professionals in South Africa construction industry, the research findings concluded that the industry's performance cannot be measured on the basis of meeting the client's demands through dynamism and technical competencies and innovative skills only but also by assessing the behavioural pattern of professionals in protecting the interest of the client and maintaining public harmony. This shows that that the professional etiquette of professionals is observed by the public.

Researchers have pursued the topic of professional ethics but the question whether or not adoption of codes of ethics bear improved results remains debatable (Babalola and Ojo, 2015). Unethical practices still remain a key issue in the construction industry with critics questioning the adherence of construction professionals to codes of conduct. Adeyinka, Jagboro, Ojo and Odediran (2014), assessed construction professionals' levels of compliance to ethical standards in the Nigerian construction industry and concluded that clients service delivery, educational training and professional qualification and standards of practices are the most attended to construction ethical standards in Nigeria. Fair competition is the standard that received the least compliance. The study further recommended that construction professionals

should pay equal attention to all standards to meet their client's demands. Further research was recommended in the different mechanisms employed in enforcing ethical standards and the factors influencing compliance. Thus the aim of this research is to fill this gap by identifying in the South African context the challenges facing construction professionals.

1.2 Problem statement

Challenges faced by construction project managers in South Africa in complying with their codes of conduct results in project delays, cost overruns, poor quality of work and unfinished projects. Accordingly this affects physical development which lowers the nation's gross domestic product.

While various factors can lead to problems of cost, time, quality and completion of projects, it is argued that ethical behaviour contributes to these problems. Empirical evidence has proven that ethical behaviours of construction project managers have lead to all types of misconduct across the globe. Poon (2004), studied ethical perceptions of construction project managers in South Africa. The results show that construction managers attest to have conducted unethical behaviour in some areas by falsifying reports, over claiming expenses and by displaying low level of personal honesty. An extension of Poon (2004) study, observed several unethical conducts and dilemmas in the construction industry which includes corruption, negligence, bribery, conflict of interest, cover pricing, front loading and further indicated that there were on the increase.

Consequentially this has an effect on project success. Hamzah, Saipo, Mohd, Mohammed and Yap (2007) studied the effects of unethical practices to quality of construction work in Malaysia. The study found out that unethical practice among professionals impact negatively on the products of construction industry.

Issues of the construction sector impacts on different organizations which includes, public institutions, project owners, professionals, manufacturers, construction companies, sub-contractors, general public, government representatives, the business fraternity and users of public infrastructure to mention but a few.

1.3 Research Aim

The aim of this research study is;

To identify and examine the challenges faced by construction project managers in South Africa in complying with their professional code of conduct.

1.4 Specific objectives

The specific objectives for this study are;

- 1.4.1 To systematically identify the professional obligations imposed on construction project managers in South Africa by their code of conduct.
- 1.4.2 To examine the extent of compliance with the professional obligations specified in the code of conduct.
- 1.4.3 To ascertain and examine specific challenges faced by the construction project managers in complying with their professional code of conduct.

1.5 Research Question

The following research question is posed for this study;

- What challenges do construction project managers in south Africa face in complying with their professional code of ethics.

1.6 Research design and methods

The methods chapter outlines the choice of the research philosophy and approach used to answer the research question and to meet the objectives of this study. The research adopts an inductive approach, and uses a two stage research process whereby a survey is used to identify registered persons who admit to being non compliant followed by semi structured interviews to acquire an understanding of this phenomenon..

Data presentation and analysis of results chapter focuses on the findings of the quantitative and qualitative method. The results are prepared and presented for analysis. The level of compliance is tabulated and visually displayed using a pie chart. Thematic analysis technique is used to code, categorise and quantify the findings of semi structured interviews. The themes from thematic analysis are used to answer the research question. The discussion chapter focuses on how the results relate to the research question and objectives. Lastly the conclusion chapter gives a brief on the findings of the research and how these meet the aim and answer the question. Recommendations are made on future studies.

1.7 Scope of study

This study focuses on construction project managers in South Africa. The research looked at two professional categories, the Professional Construction Manager category and Professional Construction Project Manager Category. These are the only two categories of professional construction project managers in South Africa. The focus on SACPCMP is solely because SACPCMP is the only body mandated by the Government of the Republic of South Africa to register construction professionals. As such Professional construction managers in South Africa are only registered by this authority. It should be emphasised however that the decision to investigate SACPCMP members was not because of any other reason particularly to do with issues of professional conduct but as stated above. The SACPCMP as an organisation is established in terms of Act 48 of 2000 of the parliament of the Republic of South Africa. The SACPCMP registers and governs the practices of practising construction project managers through establishing and enforcing a code of conduct in this category and all other categories of registration. The SACPCMP has 4359 registered professional construction project managers in the specified categories including candidates.

1.8 Structure of report

This research report is presented in the following structure;

Chapter One

Chapter one is the introduction chapter and contains the introductory background, problem statement, research aim, specific objective, research question, an overview of the research design and methods, scope of study and finally structure of report.

Chapter two

Chapter two is literature review. This chapter examines and presents literature on the concept of profession, professionalization and professionalism. The chapter also reviewed literature on ethical values that are typically imposed on professionals by their code of conduct, extend of compliance with the code of conduct and the challenges that professionals typically face when complying with their code of conduct.

Chapter three

This chapter looked at the research design, methodological choices applied for this study including the issues of research ethics and validity.

Chapter four

Chapter four presents data analysis and findings of the data collected.

Chapter five

Chapter five is discussion chapter. This chapter looks at the relationship of the findings to the research question and research objectives.

Chapter Six

Chapter six draws and presents conclusions from findings of the study and includes some recommendations.

Chapter 2

Literature review

Based on the research question - “what are the challenges faced by professional construction project managers in South Africa in complying with their code of conduct?” the following are the objectives for this literature review;

- Professional ethical values that are typically imposed on professionals by their code of conduct
- Extent of compliance of the professionals with their code of conduct
- Challenges that professionals face while complying with their code of ethics.
- Obligations imposed on construction project managers in South Africa by their code of conduct.

2.1 What is a professional?

Grey areas exist in defining a “professional” and dictionary meanings are not sufficient. Much of the literature on the professions dates back to the 1900s through the 1950s and is found in the social sciences and philosophy. The three concepts of profession, professionalization and professionalism were first analysed by Carr Saunders and Wilson in 1933, their findings are still considered as a standard history of professions (Meitjes and Niemaan – Struweg, 2009) since then the definition of those concepts has been a frequent and ongoing debate.

The twenty first century world is vastly different from the world in which the traditional professional construct evolved and developed. Various factors which are social, political, cultural, geographical and historical has lead to the evolution of professions. One other example is globalisation, largely powered by cultural and economic arrangements which emerged following the decline of the post 1945 economic and political order. The formation of the World Bank and the rise of the IMF with its economic practices and management policies promoted professional practices specifically in the public sector. This transformation of society

gave birth to professionalism and resulted in material benefits to organisations, positive effect to customer satisfaction and improved job satisfaction for employees (Cheng & Wang, 2015). In as much as there is extensive literature on what constitute a “professional” the search of a satisfactory definition of a professional is long and still unresolved. Many writers have defined the word “Professional” based on its distinctive characteristics. Brown (1964) states that the term can be defined by identifying what it symbolises to society. Billet, Harteis and Gruber (2014) agrees that the terms “profession”, “professional” and “professionalism” are used in a variety of ways not all which are consistent to one another, the term with the loosest usage of the three being “professional”. The idea of profession and professional is often viewed the same. The term professional has an arbitrary definition as used by social scientist to identify certain phenomena in a special kind of occupational organisation. The earliest meaning of the word “professional” comes from those professing the vows of a religious order; it meant the act of professing. The word professional has also been widely recognised as rhetoric. This presents an unidentifiable standard because the elements of professionalism are seldom specifically defined.

The Oxford dictionaries online (accessed 27/04/2016), offers different definitions of the word professional both as an adjective and as a noun, firstly relating to or belonging to a profession, secondly worthy of or appropriate to a professional person, competent, skilful or assured, thirdly someone engaged in a specified activity as one’s main paid occupation rather than as an amateur. A professional is further defined as a noun. Firstly, as a person engaged in a specified activity, especially a sport, as a main paid occupation rather than a pastime, secondly defined as a person who is competent or skilled enough to undertake a particular activity. The dictionary definitions shows the different meanings different societies give the word “professional” with much ambiguity of the term in its adjectival sense. Billet, Harteis and Gruber, 2014 agrees to the dictionary meanings, the word “professional” can be used adjectively or as a noun thus to refer to one as a professional signifying that the person (doctor, nurse, waiter, electrician) received some training or acquired expertise or experience with regard to the task the person is undertaking.

Naagarazan (2006), defines a professional as a member of a profession, or someone who earns a living from a specified professional activity. The term also describes the standard of education and or training, knowledge and skills that qualifies members to perform their roles within that profession. Naagarazan (2006) stressed the importance of the professional being a member of a professional body or association in that particular field that sets agreed professional standards of practice and ethics.

Seemingly the definition of professional revolves that of a profession, yet the concept of profession is much disputed (Scicelli, 2005 and Evetts, 2006). In narrow usage, not all jobs or occupations are named professions. Although sometimes meteorically referred to as professions, jobs such as electrician, carpenter, mason, and plumber are more generally thought as trades or crafts. According to the Harvard business review (2003), many occupations claim professional status, examples include business executives, social workers, musicians, sportsmen, and academics who all call themselves “professionals”. Not all occupations who claim to be professionals are recognised by society as such. Doctors and Lawyers are known to society as professionals in contrast to teachers and nurses. Heud (1960), yet if everyone is a professional the term loses its meaning. According to Glinow and Schriesheim, 1977 the term professional has numerous meanings and it would be pointless to give examples of the numerous ways the term has been used.

Naagarazan (2006) defines a profession as “any occupation/job/vocation that requires advanced expertise (skills and knowledge), self regulation, and concerted service to the public good. Advanced expertise, self regulation and public good are key characteristics of a profession. Evetts (2006, p135) identify professionals as practitioners who work in knowledge based service occupations. These occupations require tertiary education followed by formal credentialing, and an agreed standard of ethical behaviour. A Professional is always a “person” or a “status”. Freidson (2001,p180) offered an ideal type model of a professional as belonging to a professional body having a body of knowledge based on abstract concepts and theories and requiring the exercise of considerable discretion, an occupationally controlled division of labour, credentialing procedures, training programmes and an ethic which implies doing good rather than economic benefit. This is the definition adopted for this study. This definition

emphasise that a professional should belong by accreditation or licensure to a professional organisation and likewise this study will not consider anyone without affiliation to a professional body as a professional.

2.2 Feature of professionalism

Many researchers and practitioners have investigated professionalism in their own occupational groups with an objective to distinguish professionals from non professionals (Scott, 2007). The concept of professionalism have predominantly evolved and developed significantly in the field of sociology as a social process. Most studies emphasised on regulation of professional groups and the competencies of their members. Shulimson (1996), states that there are differences in the scholarly community about the nature of professionalism, some only insists in professionalization of classic or traditional occupations such as medicine and law while others write about nearly everyone. Hence, the definition of professionalism is considered a difficult concept to explain.

There is disagreement of standard definition of professionalism or whether there is even a need for such. This is largely because each and every occupational group has its own definition of the concept. Arnold and Stern (2006), argues that a clear, complete and concise definition that specifies the domains and dimensions of professionalism, what it includes and excludes is very important for the assessment of medical practitioners. Wilensky (1964), states that any occupation willing to implement professional authority must find a technical basis for it.

Lee (2014) defines professionalism as an asset of individual values, behavioural orientation and belief system that advances both personal expertise and social status. Earlier studies have revealed that the concept of professionalism is defined and implemented differently across the different professions. According to Abbott (1988)'s construct of professionalism, it is not the characteristics or structure of professionalism that is important but the work the profession performs and how it controls that work as related to the competing professions. This link is what he termed "jurisdiction". Pizam (2007), states that professionalism is an amalgamation of an array of appearance and behaviours, an assortment of technical and conceptual skills, a

commitment to maintain competence in a given body of knowledge, and a set of internalized character strengths, values, and attitudes directed towards high quality service to others, concern for others, respect for the rule of law, and commitment to excellence. Sociological analysis of professional work has differentiated professionalism as a means of organising work and controlling workers, in contrast to the hierarchical, bureaucratic and managerial controls of industrial, governmental and commercial organisations. However analysts and researchers having faced great difficulties in defining the distinguishing characteristics between professions and occupations have come to conclude that drawing lines between professions and occupations is not of essence, instead both should be regarded as similar social forms which share common characteristics (Olofsson, 2009).

While several definitions and ways to measure professionalism exist, the approach of Hall (1968) has been the most influential and therefore adopted for this study. Hall, 1968 and other sociologists as mentioned in the following paragraphs have drawn a professional model which is a series of characteristics that are associated with professions following their studies in different professions and occupations. The professional model can thus be used as a criterion to differentiate between professions and other kinds of work.

The multi dimensional construct of professionalism has been a popular approach among the community of researchers and practitioners to conceptualise professionalism. This approach is grounded to a combination of structural and attitudinal aspects as defined by Wilensky (1964). Hall (1968), states that there are two types of professionalism, which are structural attributes and attitudinal attributes. The structural attributes of a profession are characterised through a professionalization process in four stages, (i) the creation of a full time profession (ii) the establishment of a training school (iii) the formation of professional association and (iv) the formation of code of ethics. The attitudinal attributes of a profession are (i) use of professional organisation as a major referent, to which a professional abide by norms and standards established through licensing and charter ship issued by governing authorities (ii) belief in public service (iii) belief in self regulating (iv) sense of calling (v) autonomy.

Snizek (1972) modified and evaluated Hall's scale on medical practitioners and engineers.

Further studies followed to test the suitability of Hall's scale for the measurement of professionalism and supported its suitability which are Mowery, 1986; Crank, 1987; Morrow & Goetz, 1988 as cited by Scott (2007). Scott (2007) evaluated Snizek's modified version of Hall's professionalism scale in the construction industry among builders and assessed the suitability of the scale. This study found out that the scale is applicable with modification additions to reflect professional practice of today. Several other scholars have studied professionalism coming up with a variety of approaches to the concept. Armstrong (2001) used a structural equation modelling to investigate professional commitment.

Cheng & Wong (2015) carried a review on literature on dimensions of professionalism in the fields of sociology, philosophy, medicine and education which revealed that several components are generally reported in traditional professions, medicine, law and education. Which are (i) specialist knowledge (ii) expert competence and skills (iii) expert qualification and training (iv) job autonomy (v) social orientation (vi) ethics and self regulation. The results are summarised in Table 1 below as identified in various occupational contexts.

Table 1 - Dimensions of professionalism in various industries (Chen and Wong, 2015)

Authors	Hall (1968)	Kerr et al. (1977)	Bartol (1979)	Haywood-Farmer and Stuart (1990)	Wood et al. (2000)	Boyt et al. (2001)	Swailles (2003)	Cohe n and Kol (2004)
Context	11 types of profession	Accounting	Computi ng	Medicine	Not for profit Hospital	Professional services,	Public sector	Nursin g
Remark			Based on Kerr et al.			Based on Hall (1968)	Based on Hayward - Farmer	Recon struct ed Based
Dimensions	X	X	X	X		X	X	X
Job Autonomy								

Societal			X		X	X
Ethics		X	X		X	
Commitment		X	X		X	
Professional association as referent	X				X	X
Knowledge			X			X
Collegial maintenance of standards		X	X	X		
Sense of	X				X	X
Professional identification		X	X			
Self regulation	X				X	
Own Superiority/ Self confidence			X			X
Good communication skills						
Right attitude to service						

❖ *Dimensions with similar meaning but different wording were grouped together*

In summary, the table shows that elements of professionalism are not universal across different industries. For the purpose of this study Snizek's modified Hall's attributes are accepted as practical dimensions of professionalism with which professionalism can be measured or achieved based on the findings by Chan and Chan (2007). Hence,

professionalization can be defined based on the aforesaid elements of professionalism. Professionalization is the development of occupations to professional status by adopting the elements of the professional model.

Professionalization results in the qualifying occupation obtaining legal recognition, professional titles being granted to members and protection of work within the profession's jurisdiction (Meintjes and Niemann, 2009).

2.3 Why professional bodies adopt codes of conduct

Professionalism can be established by maintaining structural and attitudinal attributes. Key attributes includes the formation of professional associations, creation of a code of conduct and use of professional organisation as a key referent. Members of a profession are bound together by social and moral ties to form a community of purpose. A profession can therefore be viewed as a moral community which assist in sustaining the relationship between the profession and those who receive professional services. Davis (1991), a profession is a group of persons who want to cooperate in serving the same ideal better than they could if they did not cooperate.

A code of ethics is a convention between professionals which prescribes how professionals are to pursue their common ideal. Most groups establish moral rules, standards, obligations and laws in form of a code of ethics to reduce the variation of individual ethical conduct. Codes of ethics are documents which prescribe the main behavioural principles and articulate the values embraced by an institution. A code of conduct is a vehicle which assures the public, clients and colleagues that its members are competent have integrity, and that the profession intends to maintain and enforce high standards.

Although national governments or supra – national authorities may enforce unethical behaviour by making them illegal using legislation, it is impossible to legislate on every matter of concern. As a result professional bodies play an important role in promoting and enforcing good ethical practices. For this reason most professional bodies use professional codes of conduct to set

ethical standards, rules or obligations for their members to follow. Some writers argue that professionals cannot wait for the legal and administrative systems to guide their decision as situations often arise that require professionals to take actions ahead of these systems. Professionals face many ethical problems including issues of compliance and acting in accordance with the law, privacy and confidentiality, fraud, quality, dishonesty, corruption, bribery, safety health and environment, discrimination, information exchange, conflict of interest, professional relationships, working within limits of decision, vendor management, client care and advocacy. The professional's knowledge when faced with the above situation can be strengthened by a professional code of conduct.

Often writers use the phrase "Code of ethics", interchangeably with ethical codes, professional codes, and codes of professional conduct, codes of ethical practice or just "codes". L'etang (1992) argues and defines three types of codes, Codes of ethics these comprise of a fairly short set of ethical principles expressed in imperative mode. Codes of conduct these are very specific and practical documents that govern client relationships. Codes of practice are technical documents that define required standards for members of work. According to Beets (1991), there are professional codes of ethics that are detailed and those that are general and vague. Codes of ethics that are general in nature often appeal to practitioners' moral character without giving specific practices to guide members in acting ethically. While those that are specific gives rules and lists of "shall nots". Some codes contain both general and specific provisions. Usually general provisions are based on moral foundations and the specific prescribe the prohibited unethical practices. Frankel (1989) put forward types of professional codes of conduct, the aspirational code, which gives ideals that practitioners are expected to strive for. Educational code, that help practitioners to deal with problems of professional practices and involves commentary and interpretation and lastly regulatory codes, these are a detailed set of rules to govern professional conduct and gives guidance on handling grievances. In concept these codes are distinct but in practice one code can have characteristics of all three.

Professional codes of conduct play a crucial role in ensuring that members question their values (Meyer, 1987). Professional codes of conduct serve multiple functions. Frankel (1989)

came up with eight distinct functions of codes of ethics these have been agreed upon by different writers as well; Code of ethics as an *enabling document* which puts up a framework for organising and evaluating alternative course of action for practitioners. As *source of public evaluation*, the code can be used as a *mechanism for evaluating professional performance* of the profession and professional. *Professional socialisation*, to create a sense of common purpose and strengthen professional identity amongst its members. As a *deterrent to unethical behaviour*, by enforcing sanctions and fostering a monitoring system to uphold the group's integrity and promote good ethical conduct. As a *support system* which offers support to professionals against improper claims or unreasonable demands by clients or employers. Codes can be utilised when adjudicating claims among members or involving outsiders and or as a *tool for assessing professional practice*.

Nitjhof et al, (2003); Oladinrin, Ho 2015 states that codes of ethics exist in various organisations, for example 75 to 85% of the top 1000 US companies including industry and professional associations have documents called code of ethics or code of conduct. 38% of the top 100 organisations in the Netherlands have a code of conduct. 65% of the top 500 organisations in Spain have a code of ethics. In South Africa specifically in the built environment, the code of ethics is enforced by act of parliament.

In South African built environment, the CBE Act establishes the Council for Built Environment (CBE), explained later, to ensure consistent application of the code of conduct as prescribed by the council of professions. According to the SACPCMP act of 2000, clause 27, the SACPCMP must in consultation with the CBE, voluntary associations and registered persons, draw up a code of conduct for registered persons. The SACPCMP is responsible for the administration of the code of conduct and ensuring that all registered practitioners comply with the code of conduct and failure to do so constitute misconduct. Similarly ECSA issued a code of conduct on 22 November 2013, as published under the Engineering profession act, 2000 (Act 46 of 2000). In Hong Kong, code of ethics is a requirement for any contractors to bid for government works. Corporate firms in the USA should comply with the foreign corrupt practices act by establishing a written code of ethics. According to Verschoor (2002), the New

York Stock exchange requires all listed companies to have a code of ethics which covers stipulated issues and is accompanied by appropriate compliance standards and procedures.

2.4 Ethical values typically imposed on professionals by their code of conduct

Researchers in the past, performed content analysis of different professional codes of conduct using different approaches to establish the guiding ethical values reflected by each code of conduct as course of conduct. Amongst them Raiborn and Payne (1990); Tucker et al.,(1999); Wiley (2000). Most professional groups adopt professional values as guidelines to professional behaviour to the members of that group. In order to articulate professional values into practice organisations adopt obligations or standards or rules that promote the adherence to these ethical values.

According to Raiborn and Payne (1990), a code of ethics should address the four values of justice, integrity, competence and utility. Tucker et al.,(1999) assessed professional codes of conduct for professional business associations and identified seven ethical constructs which are , integrity, equality, economic efficiency, equivalence, distribution, contributive and environmental. These were found to be similar to Raiborn and Payne (1990) by definition with the exception of two additional ones which are economic efficient and environment. Wiley (2000), states that there are five ethical values that define good professional behaviour; integrity, proficiency, legality, loyalty and confidentiality. All of Wiley (2000)'s five ethical values are similar to Raiborn and Payne (1990) by definition, integrity matches integrity, proficiency matches with competence, legality with justice and confidentiality with justice as well. However according to Coughan (2001) these have been disregarded as different terms with similar meaning to Raiborn and Payne (1990). Other values as mentioned, "Economic efficiency" were disregarded on the basis of ambiguity with no specific rationale. The four ethical values of Raiborn and Payne (1990) are described below;

Justice – includes conscientiousness, impartiality and good faith in dealing with others. A just person is one who always does what is morally right. Just discourages discrimination.

Competence – competent persons are capable, reliable and duly qualified. They always seek continuous self improvement and reliability as a habit.

Utility – as defined by Raiborn and Payne (1990), as encompassing efficacy & providing the greatest good for the greatest number. Utility is based on utilitarianism; the appropriateness of an action is determined by the consequences of carrying out that action. In this value individuals always consider others.

Integrity – integrity is displayed by our actions based on moral principles which includes but not limited to humility, courage, honesty, sincerity and condor. Integrity requires a continuous reflection of consistency of values.

According Olson (1998), a code of ethics is written to a specific group of people and the type of activities the members are engaged in determines the probable situations ethical misconduct may occur. Usually a code is commenced with a statement of purpose which answers the question “why does my organisation want to develop a code of ethics?” Other codes instead of a purpose statement they define their purpose in the *preamble* or *statement of intent*. Either way this part of the code helps to set the tone of the document. Formulating a code of ethics is a collective task and requires group input and consensus on the morally permissible standards relevant to the group. Olson, 1998 gives a list of questions as a guideline on what to include in the code; that are the persons or organisations that are affected by the professional organisation or by members of the organisation, prioritised? What is the main function of the organisation? What are the unethical actions and or decisions that the organisation can foresee and would want to prevent and how would they be prevented? What type of ethical problems are members of the organisation most likely to encounter? How can conflicting principles be resolved? After answering the questions the next step would be to decide how to organise the code, and this is mainly based on the principles of the organisation. Some factors to consider include the length of the code as required by the organisation. A list will be suitable where there isn't much information and a well structured might be utilised where there is much information. Codes that are usually short show the commitment of the organisation to fundamental principles and usually fail to give meaningful guidance in complex situations. Models do exist that can be followed to build codes.

2.5 Review on studies on the extent of compliance with professional code of conduct

Although professions are in agreement with the use of professional codes of conduct to implement professional ethics, controversy surrounds professional codes of conduct concerning their applicability and ability to resolve ethical conflicts and uphold professionalism. While on one hand some researchers argue the theoretical considerations for a meaningful code that is its structure and contents (Oz, 1992; Jamal and Bowie, 1995; Wiley, 2000). On the other hand some researchers challenge the levels of compliance by professionals. This debate has aggravated studies on this subject ranging from assessment of levels of compliance, factors influencing compliance through to challenges being faced by professionals in complying.

Nonetheless many investigators have come up with a variety of findings surrounding the issue of compliance and non compliance to codes of conduct. Calhoun and Wolitzer (2001) argue that the use of codes alone to enforce ethical conduct is inadequate. Vee and Skitmore, (2003) carried out a survey to establish ethical trends in Australian construction industry, their study revealed that majority of organizations have their own codes of ethics and similarly employees belong to professional associations that foster moral ethics. Regardless of that, two thirds of the respondents claimed to have witnessed unethical behaviors, the study concluded by saying that curbing of unethical behavior by use of codes of conduct is difficult because of a lack of professionalism. Bowen et al (2007), researched construction ethics in the South African construction industry focusing on service providers and specifically on issues surrounding professional responsibilities and obligations. The results of the study revealed that generally construction professionals uphold their code of conduct although there are noticeable breaches of codes of conduct by both the professionals and the clients, these breaches are in the areas of conflict of interest and maintaining confidentiality and proprietary information. Further research by Adeyinka, Jagboro, Ojo (2015) to establish factors influencing compliance by construction professionals to ethical standards motivated by Knight and Morledge, (2005) who argued the effectiveness of codes of conduct stating that there is a gap between theory and practice, and that gap implies that there are factors that influence the compliance of professionals to ethical standards, revealed that individual related factors were highly

significant and influential to the level of compliance. Adeyinka, Jagboro, Ojo (2015) recommended further study to expose the challenges faced by different professionals in complying with their code of ethics.

Numerous possibilities exist for examining the content of professional codes. Oz (1992), analysed Information Systems organisations' professional code of ethics. The five organisations included in the study were the Institute for Certification of Computer Professionals (ICCP), Association for Computing Machinery (ACM), Canadian Information Processing Society (CIPS) and the British Computer Society (BCS). The analysis was based on Johnson's (1985) framework which used six types of commitments which are; obligations to employers, society, clients, colleagues, professional organisations and the professions. Oz (1992) found out that the similarities among the codes were more than the differences hence he recommended a unified code of ethics for the Information Systems professionals.

Jamal and Bowie (1995) studied 3 professional codes of the American Institute of Certified Public Accountants, The National Society of Professional Engineers, and The American Bar Association in an endeavour to classify the obligations of the three codes based on a threshold classification scheme. The categories applied in their research included examining the code for (i) moral hazards (ii) professional courtesy (iii) public interest. The conclusion was a recommendation to discard all content of a code that could be classified as self serving.

Wiley (2000), focused on five human resources professional codes of ethics, American Compensation Association (ACA), American Society for Training and Development (ASTD), International Association of Human Resource Information Management (IHRIM), International Personnel Management Association (IPMA), Society for Human Resource Management (SHRM). The objective of the analysis was to classify all the code items based on Johnson's (1985) six obligations; Oz (1992). The six commitments are obligation to the public, society, employers, clients, colleagues, professional organisations and the profession. Wiley (2000)'s findings and recommendations were as follows; (i) in agreement with Frankel (1989), contents of the codes create public expectation that will enable the public to judge the professional against the expectation; codes give the preferred character that individual professionals would be able to emulate. (ii) The similarities were more than the differences hence he recommended a unified code for the Human resource profession. (iii) These codes did not prescribe sanctions

and penalties which supports the idea that codes are primarily a public relations tool as previously mentioned by Davis (1991).

Other approaches for analysing content of codes of ethics includes consequentialism which focuses on outcome of act as the basis of determining whether its wrongness or rightness. One other approach is deontology, unlike consequentialism, focuses on the obligations of members' towards one another, and states that an action is only correct if it is undertaken out of duty not out of gain. Another approach based on the writings of Aristotle is called virtue ethics, this approach is character based and utilises habits to make right and wise choices. Coughlin (2001), examined four professional codes from the hospitality industry using a framework based on values which they describe as the basis of an individual's ethical behaviour. The values are justice, integrity, competence and equality.

Although previous literature has succeeded in identifying non compliance to codes of conduct in the construction industry due to a variety of factors, little is known about challenges facing construction professionals in complying with codes of conduct. A better understanding is required on this subject. Adjei, Sarfo and Sam (2015), identified and evaluated challenges that professionals subscribing to GhIS (Ghana institute of Surveyors) face in complying with their code of ethics. In as much as the study revealed that members of the GhIS unanimously supports the establishment of a code of conduct in each organisation and the need to adhere to it, members of the GhIS also accepted that there are challenges that they face when adhering with a code of conduct. These challenges are political pressure, corruption, social pressure and none sanctioning of defaulters. Literature pertaining to the effectiveness of codes of conduct is scarce in South Africa with insufficient information revealing the challenges faced by construction professionals in complying with their codes of conduct. It will therefore be improper to generalise and use the same results revealed in Ghana in South Africa. The context in which a research is conducted has a significant bearing on the findings, the results produced by a study undertaken in Ghana may not be similar to results produced in a South African context. In order to avoid running a risk of such a generalisation it was deemed necessary to conduct a similar search in the South African environment. Research on challenges faced by construction professionals in complying with codes of conduct is minimal

and a comprehensive theory on this subject is lacking in literature. Adjei, Sarfo and Sam (2015) in their study concluded that the main challenges faced by professional members of GhIS are political pressure, corruption, social pressure and none sanctioning of defaulters. The proposed study in its endeavour to identify and evaluate similar challenges in South Africa will utilise those four challenges which are political pressure, corruption, social pressure and none sanctioning of defaulters but will still remain open differing responses. This study will seeks to develop a theory on challenges faced by construction professionals in complying with their code of conduct using the experiences of the SACPCMP members. It is important to clarify that SACPCMP was chosen solely out of interest and not because of any other reason particularly to do with issues of professional conduct.

2.6 Challenges in complying with professional codes of conduct

2.6.1 Moral Myopia

Drumright and Murphy (2004), describes people with low moral perception as those people who can fail to see the moral dimensions of given situations meaning that they possess a distorted moral vision. A Professional may become so much focused on meeting production targets that ethical issues are obscured. In this case the professional's perception of reality becomes altered so that ethical issues are distinct and hidden from view.

2.6.2 Insufficient attention

Certain matters are given insufficient attention which results in less time spend on ethical decision making (Jones, 1991). People are more likely to produce good results when they have adequate time to digest issues. Less time results in snap decisions which can produce unfavourable outcomes. Issues perceived to be of lesser significance are usually given insufficient attention or neglected. For example when making decisions a Project Manager may consider ethical issues to be secondary to production issues.

2.6.3 Common psychological biases

Messick and Bazerman (1996), mentions that common biases can unconsciously influence our decision making process and result in unintentionally unethical conclusions.

2.6.4 The inside outside struggle

According to Hartman (2008), people do not want to be cast out as different. In many cultures, if you diverge with the rest of the people, you will be rejected. The effects of pushing against the in-group of the organisation can include, blackmailing, excommunication, dis-fellowship, discharge, expulsion and denial. For fear of these consequences professionals can make unethical decisions or end up not deciding.

2.6.5 Little influence over events or perceived control

According to Jones (1991), perceived control is a connection between individual efforts and outcomes. Two types of people exist, people with a high sense of control who believe who believe that their efforts can control and change their environment. On the other hand are those who perceive themselves powerless and believe that one's actions can not affect outcomes. The more control an individual perceives over an event, the more responsibility that individual assumes to make the event happen. Hence some individual will not perform moral action because of that belief that their actions have little influence over events.

2.6.6 Conflict of interest

Board of ethics website (accessed 10/27/2017); define conflict of interest as a situation whereby personal or financial considerations have the potential compromise professional judgement in different professional activities. The compromise does not have to happen first for the situation to be classified as conflict of interest. Situations that may result in conflict of interest includes awarding of construction contracts to family members, former employees and friends; accepting gifts and gratitude's; consultants using their positions for financial gain (Vee and Skitmore, 2003).

2.6.7 Principal of beneficence

The principle of beneficence includes all actions aimed at benefiting or promoting the good of other persons. Beneficence is a moral obligation to non obligatory, optional moral ideals performed to do for the benefit of others

2.6.8 Breach of confidence

Generally one is entitled to communicate anything that one pleases to anyone else, either in writing or by speech or in any other way. However if information is imparted in circumstances that it is made clear that it is confidential, the recipient comes under an obligation not to impart it. Such circumstances include disclosure to a professional person. In cases where there is no separate stand alone agreement, the duty of confidentiality will arise if the information concerned has the necessary quality of confidence that is it must be fairly obviously distinguishable from any information publicly available. Information regarding a client's proposal for a building development for example or about financial matters can be qualified as confidential information. The client's organisation should show that revealing such information would either harm its business or benefit its competitors. Codes of conduct protect private information that is conveyed to professionals in confidence.

2.6.9 Corruption

Cavall and Schail (2008) define corruption as the misuse of power for personal advantage either by initiation or inducement. Grand corruption takes place at the highest level of communities and involves large amounts of money by renowned leaders such as politicians and company executives. Petty corruption is at a lower level and involves ordinary citizens and junior public officials such as policemen. Various forms of corruption exist, examples are bribes, fraud, embezzlement and kickbacks. Corruption is not entirely an issue of legal compliance but a question of morals and ethics. Codes of conduct are an appropriate tool to deal with corruption. With the rising cost of corruption in the UK, Transparency International has drawn up an anti corruption code of conduct in the construction industry.

2.7 Review of the SACPCMP code of conduct

The review on the SACPCMP code of conduct is solely because SACPCMP is the only body mandated by the government of South Africa to register construction professionals and as such all professional construction project managers are registered with SACPCMP. Born out of the Council for the Built Environment, the Council for the Built Environment is established under Act No. 43 of 2000: council for built environment act of South African parliament. The Council coordinates six Professional Councils, (Architecture, Engineering, Landscape

Architects, Project and Construction Management, Property Valuation, and Quantity Surveying). The objectives of the Council include among others, to promote and protect the interest of the public, govern the built environment and to ensure uniform application of norms and guidelines set by the council of professions throughout the built environment. In terms of CBE Act the Council is, amongst others, responsible for transforming the professions, promoting growth of the professions and contributing to the development of a dynamic built environment.

Act 48 of 2000 of the same suite of Acts establishes the SACPCMP. SACPCMP provides for the registration of professionals, candidates and specified categories in the project and construction management professions and regulation of relationships between the South African Council for the Project and Construction Management Professions and the Council for the Built Environment and further provide for related matters. Amongst its goals the SACPCMP seeks to achieve the following; development of educational standards and accreditation of tertiary institutions involved in built environment professions, define scope of work for these professions, establish sound regulations and code of conduct for designated professions, investigate improper conduct and carry out disciplinary hearings and in administering the Act report to the minister and CBE as stipulated by the Act (No: 48 of 2000).

As discussed earlier several approaches can be used to review professional codes, based on this literature review, Raiborn and Payne, 1990's evaluative framework was adopted to analyse the SACPCMP code of conduct. According to Raiborn and Payne (1990), a code of ethics can be viewed as clear, comprehensive and thorough if it addresses the four values of justice, integrity, competence and utility. These four values form the basis of an individual's ethical behaviour. Raiborn and Payne (1990) defined the values as follows; Justice – includes conscientiousness, impartiality and good faith in dealing with others. A just person is one who always does what is morally right. Just discourages discrimination. Competence – competent persons are capable, reliable and duly qualified. They always seek continuous self improvement and reliability as a habit. Utility – as defined by Raiborn and Payne (1990), as encompassing efficacy & providing the greatest good for the greatest number. Utility is based on utilitarianism; the appropriateness of an action is determined by the consequences of

carrying out that action. In this value individuals always consider others. Similarities have been identified between this approach and Tucker et al., 1999 who identified seven specific ethical constructs. However according to Coughan (2001) these have been disregarded as different terms with similar meaning to Raiborn and Payne (1990). Other values such as “economic efficiency” were disregarded on the basis of ambiguity with no specific rationale.

The results of the analysis are tabulated below in Table 2, which shows the presence of the four ethical values in the council’s professional code of conduct. Refer to Appendix A for SACPCMP code of conduct.

Table 2 – SACPCMP code of conduct ethical values

Value	Section of the code of conduct
Integrity	2.1
Justice	2.4
Competence	2.2
Utility	2.3

The code of conduct covers all four values of justice, competence, integrity and utility in terms of both expected and prohibited behaviour and addresses all stakeholders that is the employer, the client and the professional. The SACPCMP members are expected to follow these standards failure to which they will be subjected to disciplinary action.

The SACPCMP code is brief and is presented as a list. According to Olson (1998), codes that are short in length and context illustrate the organisation to commitment to fundamental principles. These codes fail to give substantial guidance to professional members in give and take situations and hence will most likely fail to achieve its intended purpose.

The SACPCMP like any other professional organisations face limitations in terms of enforcing its code of conduct. Professional organisations face challenges in enforcing ethical behaviour that other institutions like Government and religious groups do not. Both followers of religion

and government bound citizens are aware of the harsh consequences they might face if they break the law or transgress maxims of faith. The harshest penalty a professional can face is to lose membership. For this reason professional organisations rely on encouraging professionals to practice self discipline, personal morals and meeting legal requirements (Bowie 1999, p237-238).

From the literature review conducted it can be concluded that professional codes of ethics are important as a mechanism of implementing professional ethics. Professional codes of ethics serve eight functions as identified by Frankel (1989), which are, an enabling document, source of public evaluation, professional socialisation, deterrent to unethical behaviour, support system, adjudication of claims and as a mechanism for evaluating professional performance. However professional organisations have limited enforcement as they cannot offer harsh sentences like imprisonment and as such and the public tend to rely on legislation or government enforcement for adjudication. The SACPCMP code of conduct was analysed using the evaluating framework suggested by Raiborn and Payne (1990), and it was found out the code satisfies all four values suggested of integrity, justice, competence and utility. The code addresses also all stakeholders engaged in construction industry which are the client and employers, the professional and the professional organisation. However the code is short and focuses on fundamental principles and lacks much detail that is required when dealing with issues of ethical dilemma which requires substantial guidance. When complying with professional code of conduct professionals tend to face challenges which were identified by Adjei, Sarfo and Sam (2015) as, political pressure, corruption, social pressure and non-application of penalties to defaulters.

In conclusion, professionalism is characterised by professional associations and a code of ethics among other attributes that it enforces to its members as a guide to acceptable ethical practices. Literature review shows that inasmuch as most professional associations have professional codes of conduct that their members compulsorily adhere to, unethical practices still prevail. Previous research studies have focused on interpreting this phenomenon by examining unethical practices common in the construction industry in different global locations, assessing the level of compliance to professional codes of conduct, investigating factors

influencing compliance of professionals to professional codes of conduct and identifying the challenges faced by construction professionals when complying with professional codes of conduct. This literature review also revealed that although much is known about the level of compliance by professionals, little is known about the challenges they face to comply particularly in the South African construction industry. This information is primarily essential in curbing unethical practices and advancing the body of knowledge, and also for SACPCMP when training their professional members. Other South African built environment professional bodies will not be able to fully use results of this case study.

2.8 Conclusion

This chapter reviewed literature on the professional values that are typically imposed on professionals across different industries by their code of conduct and revealed that the four ethical values of justice, competence, utility and integrity are commonly used as the basis of crafting professional codes of conduct. Although literature examined on the extent of compliance of professionals with their codes of conduct revealed that there is general compliance with the codes of conduct, studies also concluded that professionals attest to have witnessed malpractices. This has raised the debate on the effectiveness of codes of conduct in enforcing ethical behaviour. Research on factors influencing non compliance also revealed that there could be challenges that professionals face when complying with their codes of conduct that we do not know about. Literature was examined on the challenges faced by construction professionals in complying with their code of conduct, the findings revealed limited studies on this subject globally. Lastly systematic analysis of the SACPCMP code of conduct revealed 39 obligations imposed on registered persons.

Chapter 3

Research design and methods

This chapter presents the research methodology adopted for this study. Saunders et al., (2016)'s research onion is used as a framework for crafting the research design. The chosen research method is analysed and justified. This is followed by an overview on data collection and analysis. Lastly research ethics and validity issues are discussed.

3.1 Research Question

It is important for a research idea to be clearly formulated into a research question(s). This research question should establish the issue or problem at hand and what answer is required. The research question will be at the centre of the research project and will give guidance on literature to review, research design, sampling approach and data collection and analysis methods. Additionally a research question is used to create investigative questions and to craft research objectives. According to Saunders et al.,(2016) questions can be classified into exploratory, descriptive, explanatory, evaluative or combination of these. The “what” “when” “where” “who” “why” “how” part of a question will prompt an answer or a study that is exploratory, descriptive, explanatory or evaluative or a mix of these. Hence the nature of a research question directs the purpose of a research project.

The purpose of a descriptive study is to gain an accurate profile of events, persons or situations. This type of study is seldom conclusive as it mostly describes the situations or events. For this reason, a descriptive study is usually a forerunner or an extension explanatory research. It is crucial to have a clear understanding of the phenomenon that you wish to collect data on prior to data collection. Descriptive data collection questions, usually start with “who” “where” “What” “when” “how”. Descriptive data collection questions will start with “who” “where” “what” “when” “How”.

The purpose of an exploratory study is to clarify an understanding of an issue, problem or phenomenon. This is suitable if you are unsure of the precise nature of the phenomenon to be investigated. Exploratory study asks open questions to discover what happened and to gain insights about a topic and usually starts with or include “what” and or “how”. Questions during

data collection are likely to start with “what” “how”. This type of research typically performs unstructured interviews to allow insightful contributions from the participants. Exploratory research typically conducts the following literature review, interviews with subject matter experts, in-depth individual interviews or focus group interviews.

Explanatory studies seek to establish casual relationships between variables. Main emphasis of this type of study is to study a situation or problem in order to explain the relationships between variables. Explanatory questions require an explanation. Explanatory research questions contains “why” and or “how”. Same applies with data collection questions aimed at gaining explanatory response will likely start with “why” “how’.

An evaluative study seeks to establish how well something works, examples includes an assessment for the effectiveness of a performance strategy, policy, programme, process or similar. This is usually concluded by a comparison with existing theory. Evaluative research questions begin with “how” “what”. Data collection questions start with or include “how” “whay”.

A combination study uses a combination of exploratory, descriptive, explanatory or evaluative.

The following is the research question for this study;

- “What challenges do construction project managers in South Africa face in complying with their professional code of conduct?”

The objectives for this study are as follows:

Objective 1 - To systematically identify the professional obligations imposed on construction project managers in South Africa by their code of conduct

Objective 2 - To examine the extent of compliance with the professional obligations specified in the SACPCMP code of conduct

Objective 3 - To ascertain and examine specific challenges faced by the professional construction project managers in South Africa in complying with their code of conduct

Looking at the nature of the research above, this study should conclude with specific challenges faced by professional construction project managers in South Africa. The “what”

part of the question makes the question either descriptive or exploratory or evaluative? From Literature review (Chapter 2) it was realised that there is not sufficient previous studies on this topic to support theory development. The challenges are not known precisely. Consequently this study seeks sufficient data to develop a theory. An exploratory study is essential to clarify the issue of compliance to the code of conduct and the challenges faced. The purpose of this research should allow for an in depth study that exposes the phenomenon by conducting in depth interviews with the professional construction managers who admit that they do not comply with the code of conduct. This will bring in new insights into the problem.

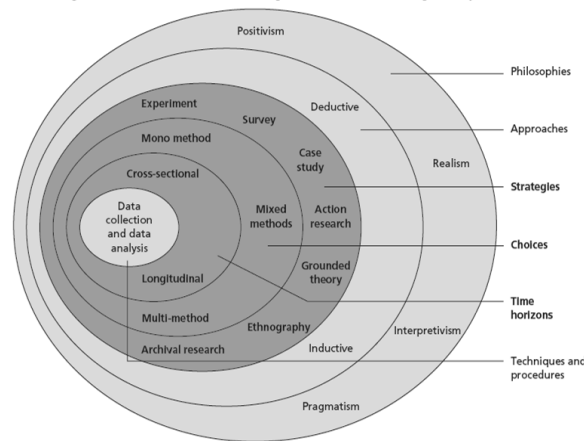
However should this be a descriptive answer this research becomes far easier and answering a question that way is most likely not going to reveal the challenges to a sound depth. An evaluative study concludes by a comparison with existing theory. This cannot be applied to this study as there is no basis for evaluation. In that case considering this study exploratory would provide a suitable answer to our research question. Moreover an exploratory study would suit this researcher's research idea.

3.2 Research Design

In answering the research question, the research onion (Saunders et al, 2016) shown below was used as a framework for crafting the research design. The research onion is used to reveal the issues leading to the selection of data collection techniques. This chapter follows the sequence outlined by the layers of the onion, from the outside to the centre point of the onion (data collection techniques) Saunders et al., (2016)'s research onion comprises of six layers.

The first two layers are philosophy and approach to theory development. As explained in succeeding sections, the way a research question is answered is largely influenced by research philosophy and approach to theory development which subsequently influence choices in the next three layers which are methodological choice, strategy and time horizons. These three layers concentrate on the research design. The sixth layer or centre point of the research onion is data collection techniques and analysis. As the onion is peeled from outside towards the centre point one choice is made per layer and this ultimately leads to the choice of data collection technique.

Figure 1 – Research onion



Source: Saunders, Lewis and Thornhill (2016:164)

A research design is a general plan that shows how the study was conducted in line with Figure 1 above. Yin (2003), describes a research design as an action plan for getting from 'here' to 'there', where 'here' is defined as the initial set of questions to be answered and 'there' is the conclusions or answers. Saunders et al (2016) mentions that a research design is a general plan of how the research questions were answered and should contain objectives derived from research questions, specify sources of data collection and take into consideration practical and ethical constraints.

3.2.1 Research philosophy

Some writers such as Guba and Lincoln (1994, p105) argue that questions of research methods are of secondary importance to research philosophy. In clarifying the research structure of inquiry and methodological choices made here, an exploration of the philosophy adopted for this study is discussed primary to a discussion about specific methodologies.

Research Philosophies is the first layer of the research onion shown in Figure 1 above. Saunders et al (2016), using a research onion classified research philosophies into five categories which are positivism, critical realism, interpretivism, post modernism and pragmatism. However positivism and interpretivism are the two most commonly used

philosophies in the field of business and management. Positivism is an approach to natural science that generally emphasize on empirical data and scientific methods. This philosophy holds the belief that the world is made up of observable social realities and a researcher can acquire knowledge about the world by observation to produce law-like generalisations. On the other hand interpretivism is an approach to social sciences that generally opposes positivism. The interpretivism discipline believes that knowledge is socially constructed not objectively determined and perceived as in positivism. Positivist works with rigid structural frameworks while interpretivist concentrate on capturing human interaction and infer-sense of what is perceived as reality (Carson et al., 2001). Consequently the main difference between positivism and interpretivism is that the latter seeks to interpret meaning in human behaviour whereas the former predicts cause and effect. Typically positivism is deductive and highly structured and uses qualitative methods of analysis. In contrast interpretivism is inductive and conducts in-depth investigations and uses qualitative methods of analysis.

A compelling research philosophy leads to a credible methodological choice of research strategy and data collection techniques. A research philosophy is crafted out of well considered set of assumptions. There are three types of common philosophical assumptions that can be used to distinguish between research philosophies ontology, epistemology and axiology. Ontology is concerned about the nature of realities in the research. Epistemology refers to the assumptions about nature and scope of human knowledge. Axiology is how the researcher's values influence the research process. These assumptions form the basis of a research strategy and research process.

On a broader perspective this research is studying the topic of unethical behaviour in the construction industry. From literature review (Chapter 2), empirical evidence has proven that unethical practice is on the increase in the construction industry yet codes of conduct have been in practice as a deterrent to such behaviour. Hence the issue of non compliance to the code of conduct and possibly challenges hindering the professionals from complying. Therefore the reason for the research question; what are the challenges faced by professional construction project managers in complying with their code of conduct? From Section 3.1 above, this research question is an exploratory question that seeks to understand in depth the

specific challenges faced by professional construction project managers in complying with their code of conduct. In answering this question this researcher takes a social sciences stance that this study is a social phenomenon, it is about human beings in their social context. Hence, for this study to be credible, any research philosophy adopted should be able to generate an in depth research of this phenomenon in its real life context, leading to rich empirical descriptions and theory development.

If a positivist philosophy is adopted, existing theory would be used to develop a hypothesis which would be tested and confirmed or refuted, further developed and retested and possibly confirmed. This philosophy is a strict scientific empiricist method used to produce pure data and facts uninfluenced by human interpretations. In contrary, the literature review revealed a limited number of studies on this topic to come up with a compelling theoretical framework to develop a hypothesis. For that reason this research adopted an interpretivism philosophy which allows the researcher to generate empirical descriptions and develop theory from an in depth research. Furthermore this researcher believes that humans are not the same with objects because they create meanings. It is these meanings that will answer the research question. To answer the research question the researcher cannot be neutral or external to data collection; it is important that the researcher enters the social world of the research participants and have an understanding of the world from their perspective.

This research is unique based on the fact that it contains people (professional construction managers) from different cultural backgrounds, race, age, gender, geographical locations. People, male and female may face different challenges in complying with their code of conduct. Hence the research philosophy should lead to a data collection technique that allow an in depth understanding of the challenges being faced by professional construction project managers, such as in depth interviews, so the researcher can make follow up questions based on the participant's initial responses or frame questions differently as appropriate within the participant's real-life setting. This will give new rich understandings and interpretations of the phenomena.

In conclusion, interpretivism approach as adopted for this study- is more suitable to answer the “what” aspect of our research question with adequate information. Contrary to positivism, interpretivism does not require predefined variables, but focuses on human sense making as the situation emerges.

3.2.2 Research approach

Easterby Smith et al. (2008) writes, a well-informed research approach forms the basis of a research design and gives direction on data collection and data interpretation in line with the question. This reveals the research strategies that are suitable, and those that are unsuitable.

Research approaches is the second layer of the research onion, Figure 1 above. This layer contains three selections of approaches; deduction, abduction and induction. According to Saunders et al (2016), the extent to which theory is available at the beginning of the research largely influences the research approach to theory development. A deductive approach requires development of a theory and a hypothesis, which then is tested using a research strategy. On the contrary an inductive approach starts without a theory and concludes with a theory, data is collected and analysed and a theory is then developed as a result of this analysis. A deductive approach is linked to a positivism philosophy; in like manner an inductive approach is linked to interpretivism philosophy.

Looking at the research question Section 3.1 above, this study is exploratory in nature. This is further supported by literature review findings; hence the study requires an approach that allows searching of new information without limitations. Literature review showed lack of similar studies relating to this topic. There is little known about challenges facing professional construction managers in South Africa. The research question requires sufficient data to develop a theoretical framework. Hence, the researcher should be able to engage the participants and obtain in-depth explanations of their experiences while complying with their code of conduct. Therefore an inductive approach should be flexible enough to accept new information and further explanation without limitations. In contrast to the deductive approach, inductive approach is selected suitable to answer the research question. It was well thought-out for the purpose of this study that the conclusions should not be generalised, an in depth

understanding of the human attachment to the issues of compliance is required as favoured by the inductive approach. In this context, the chosen approach would treat professionals as humans whose compliance behaviour is a consequence of the way which they see the code of ethics. This approach gives a consideration to the context in which the phenomena takes place, therefore a small sample of subjects would be appropriate compared to a larger sample as applied in the deductive approach. It should be acknowledged as well that the use of an inductive approach has certain challenges as compared to deductive approach, the time required to collect data when using an inductive approach can be protracted because of the data collection methods in use. This can even go to as far as becoming a risk with some certainty lost on whether or not some of the questionnaires will be returned. Saunders et al (2009) raised a question of audience, some audience are more accustomed to traditional deduction approach and far more likely to put their faith in its conclusions.

3.2.3 Research method

Methodological choice is the third layer of the Research onion, Figure 1 above. Saunders et al., (2016) Research onion gives six methods; Mono method quantitative, mono method qualitative, multi-method quantitative, multi-method qualitative, mixed method simple and mixed method complex.

A research method is a strategy of enquiry (Myers, 2009). The most common research methods are qualitative, quantitative or mixed methods. The terms qualitative and quantitative are used at one level to refer to the nature of the world and another level to refer to the research methods, which is in the way data is collected and analysed.

While quantitative research methods are more often used in natural sciences to enable study of natural phenomena, qualitative research methods were developed in social sciences to enable study of social and cultural phenomena. A mixed method of qualitative and quantitative research methods is more prevalent in education. There is no better method than the other; it all lies in the context, purpose and nature of research. In fact, they can be used interchangeably or together to compensate or compliment their weaknesses and strength. The most common differences between qualitative and quantitative research methods are the form

of data collection, analysis and presentation. Quantitative results are numerical or statistical while qualitative research data is in words or text. Another common difference between these two is that quantitative research is deductive and tests a hypothesis while qualitative research methods are inductive and doesn't require a theory from the onset. Quantitative research method, measures variables of a hypothesis and expresses the relationship using statistical methods such as correlations and relative frequencies. Stake (1995) states the main differences among qualitative and quantitative methods is the availability of knowledge meaning that in qualitative it is constructed and in quantitative it is discovered, and the purpose of the enquiry. According to Creswell (2003), a qualitative research method, uses multiple knowledge claims, data enquiry strategies and data collection methods and analysis. Data for qualitative research methods can be acquired from written opinions and public documents, events, attitudes, environments or in combination of all these sources.

This research question in Section 3.1 above is an exploratory question that seeks to derive a hypothesis on the challenges faced by professional construction project managers with little information at hand. For that reason, this study employs qualitative methods. Domegan and Fleming (2007), "qualitative research aims to explore and to discover issues about the problem at hand". The research question requires exploration and a discovery of the challenges being faced by professional construction managers, little is known on this question from literature review. This method acknowledges the differences of the countries and communities in their natural setting under study or under exploration that is why findings from similar research conducted elsewhere in the world cannot be assumed to apply in South Africa. An in-depth description of the participant's experiences is required and can only be acquired through a qualitative research.

However, initially quantitative methods were used to examine the extent of compliance of the construction project managers and further identify cases that do not comply with the code of conduct this is important. These non-complying cases are then interviewed to give their perceptions on why they do not comply. The study was concluded by a qualitative investigation to ascertain and examine the specific challenges faced by the construction project managers registered with the SACPCMP in complying with their professional code of conduct. Hence this

study uses both quantitative and qualitative data collection techniques analytical procedures. This makes this study mixed method simple according to Saunders et al., (2016). The first stage is quantitative, this informs and directs the second stage that is qualitative of data collection and analysis.

3.2.4 Research strategies

Research strategies occupy the fourth layer of Research onion in Figure 1 above. Research strategies cannot be tied down to one research approach. Each research strategy can be used across the approaches from exploratory, descriptive and explanatory research (Yin, 2003). Strategies can be reviewed on their abilities to answer questions and against research objectives, findings of literature review, availability of resources, as well as philosophical underpinnings of that particular research (Saunders et al, 2016).

This research considered a variety of research strategies (eight) as shown in Figure 1, research onion which includes; experiment, survey, archival research, case study, ethnography, action research, grounded theory and narrative enquiry. However single case study was adopted based on the following rationale.

According to Merriam (1998) a case study is particularistic which implies that it focuses on one event or situation, a “case” which in this context is the SACPCMP members; it is descriptive in nature which means it uses intensive and extensive data relating to phenomena; it is heuristic, it advances the understanding of phenomena and lastly it is inductive in reasoning. The aim of a case study strategy is to understand human beings in a social context, by interpreting their actions as a single group or community. Yin (2003), a case study is an empirical inquiry that seeks to investigate phenomena within the limits of its real life context, mostly in research studies where boundaries between phenomena and context are not clearly defined.

This study adopted an interpretivism philosophy based on the literature review findings and research paradigm, followed by an inductive approach on the same reasoning, a qualitative research method was used to collect the data required to answer the research question. At this point it is justified to say, based on the previous choices, and taking into consideration the

nature of the research question as explained in Section 3.1 above, that case study is the most appropriate research strategy to answer the “what” part of our research question. The case study allows collection of data with a much deeper understanding of the prevalent situation in great detail. The case study allows collection of data on participants’ perspectives and promoted use of multiple data collection techniques. This research strategy also permitted the use of mixed methods and gave multiple options of data collection methods with the first stage of questionnaires followed by semi structured interviews.

3.2.5 Time horizons

The fifth layer of the research onion is time horizons. Saunders et al. (2016), states that choice of time horizons is independent of the research strategy or choice of method being pursued. This study adopted a cross sectional time horizon solely because it’s for academic purposes and hence bound by time for study is limited. Interviews were conducted within a short period of time.

3.2.6 Data collection and data analysis

The sixth layer of the research onion is data collection and data analysis. This layer covers different methods of obtaining data to answer the research question by meeting the research objectives set out in Section 3.1 above. Objective 1 required a detailed list of the specific obligations imposed on the professional construction project managers by the SACPCMP code of conduct. The SACPCMP code of conduct was systematically reviewed to give a list of 39 obligations, see Section 2.7 Chapter 2. These obligations would be used as variables in the survey instrument as explained later in Section 3.3.2.2

As discussed earlier this study adopted a two stage research process of data collection and analysis. The first stage employs quantitative methods of data collection to meet the requirements of Objective 2. This objective requires data on the extent of compliance with professional obligations. There many techniques that can be used to collect data for this objective that this study considered and these are; observations, structured interviews and questionnaires. Questionnaires were found to be more suitable to answer structured questions in this case a list of 39 obligations. This technique allows the questions to be standardised so

that research participants can interpret them the same way. The objective requires a descriptive response (comply, partially comply or non compliant). This is explained in detail in subsequent sections. Hence, self completed questionnaires were distributed to the respondents through the internet using a hyperlink (Internet questionnaire).

Objective 3 requires data on the specific challenges faced by professional construction project managers in South Africa in complying with their code of conduct. Previously a qualitative approach was adopted to suit the exploratory nature of the question. However to obtain this data a technique is required that enables the researcher to ask questions and to be able to explore the respondent's answers by further questions. Consequently interviews were adopted as a suitable data collection technique to meet the research the third objective. Interviews vary in terms of formality and structure and can be categorised as structured interviews, semi structured interviews and unstructured interviews or in depth interviews. Semi structured interviews were adopted for this study based on the data required. A list of themes and leading questions was developed into an interview schedule. Data was collected by note taking. This is discussed in detail in the following sections.

3.2.7 Research design conclusion

In answering the research question outlined in Section 3.1 above, this study adopted an exploratory approach based on the nature of the question and the findings of literature review (Chapter 2). The research design followed Saunders et al., (2016) research onion depicted in Section 3.2 above figure 1 as a framework for research design. An interpretivism philosophy was adopted for this research. Literature review showed limited literature to build a theoretical framework, consequently this research required an in-depth understanding of the phenomenon underlying non-compliance with code of conduct and the factors hindering professionals from complying with their code of conduct. An inductive approach was chosen as a suitable approach that necessitated theory development against such backdrop of insufficient literature. A mixed method (two stage research), initially commencing with a quantitative method to single out the professionals who admit not to comply with the code of conduct, followed by a qualitative research to acquire data on the challenges faced in complying with the code of conduct was chosen. A case study was chosen to be the most appropriate research strategy to

answer an exploratory research study, considering that a case study would allowed use of interviews with open ended questions this brought-in an in depth understanding. A cross sectional time horizon was chosen based on the limited academic time frames. To answer the three objectives of this research study see Section 3.1 above, literature review, questionnaire survey and semi structured interviews were used. The research participants are professional construction project managers in South Africa in the two designated categories of Professional Construction Manager and Professional Construction Project Manager. SACPCMP is the only organisation recognised by the Parliament of the Republic of South Africa to register construction professionals.

3.3 Research methods

3.3.1 Research participants

The subjects of this study are registered persons in terms of section 19(2) of Act, 48 of 2000 of the Republic of South Africa. This means all persons registered under the two categories of professional construction manager and professional construction project manager and their subsequent candidates of SACPCMP. For the purpose of this study candidates in both categories are considered as they are also expected to adhere to the code of conduct. The table below shows the number of registered persons in the two categories of professional construction manager and professional construction project manager and their subsequent candidates. Thus the research population is 4329 registered persons (SACPCMP/CBE report, December 2016).

Table 3 – SACPCMP Number of registered persons per designation

Category	Number of registered persons
Professional construction project manager	1666
Professional construction manager	793
Candidate construction project manager	1523
Candidate construction manager	377
Total	4359

For the purpose of this study only the two categories of professional construction manager and professional construction project manager are considered (including their candidates) as follows;

Table 4 – SACPCMP population for member designations for this study

Category	Number of registered persons
Professional construction project manager	3189
Professional construction manager	1170
Total	4359

3.3.2 Data Sources

Data was collected from participants mentioned in Section 3.3.1 above. Data was evaluated systematically to collect only the data that represents the opinion and experiences of participants. Primary data sources in this context was the construction project managers. The main data collection sources for this study were literature review, questionnaires and interviews. Secondary data sources include relevant records that will be obtained from the SACPCMP.

3.3.2.1 Literature review – Document analysis

The literature review section answers the first objective of this study through document analysis of the SACPCMP code of conduct (Appendix A). The obligations imposed to construction professionals were systematically broken down into single actions. The tabulated actions reflect the multiple obligations imposed on members of the SACPCMP. Each obligation is coded and categorised fewer than four categories of relations with public, relations with employer, and relations with other professionals and lastly standards of professional practise. Please refer to literature review for a summary on document analysis Table 4.

3.3.2.2 Quantitative methods – Questionnaire survey

3.3.2.2.1 Identification of variables - Obligations imposed on construction project managers in South Africa by their code of conduct.

The following table presents the code of conduct SACPCMP, systematically broken down to give all the obligations imposed on all professional project managers in South Africa. SACPCMP was chosen simply because SACPCMP is the only body mandated by the government of South Africa to register construction professionals. As discussed earlier, the code of conduct has five categories which are; introduction, relations to the public, relations with the employer or client, relations with other professionals and the standards for professional performance. The following are the obligations imposed to construction professionals according to the five categories;

Table 5 – Professional Obligations imposed on SACPCMP members (source of variables used for the survey instrument design)

1.0	Obligations listed in the Introduction section of the code of conduct
1.1	Shall keep high standards of ethical conduct
1.2	Shall be honest in serving their employers
1.3	Shall be honest in serving their clients
1.4	Shall be honest in serving the public
1.5	Shall always aim to improve their competence
1.6	Shall aim to uphold the prestige of their profession
1.7	Shall not engage in any act of dishonesty, corruption or bribery
2.0	Obligations listed in the code of conduct under relations with the public section
2.1	Shall always fully consider the public in carrying out all their duties
2.2	Shall uphold the respect of the profession
2.3	Shall be rational and truthful in providing information whether written or verbal
2.4	Shall apply due consideration for the safety, health and welfare of the public
2.5	Shall apply due consideration for the safety, health and welfare of the environment
2.6	Shall not express an opinion on matters of construction project management without sufficient knowledge
2.7	Shall not express an opinion on matters of construction project management without honest and certainty
3.0	Obligations listed in the code of conduct under relations with employers and

	client section
3.1	Shall execute their duties to their employers in a responsible and competent manner
3.2	Shall execute their duties to their clients in a responsible and competent manner
3.3	In representing their employers shall act in all faithfulness
3.4	In representing their clients shall act in all faithfulness
3.5	Shall not accept reimbursement from more than one party for the same service without consent of all involved parties
3.6	Shall not accept reimbursement from more than one party on the same project without consent of all involved parties
3.7	Shall declare to their employers any dealings with other parties doing the same or conflicting business
3.8	Shall declare to their clients any dealings with other parties doing the same or conflicting business
3.9	Shall notify their employers in writing about the status of their professional indemnity insurance cover
3.10	Shall notify their clients in writing about the status of their professional indemnity insurance cover
3.11	Shall not disclose any confidential information accessed by appointment unless required to do so by this code or by law
4.0	Obligations listed in the code of conduct under relations with other professionals section
4.1	Shall act with honesty towards other professionals
4.2	Shall not in any way possible damage the reputation or injure the business of others
4.3	Shall not discriminate be it by race, gender, ethnic, sex, marital, creed, nationality, disability or age
4.4	Shall not seek and or accept professional commission under conditions that will influence their judgment on professional matters
5.0	Obligations listed in the code of conduct under standards of professional performance section
5.1	Shall only engage themselves in work they have relevant skills

5.2	Shall only engage themselves in work they have relevant knowledge
5.3	Shall only engage themselves in work they have relevant resources
5.4	Shall not fabricate or allow distortion of their own academic qualifications
5.5	Shall not fabricate or allow distortion of their associates' academic qualifications
5.6	Shall always seek to create opportunities for professional development of candidates under their management
5.7	Shall always engage themselves in professional development as required by the council
5.8	Shall bring to the attention of the council any breach of the code of conduct by any registered person/s
5.9	Shall notify the council should they become insolvent
5.10	Shall comply with Act, 48 of 2000

3.3.2.2.2 Questionnaire survey

This study adopts two phases of data collection and analysis. This answered the second and the third (last) research objectives. Data is first collected and analysed using a quantitative method. Findings of this phase are useful directing the qualitative investigation to the cases that admit that they do not comply. The second objective was to examine the extent of compliance with the professional obligations specified in the code of conduct achieved by use of quantitative methods. A questionnaire attached in Appendix B was used to examine the extent of compliance with the professional obligations specified in the SACPCMP code of conduct.

The questionnaire used, was a self-completed, internet distributed questionnaire. An Internet circulated questionnaire is fast to distribute and collect responses unlike postal or delivery and collection questionnaires. Academic research has strict time frames hence the importance of choosing a type of questionnaire that meets this requirement. Again questionnaires sent by e-mail have higher chances of being answered by the intended recipient. In this case, SACPCMP circulated via e-mail the questionnaires to registered members who were geographically dispersed. Internet distributed questionnaires bear less financial implications. The questionnaire used vocabulary similar to the SACPCMP code of conduct to ensure that

respondents use their knowledge of the code of conduct to understand the questions. The questionnaire is accompanied by a cover letter, see Appendix C. This letter contains introduction to the research, the time available for the participant to complete and return the completed questionnaire, the address to send responses to, a paragraph on confidentiality and anonymity, contact details for researcher, contact details for queries and lastly contact details for research related complaints. For ethical reasons the questionnaire will be accompanied with a respondent consent form, see Appendix D (as would be explained later).

All the questions were coded with numeric codes. As explained earlier all questions are forced choice questions, which means answers are provided to which the respondent is instructed to choose (De Vaus, 2014). Obligations identified on Table 3 during document analysis are pasted on the questionnaire to form a series of rating questions. All the questions are closed questions; the respondent was requested to rate on a three-point rating scale whether they are complying, partially complying, or non-complying to each objective. Using Microsoft Excel spreadsheet data collected from questionnaires was captured into a table, data matrix. The columns of the table contain all the cases that responded to the questionnaire survey (respondents coded R1, R2, R3...and so on), on the other hand the side rows contain the variables which are in this case all the obligations as presented on the questionnaire for which data was collected. Hence each column contains all data from one respondent. The data collected was recorded inside the table using code C for compliant, PC for partially compliant and NC for non-compliant. Cases that indicated partial compliance or noncompliance were required to further participate in the qualitative study to further explore the challenges that they face. The quantitative data was analysed statistically to determine percentage compliance based on percentages.

3.3.2.3 Qualitative methods – Semi structured interviews

The last objective was to ascertain and examine specific challenges faced by the construction project managers in complying with their professional code of conduct and this was realized by employing qualitative methods. One to one, face to face, semi structured interviews conducted only with the cases that showed partial or non-compliance in their responses. The semi structured interviews required an exploration and understanding of the specific challenges that

lead to their partial or non-compliance as indicated by their responses on the respective questionnaires.

The interviews were recorded by handwritten notes on the interview schedule see Appendix E, these notes are then transcribed and analysed using thematic analysis method. The choice of thematic analysis was influenced by the nature of the research data and research question. This research was based on an inductive approach therefore themes were only determined from data collected by the interviewer. Thematic analysis was suitable in identifying themes emanating from data and to further develop explanations and conclusions.

According to Saunders (p 609, 2016), thematic analysis is a data analysis technique that involves data coding, categorizing and quantitative analysis of the textual data. In one approach to thematic analysis the codes and categories are identified before collection of data commences. When using the inductive approach, data categories will be left to emerge during analysis, this is the approach adopted in this study. After coding and analysis, textual data is quantified quantitatively and described. The following steps are followed in thematic analysis, choice of a sampling technique, devising analytical categories, defining the unit of analysis, conducting coding and lastly quantitative analysis.

The interview schedule contained relevant themes and key questions applicable to each interview participant based on their previous responses from questionnaire survey. This means that the interviews had different questions based on different areas of non-compliance to the obligations. In addition, the interview schedule also recorded contextual data about the interview which includes, date and time, location, pseudonyms, interview setting and participant background.

The use of audio recording devices for recording interviews has been carefully thought of, and the researcher concluded that although audio recording had numerous advantages, the disadvantages associated with its use would outweigh the advantages. Audio recording gives the viewer an opportunity to concentrate on the interview rather than writing, and also allows the interview to be accurately recorded for future use. However, ethical issues can be sensitive

and use of voice recording can inhibit some interviewee responses. Instead the researcher took hand written notes of the interview. This interview verbatim was to be transcribed after the interview to word processed text. Each transcribed interview was saved as a separate file with a transcription name (pseudonyms) for confidentiality. All the filenames started with a letter 'R' followed by a number between 1 and 5. The letter 'R' stands for the word 'Respondent' and the number signifies the individual interviewee in order of interview attendance. For uniformity the participants maintained their pseudonyms from the questionnaire survey. The complete filename would for example, R1. Appendix F is a Data document R1. This transcript is also known as the data document.

Once the data document is finalized the process of coding would commence. When using an inductive approach all the data was coded for exploration of meaning. The unit of analysis, which was the smallest meaningful segment from the participant's response, was extracted for further analysis. This unit of analysis would describe the challenges faced. On the data document, the phrase or part of the line is highlighted in red and underlined (codes) to indicate its source in the text before it is posted to the column on the right hand side. This process was conducted for all the five documents. All the columns on the right hand side on all five data documents were copied and pasted on one page to form a table. All similar topics in the table were highlighted with the same colour. The process of coding did not follow linear progression but rather a constant comparison process where data was continuously re-read and re-coded.

Once coding was completed, the next step was to identify the challenges and recognize relationships (Saunders, 2016). The coded data extracts were used to identify challenges. On a separate table all codes with the same colour were clustered together to form a theme of related challenges and the best suitable name was inserted on top. A row is added at the bottom of the themes to tally the number of participants who mentioned related challenges. Three categories of themes would be applicable depending on the sum of participants who mentioned the theme; the primary themes which are themes mentioned by at least four out of the five participants; the secondary themes which are themes mentioned by two or three participants and tertiary themes are those that are mentioned by one person and finally left over themes. This Qualitative research phase was conducted in an iterative cycles, the

processes described above of data collection, data analysis and development of themes were repetitive process repeated throughout data collection after every interview before the next one.

3.3.3 Sampling techniques

This section will initially consider sampling techniques for the questionnaire survey, followed by semi-structured interviews.

3.3.3.1 Questionnaire survey

It was impracticable to collect and analyse data for the entire population of 4329 registered professional construction managers. Although data for the entire population could have been collected at reasonably the same cost and within the same duration as the sample, the former requires more time and resources on the contrary to prepare and analyse such data.

Probability sampling was employed for this study. There are four steps in the process of probability sampling (Saunders, 2014). These are;

- a) Establish sampling frame
- b) Determine the sample size
- c) Choose sampling technique and select sample
- d) Ensure sample is representative of population

A sampling frame is the full list of all the cases in the population. As highlighted in Section 3.2.6.1 above the sampling frame consisted of 4359 cases. This list was available on the SACPCMP record revealed to the researcher. The list was up to date and contained active members of the SACPCMP in the categories mentioned in Table 3 above only.

A sample size is determined by judgement and calculation. Determination in this case is calculated according to Saunders 2016, p 281. For a target population of 5000 cases, at 95 per cent confidence level (assuming data is collected from all cases in the sample), and allowing a 5 per cent margin of error the sample size for this research would be **357** persons.

There was need to adjust the size of sample based on the likely rate of response. In reality there will always be non-responses due to a variety of interrelated reasons which include refusal to respond, ineligibility to respond and unable to locate responded or contact

responded. The following equation (Saunders 2016, p 283), was used to calculate the actual sample size;

$$n^a = \frac{n \times 100}{re\%}$$

Where n^a is required actual sample size, n is minimum sample size and $re\%$ is estimated percentage response rate. Substituting into the equation, n is 357, $re\%$ is 10%; n^a becomes **3570** persons.

According to information acquired from SACPCMP the response rate on questionnaire survey is 10%. From the above calculations the actual sample size becomes 82% of the population. Based on the 82% the researcher decided to survey the entire population of 4359 persons, as this would actually save on time and give more accurate results. Finally, with a population of 4359, n (adjusted) becomes **436** persons.

3.3.3.2 Semi structured interviews

For semi structured interviews, the use of probability sampling will not meet the desired objectives, as the selected cases may not be appropriate in giving the required detail of information. Hence non-probability sampling techniques were used. Non probability sampling techniques give focus on the purpose of the research and the underlying objectives. There are no rules to follow for non-probability sampling other than for quota sampling.

The objective of semi structured interviews is to expose the specific challenges faced by construction project managers in complying with their professional code of conduct. To meet this research objective, only cases that indicated non-compliance and or partial-compliance to the obligations (during the questionnaire survey) were considered for interviews to further explore the challenges that hinder them from complying. The cases that fully complied with obligations were not considered for the qualitative study as they are presumed not to face any challenges.

Considering the above, purposeful sampling techniques were used for this study. These techniques enabled the researcher's judgement to be used to identify and select cases that will

give appropriate information to answer the research question and meet the objectives. Individuals that are especially knowledgeable about or experienced with the phenomena of interest are selected (Creswell, Plano and Clark, 2011). This technique in addition allowed consideration of those subjects who are available and willing to participate with the ability to communicate experiences and opinion in an articulate, expressive and reflective manner; this was paramount to this sensitive research context where some subjects may not be willing to discuss ethical challenges.

The research question and objectives usually determines the sample size for the semi structured interviews. Saunders (2016) advises for semi structured interviews collection of data (conducting interviews) until saturation is reached. Reasonably so, the researcher should determine how much data will be useful, how much will be credible in consideration of the available resources. Creswell (2013), suggest for semi structured interviews 5 to 30 interviews. Saunders p 297 (2016) adds for non-probability sampling, semi structured and in depth interviews minimum sample of 5 to 25 interviews. Based on that logic this research will aim a minimum of 5 semi structured interviews.

3.4 Validity

Validation is a process of verifying research data and assessing its quality. The two most common techniques of validation are triangulation and member validation. Triangulation is when more than one independent source of data is used and results are evaluated to reveal the reality in the data. This approach is mostly endorsed based on positivist approach; interpretivism researchers believe that this approach is best used to acquire more detailed results. In the context of this research, a quantitative study is initially used followed by a qualitative study to acquire an in depth understanding of the quantitative study. Records from the SACPCMP are also reviewed and checked against the findings from the primary data. The researcher assumes internal validity issues with the questionnaire survey, the tendency is for the respondents to indicate that they comply with the code of conduct. The case register from the SACPCMP was used to validate responses of the questionnaire survey. Member validation is a process whereby research data is sent back to the participants for them to accept the

accuracy. Data documents of the semi structured interviews were sent back to the participants for validation and this was confirmed.

3.5 Research ethics

Ethical guidelines ensure protection of the research population from harm, embarrassment, stress, discomfort, pain or any other material disadvantage. This includes taking necessary precautions to uphold participants' privacy, confidentiality, dignity, rights and anonymity. Miles and Huberman (1994) put up ethical issues that a researcher needs to consider prior to commencing research and these are;

- Informed consent, participants should be informed about what they are going to be involved in.
- Harm and risk, will the study expose its subjects to any risk or harm?
- Honest and trust of the researcher on collecting and presenting data.
- Privacy, confidentiality and anonymity of participants
- Intervention and advocacy.

Adopting the list of Miles and Huberman (1994), the following is how ethical issues pertaining to this research were addressed;

- *Informed consent*, all research participants were informed in writing about the purpose and the limit of the research, including the data collection methods that will be employed and their expected role in the research by means of an Information sheet, see Appendix G. All participants will have to give consent to their participation in writing, see Appendix D, notwithstanding the fact that they can still withdraw their participation at any moment in whole or in part. Researcher shall not use deception to gain participation.
- *Harm and risk*, the participants were further informed that by participating in the research they will not be exposed to any harm or risk whether physically or psychologically. This information was available on the information sheet.
- *Honesty and trust*, the researcher complied with the ethical guidelines as set by the University of Witwatersrand and or any other participating organisation(s) as explained below. The researcher further requested the participants to be honest in their responses for the study to remain valid.

- *Privacy, confidentiality and anonymity*, the study was iterative in nature meaning that total anonymity was impossible. However, the research information shared did not reveal names of participants at any point in time. Confidentiality and anonymity of participants was maintained throughout the research process. Research data was kept confidential. This was a sensitive study considering that the study required participants to admit to not complying with certain obligations of their code of conduct more so in some instances participants were expected to admit practising unethical behaviour. The researcher had to convince the participants that they would remain anonymous under all circumstances and the information they give will also remain confidential. Regardless of these efforts very few cases consented to participate. The researcher put extra effort to identify professional construction project managers in local project management firms and requested them to participate. This however protracted the duration of the study.
- *Voluntary participation*, The research was for academic purposes only and participation was voluntary and no one was forced to participate. This information was on the Information sheet and all participants gave signed consent.

To ensure research integrity the University of Witwatersrand insist that all research work conducted by students for any purpose undergoes ethical clearance before data collection commences. The University of Witwatersrand subscribes to the Research Integrity Standards published in the Singapore Statement. This research was cleared by the University of Witwatersrand, School of Construction Economics and Management Research Ethics Committee and complies with the University's ethical guidelines.

3.6 Reliability or dependability

This refers to whether different investigators on the same subject would come up with the same findings. This relates to the bias of the research. Saunders et al., (2016), mentions that there are three types of interview biases; Interviewer bias, interviewee bias and participation bias.

Interviewer bias is when the non-verbal behaviour of the interviewer influences the way the interviewee responds to the question. This study was a very sensitive study considering that is

some questions required that the participants admit to have not complied with their code of conduct or having committed an unethical practice. For that reason the researcher was very conscious about personal credibility in order to win trust. Otherwise the value of data given would be limited.

The second type is called Interviewee bias which refers to the interviewee's perception about the interviewer. As mentioned above the nature of this study had a potential of creating negative perceptions from the interviewee's perspective. Some interviewees did not trust the interviewer possibly they viewed this research as intended to investigate their ethical conduct. This led to few responses from the questionnaire survey. Data collection for this study was a big challenge and as a result the process took longer than expected. This researcher requested existing contacts, work colleagues, past and present students registered as professional construction managers to participate. Eventually the number of responses increased. Most of these participants had trust on the researcher since they were familiar with him or with the person who referred the researcher.

The last type is participation bias, which is bias that results from the nature of participants and individual organisation. Interviewees may not be comfortable to discuss issues of compliance with strangers and they may regard issues of non-compliance as private and confidential. It is important that the researcher reemphasise on confidentiality and anonymity of the research and declared on the information sheet and consent form.

3.7 Replicability

According to Saunders (2016), semi structured interviewees are not necessarily to be repeated as their results are reality during the time of collection only and the circumstances are complex and always changing as explained in section 3.4 and 3.5 above. And so, replication of data should be assessed based on the rigour of research design and how the data was obtained. Section 3.4 above gives a detailed explanation of how data was obtained to show that the findings are dependable. This also helps others to understand and interrogate the processes used.

3.8 Conclusion

In conclusion, this research adopted an interpretivism philosophy mainly based on the nature of the question which seeks a constructivistic ontology and a subjective epistemology. Literature review conclusions suggested that there are no similar studies in the South African context and hence an inductive approach employed. An interpretive philosophy and an inductive approach are more aligned to a qualitative research. Research strategies were considered, it was a well thought that the how and why part of the question will be best answered by a case study. An open ended questionnaire structured into three sections (responded background, importance of ethics and challenges faced by professionals) and focus group interviews will be used for data collecting. Participants will include professionally registered SACPCMP members and SACPCMP employees. Data collected from the two sources will be analysed together, compared and categorised, triangulated and interpreted to draw results. Ethical issues were considered with the aim to protect the research population. Most important ethical challenge pointed out was the depth of interaction with the respondents thereby compromising their values and weaknesses.

Chapter 4

Data Presentation, Analysis and Results

The purpose of this chapter is to present the results of this research study. This chapter follow the three research objectives;

4.1 Identification of the obligations imposed on construction project managers in South Africa by their professional code of contact.

Systematic analysis of SACPCMP code of conduct was performed to address the first objective of this study, this is explained in detail in Chapter 2 and 3. The SACPCMP code of conduct has 7 sections namely; definitions, introduction, relations to the public, relations with the employer or client, relations with other professionals, standards for professional performance and finally disciplinary procedures. There are 39 obligations revealed in the five sections of introduction, relations to the public, relations with the employer or client, relations with other professionals and lastly standards for professional performance. All registered persons are expected and agree to comply with these obligations while discharging their duties. The obligations tabulated below in Table 6, are in the same order and same legal language they are presented in the SACPCMP code of conduct, to avoid confusing the research participants. In total 39 obligations were revealed. The results of the analyses are tabulated below in Table 6. The table identifies 39 obligations imposed on all professionally registered construction project managers.

Table 4, adopted the five sub-headings in the code of conduct. The obligations are listed below the respective sub-heading. A column is added with numbers for each obligation.

Table 6 - Professional obligations derived from code of conduct

1.0	Obligations listed in the Introduction section of the code of conduct
1.1	Shall keep high standards of ethical conduct
1.2	Shall be honest in serving their employers
1.3	Shall be honest in serving their clients

1.4	Shall be honest in serving the public
1.5	Shall always aim to improve their competence
1.6	Shall aim to uphold the prestige of their profession
1.7	Shall not engage in any act of dishonesty, corruption or bribery
2.0	Obligations listed in the code of conduct under relations with the public section
2.1	Shall always fully consider the public in carrying out all their duties
2.2	Shall uphold the respect of the profession
2.3	Shall be rational and truthful in providing information whether written or verbal
2.4	Shall apply due consideration for the safety, health and welfare of the public
2.5	Shall apply due consideration for the safety, health and welfare of the environment
2.6	Shall not express an opinion on matters of construction project management without sufficient knowledge
2.7	Shall not express an opinion on matters of construction project management without honest and certainty
3.0	Obligations listed in the code of conduct under relations with employers and client section
3.1	Shall execute their duties to their employers in a responsible and competent manner
3.2	Shall execute their duties to their clients in a responsible and competent manner
3.3	In representing their employers shall act in all faithfulness
3.4	In representing their clients shall act in all faithfulness
3.5	Shall not accept reimbursement from more than one party for the same service without consent of all involved parties
3.6	Shall not accept reimbursement from more than one party on the same project without consent of all involved parties
3.7	Shall declare to their employers any dealings with other parties doing the same or conflicting business
3.8	Shall declare to their clients any dealings with other parties doing the same or conflicting business
3.9	Shall notify their employers in writing about the status of their professional indemnity insurance cover

3.10	Shall notify their clients in writing about the status of their professional indemnity insurance cover
3.11	Shall not disclose any confidential information accessed by appointment unless required to do so by this code or by law
4.0	Obligations listed in the code of conduct under relations with other professionals section
4.1	Shall act with honesty towards other professionals
4.2	Shall not in any way possible damage the reputation or injure the business of others
4.3	Shall not discriminate be it by race, gender, ethnic, sex, marital, creed, nationality, disability or age
4.4	Shall not seek and or accept professional commission under conditions that will influence their judgment on professional matters
5.0	Obligations listed in the code of conduct under standards of professional performance section
5.1	Shall only engage themselves in work they have relevant skills
5.2	Shall only engage themselves in work they have relevant knowledge
5.3	Shall only engage themselves in work they have relevant resources
5.4	Shall not fabricate or allow distortion of their own academic qualifications
5.5	Shall not fabricate or allow distortion of their associates' academic qualifications
5.6	Shall always seek to create opportunities for professional development of candidates under their management
5.7	Shall always engage themselves in professional development as required by the council
5.8	Shall bring to the attention of the council any breach of the code of conduct by any registered person/s
5.9	Shall notify the council should they become insolvent
5.10	Shall comply with Act, 48 of 2000

In conclusion, 39 obligations are imposed on all registered members with SACPCMP. This is according to the SACPCMP code of conduct. The five sections of the code of conduct; introduction, relations to the public, relations with the employer or client, relations with other

professionals and standards for professional performance communicates with all registered members the expected and prohibited behaviour when discharging their duties with the public, the employer or the client and the other professional members. The registered persons by accepting membership agree to comply with these 39 obligations.

4.2 To examine the extent of compliance with the professional obligations specified in the code of conduct.

This study collected primary data using quantitative methods to meet the second research objective. The objective of the questionnaire survey was to examine the extent of compliance with the professional obligations specified in the SACPCMP code of conduct.

Table 6 which shows the professional obligations imposed on the construction project managers was further developed into a survey instrument, Questionnaire see Appendix B The questionnaire was produced based on these obligations. Respondents to the survey were asked to indicate their level of compliance by answering a series of rating questions (by rating each of the above obligation) using a three-point rating scale that is Compliant (C), Partially compliant (PC) or Not Compliant (NC). 72 construction project managers participated in the internet based survey. Quantitative data was collected using self-completed, internet based questionnaires.

The questionnaire was circulated to registered members through the SACPCMP. Initially only 10 participants responded, a lot of effort was put by the researcher to increase the responses by requesting registered persons from existing contacts to participate. This increased the number of responses to 53 responses were received from the internet based questionnaire administered. In addition the Researcher contacted registered persons by reference as well as those working for project management firms within Gauteng, a further 19 responses were received via e-mail to give a total of 72 responses. The results from this section were used to determine the participants of the semi structured interviews.

Microsoft excel spreadsheet was used for data analysis. The results are tabulated in the data matrix in Appendix H. The columns represent the 72 cases coded from R1 to R72 from which

data was obtained. Rows resemble the 39 obligations (variables) summed up to 39 rows. However it is important to note that some Respondents did not answer all the 39 questions.

They are two ways of looking at the data matrix, either in terms of level of compliance per individual obligation or alternatively by looking at the level of compliance per individual case. This study looks at both, Appendix H Table 8 is the level of compliance to individual obligations and Table 8 shows level of compliance per individual case. Table 7 to each individual obligation a sum of cases compliant, partially compliant and non-compliant is given and percentages of total responses respectively. Table 9 shows level of compliance per individual case, that is total number of obligations a Respondent is compliant, partially compliant and non-compliant with out of 39.

Table 8 is the level of compliance to individual obligations. It shows summaries of number of cases compliant, partially compliant and not compliant per variable as is indicated by C, PC and NC respectively. Subsequently a total is included which is the total number of responses per question. The last three columns show as a percentage the number of participants complying, partially complying and not complying as symbolized by %C, %PC and %NC respectively.

Table 8, shows the level of compliance of each individual case, the columns contain the 72 individual cases that participated in the survey and their responses are placed in the rows showing how they rate all the obligations in terms of compliant, partially compliant and not compliant. From Table 8, it can be deduced that 55 out of 72 cases are fully compliant with all the 72 obligations of the SACPCMP code of conduct. The table further shows that 10 cases did not respond to all 39 obligations. Individual cases R1, R2, R6, R12, R22,R32, R38,R39,R46,R52,R65 and R72 with partial compliant and non-compliant responses are interviewed to reveal the challenges that lead to their non- compliance.

Table 11 shows percentage compliance per individual case from R1 to R72.

As discussed earlier there are two ways of analysing the results of questionnaire survey as displayed in Appendix H Table 7;

- Level of compliance per individual obligation
- Level of compliance per individual case

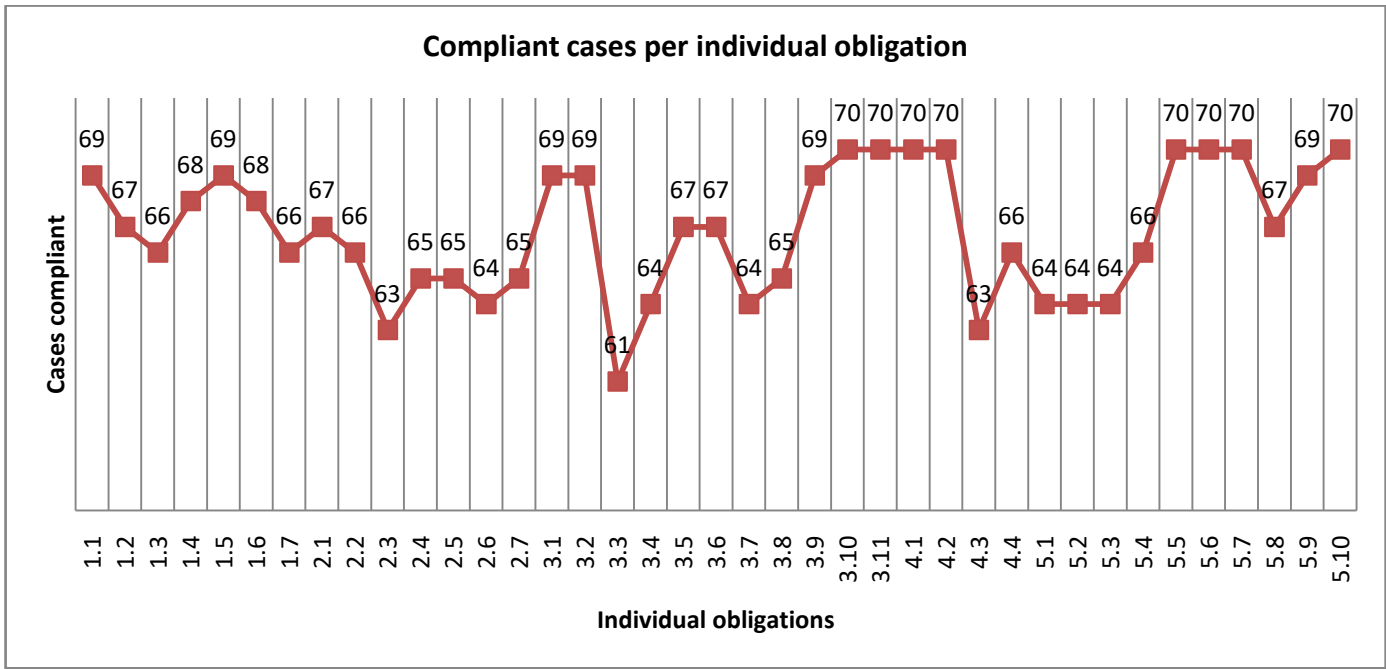
This is explained in detail below, Section 4.2.1 and Section 4.2.2 respectively.

4.2.1 Level of compliance per individual obligation

4.2.1.1 Compliant cases per individual obligation

This data is extracted from Table 8, Appendix H which depicts level of compliance per individual obligation.

Figure 2 – Compliant cases per individual obligation



The graph shown in Figure 2 above shows the number of cases complying with each individual obligation. The most complied with obligations have 70 out of 72 cases complying. 7 out of 72 cases occupy this category. The following are the most complied with obligations in the range of 70 out of 72;

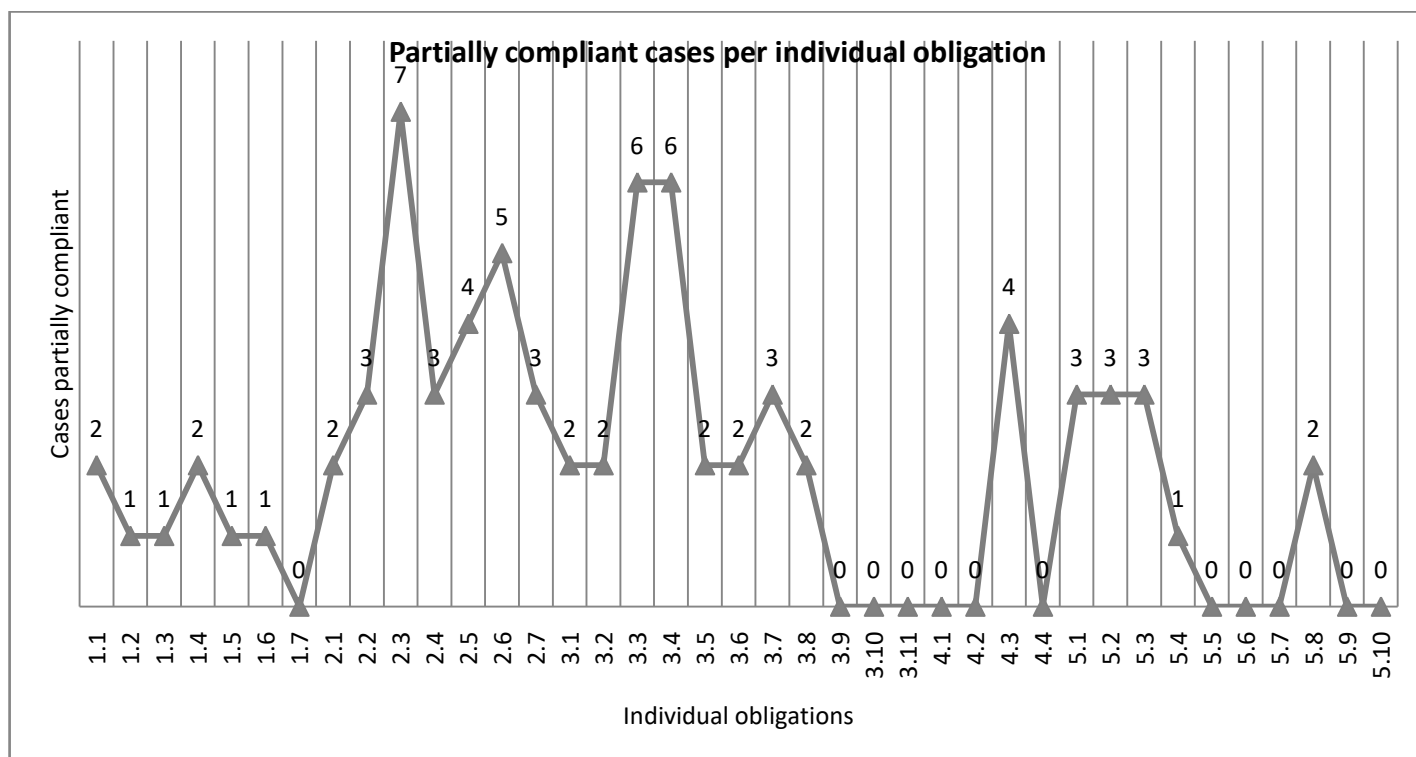
- 3.10 shall notify their clients in writing about the status of their professional indemnity insurance cover
- 3.11 shall not disclose any confidential information accessed by appointment unless required to do so by this code or by law
- 4.1 shall act with honesty towards other professionals
- 4.2 shall not in any way possible damage the reputation or injure the business of others
- 5.5 shall not fabricate or allow distortion of their associates' academic qualifications
- 5.6 shall always seek to create opportunities for professional development of candidates under their management
- 5.7 shall always engage themselves in professional development as required by the council

The least complied with obligations have 61 out of 72 cases complying. There is only one obligation at 61 out of 72 cases complying as listed below;

- 3.3 In representing their employers shall act in all faithfulness

4.2.1.2 Partially compliant cases per individual obligation

Figure 3 – Partially compliant cases per individual obligation



This data is extracted from Table 8, Appendix H which depicts level of compliance per individual obligation.

The graph in Figure 3 above shows partially compliant cases against individual obligations. From the graph it can be deduced that the most partially complied with obligation is objective 2, 3. This objective has 7 partially compliant cases. Below is objective 2, 3;

- 2.3 Shall be rational and truthful in providing information whether written or verbal

The least partially complied with obligations are with zero partial compliance. They are 12 and are listed below as follows;

- 1.7 Shall not engage in any act of dishonesty, corruption or bribery
- 3.9 Shall notify their employers in writing about the status of their professional indemnity insurance cover
- 3.10 Shall notify their clients in writing about the status of their professional indemnity insurance cover
- 3.11 Shall not disclose any confidential information accessed by appointment unless required to do so by this code or by law
- 4.1 Shall act with honesty towards other professionals
- 4.2 Shall not in any way possible damage the reputation or injure the business of others
- 4.4 Shall not seek and or accept professional commission under conditions that will influence their judgment on professional matters
- 5.5 Shall not fabricate or allow distortion of their associates' academic qualifications
- 5.6 Shall always seek to create opportunities for professional development of candidates under their management
- 5.7 Shall always engage themselves in professional development as required by the council

4.2.1.3 Non compliant cases against per individual obligation

This data is extracted from Table 8, Appendix H which depicts level of compliance per individual obligation.

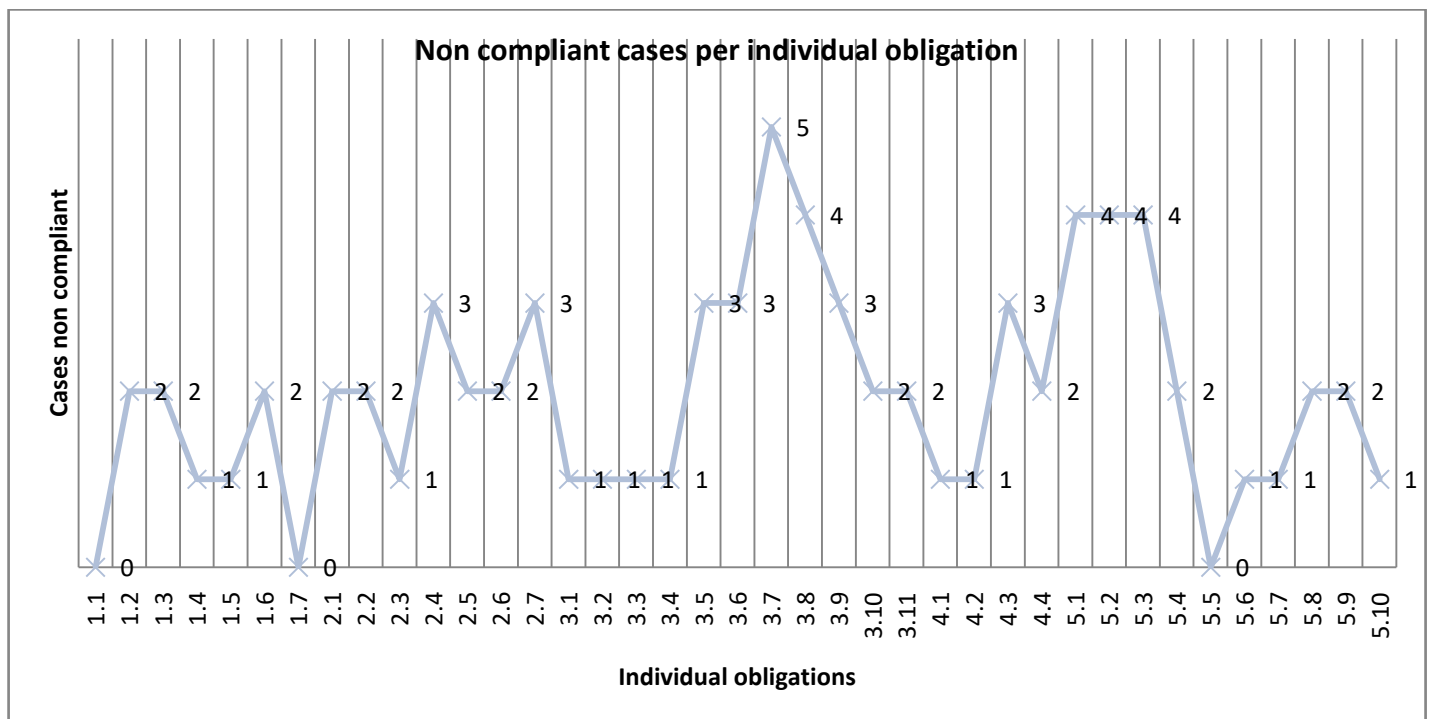
Figure 4 shows non compliant cases per individual obligation. The most non complied with obligation is 3.7;

- 3.7 Shall declare to their employers any dealings with other parties doing the same or conflicting business

The least not complied with obligations are those with zero cases indicating non compliant. They are 3 and these are;

- 1.1 Shall keep high standards of ethical conduct
- 1.7 Shall not engage in any act of dishonesty, corruption or bribery
- 5.5 Shall not fabricate or allow distortion of their associates' academic qualifications

Figure 4 – Non compliant cases per individual obligation



4.2.2 Level of compliance per individual case

Figure 5, Appendix J shows how each individual case complies with the individual obligations. The most compliant case complies with all 39 obligations. They are 55 cases that comply with all obligations and these are;

- R3 to R5; R7 to R10; R13 to R21; R23 to R30; R33; R35 to R37; R40 to R43; R45; R47 to R51; R53 to R60; R62 to R64 and R66 to R71

These cases include registered persons from the two categories under study, the Professional Construction Manager designation and the Professional Construction Project Manager designation. The least compliant case is R1; this case complies with 13 obligations out of 39.

4.2.3 Conclusion

Table 11 below, is derived from Table 9 of Appendix H shows the total number of obligations complied to by all respondents against the total number of all obligations imposed to all respondents.

Table 11 participants level of compliance

	Participants	Total Participants	Percentage
Compliant	55	72	76
Partially Compliant	10	72	14
Non-compliant	8	72	12
No responses	10	72	14

NB: Some participants are partially compliant and non compliant and or not responding to certain obligations.

Percentage compliance is deducted from these two parameters.

Thus average compliance is given by;

$$\frac{\text{Total number of participants complying}}{\text{Total number of participants}} \times 100$$

$$= \frac{55}{72} \times 100$$

$$= \underline{76\%}$$

Table 11 shows that on average 55 cases out of a total 72 cases adhere to all the 39 obligations imposed to them by their code of conduct. This means that 76 per cent of the participants comply with all the obligations of the code of conduct. On the contrary 14% partially comply with certain obligations. 12% do not comply with some obligations. 14% of the participants did not respond to certain obligations. 12 participants who indicated partial compliance and non-compliance were invited for interviews.

In conclusion the following is a summary of the findings of the questionnaire survey;

- 55 out of 72 cases are compliant to all the 39 obligations imposed by the code of conduct.
- 10 out of 72 cases indicated partial compliance to certain obligations.
- 8 out of 72 cases indicated non compliance to certain obligations.
- 10 out of 72 cases did not respond to certain obligations

4.3 Ascertaining and examining specific challenges faced by the construction project managers in complying with their professional code of conduct.

Qualitative data was collected by means of semi structured face to face interviews with registered members of the SACPCMP in the categories of professional construction manager and professional construction project manager. Twelve respondents of the questionnaire survey were supposed to participate in the semi structured interviews. Two out of the twelve interviews did not materialise as a result ten interviews were conducted. The interviewees were conducted with respondents of the questionnaire survey who admitted not to comply with their code of conduct. All interviews were conducted at the interviewee's place for convenience. The objective of the semi-structured interviews is to ascertain and examine specific challenges faced by the construction project managers in complying with their code of conduct.

Thematic analysis was conducted systematically as follows;

- Recording and transcription of data
- Coding of the identified challenges
- Categorizing of the identified challenges
- Quantitative analysis of the identified challenges

This is explained in detail in the subsequent sections.

4.3.1 Recording of data and transcription of data documents

Interviews were recorded by hand written notes and these were transcribed to word processed text as shown in Appendix F, interview transcripts.

4.3.2 Coding of identified challenges

Table 12 below shows units of data imported from the interview transcripts (data documents) grouped under individual participants. These units of data are individual words extracted from the interviewee's responses. The ten participants are coded R1, R11, R12, R22, R31, R34, R38, R39, R44, R52, R61 and R65 in the same manner they were coded in the questionnaire survey.

In the Table 12 below, the units of data are marked according to similarity by the use of brackets and a letter, as shown on the legend, a common category name is assigned to each category. The units of data are phrases that describe the challenges faced by the participants.

Legend

(.....) A	Suit Employer
(.....) B	Influenced by colleagues
(.....) C	Do not see anything wrong
(.....) D	Limited time
(.....) E	Other interests
(.....) F	Reveals confidential information
(.....) G	Other reason
(.....) H	Generosity
(.....) L	External pressure

Table 12 – Coding of challenges identified by respondent

Respondent	Units of data (Challenges identified)
R1	(Protect my employer) A
	(My superiors expect me to act in favour of the company in all my dealings) A
	(My way of thinking is adversely influenced by those around me)B
	(I cannot give information that is against my employer. I will be risking losing my job) A
	(My Manager needs to approve the release of such kind of information) A
	(My actions are limited by my organisation)A
	(I have to fit in the organisation)B
	(I am expected by fellow workmates to give my opinion)B
	(I have to give my opinion)C

	(I do not have enough time to complete all work assigned to me)D
	(My work load is a bit high so this affects negatively on the quality of my work)D
	(I also offer my services privately)E
	(I do reveal out the client's confidential information)F
	(I offer my services on part time basis) E
	(I undertake part time drafting work) E
	(Members of the client organisation are peers so we get talk about work) F
	(You may not have the luxury to choose) G
	(Due to that need for work instead of doing nothing) G
	(Instruction from above) A
	(Due to time constraints at times I struggle to make it) D
	(not be the best thing to do) C
	(Because of fear of consequences involved) E
R11	(The tendency is to prioritise company benefit) A
	(Profession usually comes last) E
	(I do not release information that implicates me) E
	(At times my company let me down) A
	(no one cares) C
	(We use our own theories to resolve problems) C
	(I cannot penalise my company) C
	(There is nothing wrong with not declaring) C
	(I do not call it discrimination but rather preference) C
R12	(There is usually pressure from the community) G
	(I am biased towards my organisation)A
	(My relationship with that contractor) E
	(After all everyone does that) B
	(Need to be rational) C
	(What if the person I am reporting finds out?) C

R22	(Health and safety requirements delays the project) C
	(Employer expects me to do wrong) L
	(Client expects me to do wrong) L
	(As long as I am morally correct) C
	(As long as I am correct in doing so) C
	(There is nothing wrong with that) C
	(I also need to acquire skills) C
	(If you don't have work you will take it) G
R31	(to suit my company) A
	(I do not see anything wrong) C
	(If it makes sense) C
	(They are other interests) E
	(If I see it morally right) C
	(What is wrong with that?) C
R34	(I comply with company policy) A
	(Make myself undesirable) B
	(Harm your company) A
	(Is management decision) A
	(Controlled by Senior Management) A
	(Say my opinion) C
	(I do make choices) C
R38	(Its morally okay) C
	(Balance between morality and business) C
	(a code is not law) C
	(Not volunteer information) C

R39	(I tend to be dishonest) C
	(That is what everyone is doing) B
	(Reputation of my employer) A
	(Protect the reputation of my employer) A
	(Be dishonest to save the company) A
	(These are petty issues) C
	(Safety is not my issue) C
	(It is debatable) C
	(My new business) E
	(My own business during working hours) E
	(Than to leave work) C
R44	(Impose development on people) G
	(You have to "lie") C
	(Collective effort) B
	(Everyone's responsibility) C
	(Our Leaders require answers) G
	(I put myself and my family first) C
	(I put myself and my employer first) C
	(I am not the only one) G
	(There is nothing wrong about it) C
	(I don't think people do notify) B
	(My employer) A
	(As a way of assisting) H
	(We all discriminate) B
	(I do not have time) D
	(I do not have time) D
	(our employers are not faithful to us) L

4.3.3 Categorizing identified challenges

Table 13 shows all the nine data categories developed with the underlying units of data (challenges identified). These categories are derived from the data. The following categories have been developed and are discussed in Chapter five; obedience to authority, low moral awareness, conflict of interest, socio political pressure, act of kindness, peer pressure, time constraints and breach of confidence. Abstract units of data (challenges identified) fall under the left over category. The categories are further quantified based on the number of participants who mentioned the same theme.

Legend

(.....) A	Suit Employer
(.....) B	Influenced by colleagues
(.....) C	Do not see anything wrong
(.....) D	Limited time
(.....) E	Other interests
(.....) F	Reveals confidential information
(.....) G	Other reason
(.....) H	Generosity
(.....) L	External pressure

Table 13 – Challenges identified by categories

Category	Challenges identified	Total number of challenges
A	(Protect my employer) A	18
	(To act in favor of the company) A	
	(I will be risking losing my job)A	
	(My Manager needs to approve the release of such kind of information) A	
	(My actions are limited by my organization)A	
	(Instruction from above) A	
	(The tendency is to give precedence to my company) A	
	(At times my company let me down) A	
	(to suit my company) A	
	(I comply with company policy) A	

	(Harm your company) A	
	(Controlled by Senior Management) A	
	(Reputation of my employer) A	
	(Protect the reputation of my employer) A	
	(Be dishonest to save the company) A	
	(I am biased towards my organization)A	
	(My employer) A	
	(Is management decision) A	
B	(My way of thinking is adversely influenced by those around me)B	9
	(I have to fit in the organization)B	
	(I am expected by fellow workmates to give my opinion)B	
	(After all everyone does that) B	
	(Make myself undesirable) B	
	(That is what every one is doing) B	
	(Collective effort) B	
	(I don't think people do notify) B	
c	(We all discriminate) B	30
	(I have to give my opinion)C	
	(no one cares) C	
	(We use our own theories to resolve problems) C	
	(I cannot penalize my company) C	
	(There is nothing wrong with not declaring) C	
	(I do not call it discrimination but rather preference) C	
	(Need to be rational) C	
	(What if the person I am reporting finds out?) C	
	(Health and safety requirements delays the project) C	
	(As long as I am morally correct) C	
	(As long as I am correct in doing so) C	
	(There is nothing wrong with that) C	
	(I also need to acquire skills) C	
	(I do not see anything wrong) C	
	(If it makes sense) C	
	(If I see it morally right) C	
	(What is wrong with that) C	
	(Say my opinion) C	
	(I do make choices) C	
	(Its morally okay) C	
	(Balance between morality and business) C	
	(a code is not law) C	

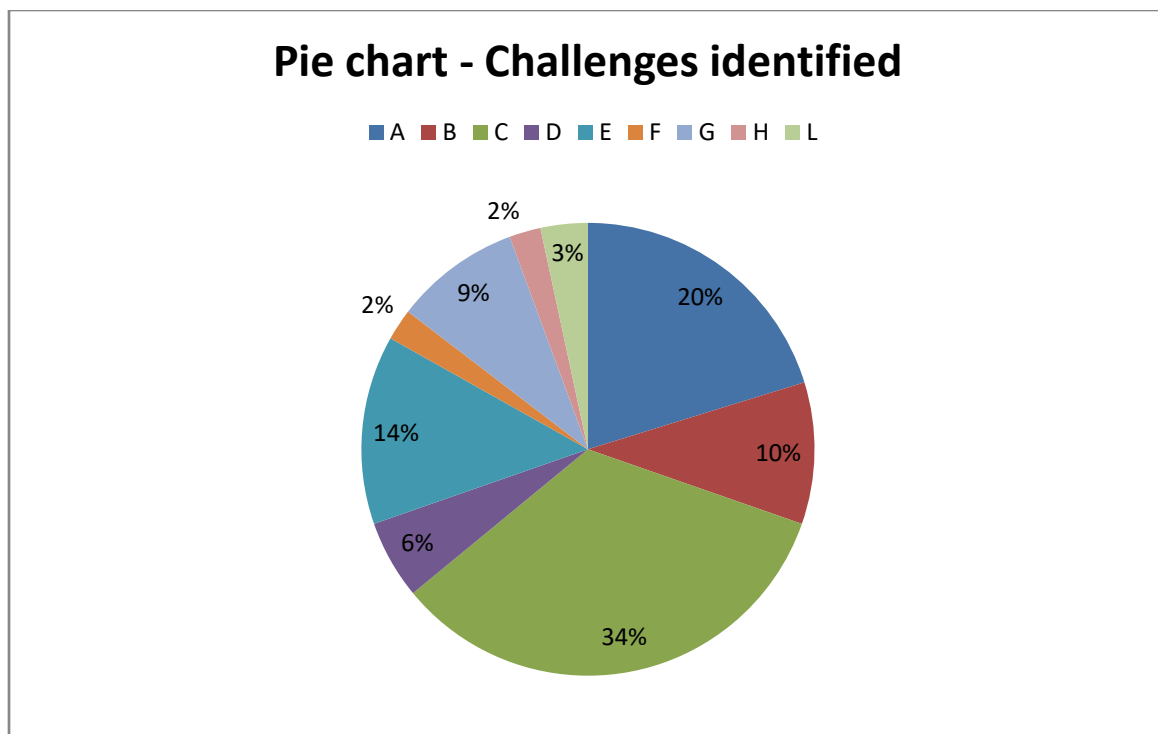
	(Not volunteer information) C (I tend to be dishonest) C (Than to leave work) C (You have to "lie") C (Everyone's responsibility) C (I put myself and my family first) C (I put myself and my employer first) C (not be the best thing to do) C	
D	(I do not have enough time to complete all work assigned to me)D (My work load is a bit high so this affects negatively on the quality of my work)D (I do not have time) D (I do not have time) D (Due to time constraints at times I struggle to make it) D	5
E	(I also offer my services privately)E (I offer my services on part time basis) E (I undertake part time drafting work) E (Because of the consequences involved) E (Profession usually comes last) E (I do not release information that implicates me) E (My relationship with that contractor) E (They are other interests) E (I also offer my services privately)E (I offer my services on part time basis) E (My new business) E (My own business during working hours) E	12
F	(I do reveal out the client's confidential information)F (Members of the client organization, are peers so we get talk about work) F	2
G	(You may not have the luxury to choose) G (Due to that need for work instead of doing nothing) G (If you don't have work you will take it) G (Impose development on people) G (Our Leaders require answers) G (I am not the only one) G (There is usually pressure from the community) G (Were deprived historically) G	8

H	(Shall be considerate) H	2
	(As a way of assisting) H	
L	(Employer expects me to do wrong) L	3
	(Client expects me to do wrong) L	
	(our employers are not faithful to us) L	

4.3.4 Analysis of identified challenges

The challenges identified were quantified based on the number of times participants mentioned them against obligations. The pie chart below depicts the challenges identified expressed as percentages of their total number. The results shows that challenges in categories C, B and D which are; do not see anything wrong, influenced by colleagues and limited time are the most frequently mentioned. Challenges in category F and H which are; reveals confidential information and generosity are the least mentioned.

Figure 6 – Challenges identified as mentioned by participants



4.3.5 Conclusion

The face to face semi structured interviews conducted with 10 participants' revealed the following challenges;

- Suit Employer
- Influenced by colleagues
- Do not see anything wrong
- Limited time
- Other interests
- Reveals confidential information
- Other reason
- Generosity
- External pressure

Based on how many times a challenge was mentioned by participants the challenges were quantified and expressed as a percentage of their total number. This data was presented as a pie chart. The challenges; do not see anything wrong, influenced by colleagues and limited time are the most mentioned among participants. Inversely the challenges reveals confidential information and generosity are the least mentioned.

Chapter 5

Discussion of results

This chapter interprets the research results from Chapter 4. In addition, it discusses the relation of the results in answering the research question and meeting the research objectives. Strengths and weaknesses and limitations of this study are also discussed. This chapter follows three sections of the three specific objectives of this research.

5.1 Systematic identification of the professional obligations imposed on construction project managers in South Africa by their code of conduct

This objective required an examination of the SACPCMP code of conduct to identify the ethical obligations imposed on its registered persons. Literature review investigated how a code of ethics is developed. According to Raiborn and Payne (1990)'s evaluative framework which was adopted for this study, a code of ethics should address the four values of Justice, integrity, competence and utility. A review of the SACPCMP code of conduct showed that the code of conduct addresses these four values in the four sections of the code of conduct as shown in Table 12 below;

Table 14 – SACPCMP code of conduct ethical values

Value	Section of the code of conduct
Integrity	2.1
Justice	2.4
Competence	2.2
Utility	2.3

However, in order for these values to be implemented into practice, the SACPCMP adopted a code of conduct with 39 obligations as shown in Section 2.3 Table 3. These 39 obligations meet the research objectives. In addition to Rayborn and Payne's evaluative framework, the SACPCMP address issues of safety and health and environment in items 2.3 and 2.4.

5.2 Examination of the extent of compliance with the professional obligations specified in the SACPCMP code of conduct

This obligation required the extent of compliance with the 39 obligations identified. The questionnaire survey was used to meet the second objective of this study. The findings of the questionnaire survey revealed that out of the 72 respondents that participated in the survey, 55 respondents comply with all the obligations imposed to them by their code of conduct. 12 participants indicated non compliant and partially compliant. 5 participants did not give responses to certain obligations.

The results of the quantitative survey showed 77% compliance in section 4.2.3. In addition Figure 2 shows the obligations with the most compliance and the least compliance. The diagram shows that generally there is more compliance in the areas of declaring professional indemnity insurance status, confidentiality and honesty towards other professionals. The same diagram also shows that registered persons are more willing to develop themselves professionally. The least complied with obligation is to be honest when serving the employer.

Figure 3 shows that there is more partial compliance in being truthful in providing information. Figure 4 shows that registered persons are non compliant with obligation 3.7, this shows that they do not declare their dealings with other parties.

Overly 55 out of 72 registered persons comply with all 39 obligations. This shows a general compliance with the code of conduct. The 12 participants that agreed not to comply with the code of conduct were invited for the face to face semi structured interviews. 10 out of the 12 invited to attend the interviews participated.

5.3 Ascertaining and examining specific challenges faced by the professional construction project managers in South Africa in complying with their code of conduct

This study used questionnaire survey and semi structured interviews, this overcame weaknesses associated with none technique of one data collection and provides a richer approach to data collection. Although large amounts of data can be collected by a questionnaire from a large number of participants in a short period, use of questionnaires alone give inadequate information with responses that are limited and lack explanation. Hence this technique was not going to give an adequate answer

to the research question. Combining questionnaire survey and semi structured interviews was a major strength of this study as semi structured interviews complimented the validity issues associated with questionnaires.

The semi structured interviews were to achieve the last objective of this study which is to ascertain and examine the challenges faced by construction project managers in complying with their professional code of conduct. This objective answers the research question, what challenges do construction project managers face in complying with their professional code of conduct? The study used non-probability sampling to identify information rich cases. Only those cases that indicated partial compliance and non compliance with certain obligations participated in the interviews.

The challenges identified in Section 4.3.5 were matched based on similarity with the challenges revealed by literature review in Section 2.6 as explained in the subsequent section and the following table was drawn up, Table 14

Table 15 - Challenges identifies

Challenges identified by face to face interviews	Challenges identified from literature review
Suit Employer	Obedience to authority
Influenced by colleagues	Peer pressure
Do not see anything wrong	Low moral awareness
Limited time	Time constraints
Reveals confidential information	Breach of confidence
Generosity	Act of kindness
External pressure	Socio political pressure

The challenges identified from literature review are defined below and linked to the research findings;

5.3.1 Obedience to authority

Russell (2014) explains obedience to authority as that tendency of people to focus on pleasing superiors or those in authority until they begin to act unethically. In that process they will no longer consider themselves responsible for their actions. In this category participants mentioned that most of their actions are directed towards pleasing their employers or client. Participants also mentioned that even if they are given instructions that are unethical they will still follow as they fear that they will lose their jobs. Participant R1 would go against the obligation that expects construction project managers to be truthful in giving information by editing the information to favour the company.

5.3.2 Low moral awareness

Moral awareness has several definitions. According to Clarkeburn (2002 p443), moral awareness is the spontaneous realization of moral issues and the ability to describe a situation in moral terms. On the other hand, Erwin (2000 p116) defines moral awareness as the recognition that one's behaviour may violate a moral principle. Participants in their responses displayed lack of moral judgment when faced with situations. Participant "R1" displayed in numerous responses poor moral awareness for example, where the obligation forbids construction project managers from accepting reimbursement from more than one part for the same job, the participant's response was "...I don't see anything wrong...". This means that according to the participant's failing to recognize the moral issue at hand. In some it is also evident that although the participant realises the moral issue the picture is not clear for example, where the obligations limits registered members to conduct work only in areas where they possess relevant skills, participant "R1" suggests that without the relevant skills as a business person you can always hire people who possess the relevant skills.

5.3.3 Conflict of interest

According to McDonald (2006), conflict of interest is a situation whereby one is in a position to gain individual benefits from actions or decisions made influenced by their position of office. It follows from the definition that office bearers are forbidden to pursue personal interest. The code of conduct requires that construction project managers declare any dealings with other parties doing the same business or conflicting to their employer or client. Participant "R1" mentioned that "...my employer may not understand the boundaries of my relationship with that contractor..." this statement shows that there is a personal relationship between the participant and the contractor and this if not declared constitutes conflict of interest.

5.3.4 Socio political pressure

The overlapping of the political and social arena into the areas of work can exert pressure on construction project managers that can cause them to neglect their ethical obligations. Examples are situations where members of a community or political figures can demand favours from project leaders. Participant “R2” mentioned a situation whereby his company, a construction company was forced by the community to work on a wetland pending the outcome of a water use license which is a statutory requirement. This means that the participant’s organization acted in contravention with the environmental act.

5.3.5 Act of kindness

Act of kindness or that inclination to be kind. This is a quality that seeks to promote good to others. It includes the concept of beneficence in professional conduct. It can be presented as a challenge where it prevents one to abide by obligations of the code of conduct. Participant “R3” mentioned in one case that “we have to be considerate”, yet the questions, to what extent? In a situation where the participant is expected to report violators of the code of conduct the council, the participant opts to deal with the issue at organizational level and considers reporting to the council as being in considerate.

5.3.6 Peer pressure

Peer pressure also known as social pressure is defined as the direct influence on an individual or group of people by their peers, this results in change of behaviours, values or attitudes to conform to those of the influencing group. Construction project managers can be found in such situations either within their organization, places of work or social circles and this can cause them to act unethically. Participant “R3” mentions a couple of situations whereby the participant cannot raise voice on standards of Health and safety. The Health and safety standards at the participant’s organization are below the requirements of the law, the participant’s co-workers and superiors are not concerned about this issue. The participant can no longer raise this issue as it is getting the other team players to judge her.

5.3.7 Time constraints

Adjei (2015), people are more likely to get work done correctly when they have ample time to digest the matter than when they pressurized to make a snap decision. Construction project managers can make mistakes because of lack of time. Participants revealed that because of a lack of time caused

by multiple deadlines, this creates workloads that they cannot bear as a result their quality of work is substandard.

5.3.8 Breach of confidence

Breach of confidence is a common law tort that protects private information that is given in confidence. If a professional gives out confidential information to a person that is not entitled to, the professional commits breach of confidence against the code of conduct. Participant “R3” acknowledges to have disclosed confidential information to peers citing that it is a norm amongst them “...we talk about this...”

5.4 Member designation

The research participants were from the two categories of professional construction manager and professional construction project manager. From Table 5 the category of professional construction project manager had a total population of 3189 and the category of professional construction manager had a population of 1170. Of the 55 respondents of the questionnaire survey 26 respondents were professional construction manager and 29 were professional construction project manager. Out of the 12 that admitted not to comply with the obligations of the code of conduct, 7 were professional construction project manager and 5 were professional construction manager. The two participants that did not attend the interviews were professional construction project managers. Eventually 5 interview participants were from the professional construction manager and the other 5 from the professional construction project manager. However this researcher did not consider member designation as an influencing factor in complying with the obligations as the data collected from both the survey and the interviews did not suggest that.

5.5 Validation

As discussed, triangulation as a validation technique was used to confirm the validity of research data collected through face to face interviews. Data documents were sent back to the interviewees for confirmation and 8 of them responded confirming that the data documents are correct. 2 did not give feedback.

5.6 Conclusion

A systematic analysis of the SACPCMP code of conduct identified 39 obligation to meet the first objective of this study. A questionnaire survey conducted revealed that 35 out of 72 participants fully

comply with their code of conduct this was the second objective of this study; to examine the extent of compliance with the obligations specified in the SACPCMP code of conduct. The semi structured interviews conducted revealed challenges which are obedience to authority, low moral awareness and conflict of interest. Other challenges that emerged to a lesser extent are peer pressure, act of kindness, time constraints and socio-political pressure.

Chapter 6

Conclusion and Recommendations

This chapter presents conclusions to the study as well as limitations and recommendations. The conclusions are based on an evaluation of the research findings against research question and objective. Conclusions are drawn from literature review and data acquired by questionnaire survey and semi structured interviews conducted.

6.1 To systematically identify the professional obligations imposed on construction project managers in South Africa by their code of conduct

The SACPCMP code of conduct has 7 sections namely; definitions, introduction, relations to the public, relations with the employer or client, relations with other professionals, standards for professional performance and finally disciplinary procedures. A Systematic analysis of SACPCMP code of conduct revealed 39 obligations imposed on the professional construction project managers by their code of conduct. These 39 obligations are revealed in the five sections of introduction, relations to the public, relations with the employer or client, relations with other professionals and lastly standards for professional performance. Table 6 tabulates these obligations. These obligations were further used as a survey instrument to measure the level of compliance with the code of conduct.

6.2 To examine the extent of compliance with the professional obligations specified in the SACPCMP code of conduct

The objective of the questionnaire survey was to examine the extent of compliance with the professional obligations specified in the SACPCMP code of conduct

The questionnaire survey conducted with 72 registered persons revealed that 55 respondents comply, 10 respondents partially comply, 8 are non compliant as well as 10 non responses to certain obligations. Statistically this gave an average compliance of 77%.

It can be concluded from the quantitative survey that the construction project managers registered with the SACPCMP comply with the professional obligations imposed on them by their code of

conduct although challenges do exist. Furthermore SACPCMP records revealed a high level of compliance. Level of compliance is highest in the ethical values of competence and least on the value of integrity.

6.3 To ascertain and examine specific challenges faced by the professional construction project managers in South Africa in complying with their code of conduct

Individual face to face semi structured interviews were conducted with 10 construction project managers who admitted in the questionnaire survey not being compliant with certain obligations of the code of conduct. The data collected was used to meet this objective 6.3 and to answer the research question.

Qualitative data was collected by means of semi structured face to face interviews with registered members of the SACPCMP in the categories of professional construction manager and professional construction project manager. Twelve respondents of the questionnaire survey were supposed to participate in the semi structured interviews. Two out of the twelve interviews did not materialise as a result ten interviews were conducted. The interviewees were conducted with respondents of the questionnaire survey who admitted not to comply with their code of conduct.

To answer the research question for this study;

- “What challenges do construction project managers in South Africa face in complying with their professional code of conduct?”

The challenges identified by the semi structured interviews are obedience to authority, poor moral awareness and conflict of interest. Other challenges that emerged though secondary to those mentioned above are peer pressure, act of kindness, time constraints and socio political pressure.

6.4 Recommendations

It is recommended that the SACPCMP code of conduct be made more comprehensive and clear enough to ensure that professionals understand the requirements of the obligations imposed on them. The SACPCMP should also consider publishing complaints guidelines on its website as a

vehicle that can create awareness and further be used by the aggrieved to lodge complaints against registered persons.

Professional bodies should put up mechanisms to identify on a regular basis the challenges that their members face in complying with their code of conduct. These can be in form of workshops, online forums and or surveys. Challenges identified such as obedience to authority, poor moral awareness and conflict of interest can be alleviated if support structures are made available in their organisations that can advice and educate members when faced with moral dilemmas that leads to non-compliance.

References

- Adjei, K.O., Sarfo, M., and Sam, A. (2015) Challenges Facing Members of Ghana Institution of Surveyors in Complying with Code of Ethics, *African Journal of Applied Research (AJAR) Journal*, Vol.1, No.1 ISSN 2408-7920 January 2015, Cape Coast, Ghana. 219-235.
- Arnold, L. and Stern, D., 2006. Content and context of peer assessment. In *Measuring medical professionalism* (pp. 175-194). Oxford University Press New York.
- Babalola Anthony, A. and AnifowoseOjo, S., A Study of the Compliance of Practising Quantity Surveyors with the Professional Code of Conduct in Nigeria.
- Bartol, K.M., 1979, 'Professionalism as a Predictor of Organizational Commitment, Role Stress and Turnover: A Multidimensional Approach', *Academy of Management Journal*, Vol.22, No.4, pp.815–21.
- Beets, S.D., 1991. Personal Morals and Professional Ethics: A Review and an Empirical Examination of Public Accounting. *Business & Professional Ethics Journal*, pp.63-84.
- Blau, G. J. (1985). The measurement and prediction of career commitment. *Journal of Occupational Psychology*, 58, 277-288.
- Bowen, P., Pearl, R., & Akintoye, A., (2007). Professional ethics in the South African construction. *Building Res. Information*. 35 (2): 189-205.
- Bowie, N.E., 1999. Business ethics: A Kantian perspective.
- Brown Marjorie (1965). "Professional values" *Journal of cooperative extension III* (Summer), 73
- CBE website. *Council for built environment act No. 43 Of 2000*. Viewed 16 april 2016.
https://www.ecsa.co.za/regulation/RegulationDocs/3CBEAct43_2000.pdf
- Century (CITC-II) 'Sustainability and Innovation in Management and Technology' 10-12 December, Hong Kong.
- Cheng, S. and Wong, A., 2015. Professionalism: A contemporary interpretation in hospitality industry context. *International Journal of Hospitality Management*, 50, pp.122-133.
- Coughlan, Richard. "An analysis of professional codes of ethics in the hospitality industry." *International journal of hospitality management* 20.2 (2001): 147-162.

Creswell, J. (2002) *Research Design: Quantitative and Qualitative Approaches* (2nd edn).

Thousand Oaks, CA: Sage.

Creswell, J. W., Hanson, W. E., Plano, V. L. C., & Morales, A. (2007). Qualitative research designs selection and implementation. *The Counseling Psychologist*, 35(2), 236-264.

Cruess, S.R., Johnston, S. and Cruess, R.L., 2004." Profession": a working definition for medical educators. *Teaching and learning in medicine*, 16(1), pp.74-76.

Dale, A., 1994. Professionalism and the police. *Police J.*, 67, p.209.

Davis, J.R., Welton, R.E., 1991. Professional ethics: business students' perceptions. *Journal of Business Ethics* 10, 451–463.

Davis, M. . Thinking Like an Engineer: *The Place of a Code of Ethics in the Practice of a Profession*. *Philosophy & Public Affairs*, Vol. 20, No. 2 (Spring, 1991), pp. 150-167. Wiley,
<http://www.jstor.org/stable/2265293>. Accessed 08-05-2016 02:15 UTC

Domegan, C & Fleming, D. (2007) "Marketing Research in Ireland, Theory & Practise", Third Edition, Gill and MacMillan

Easterby-Smith, M., Thorpe, R. Jackson, P. and Lowe, A. (2008) *Management Research* (3rd edn). Sage: London.

Evetts, J. (2006) Introduction: trust and professionalism: challenges and occupational Changes, *Current Sociology*, 54 (4), 515–531.

Fan, L.C.N., Fox, P.W. and Wan, J.C.Y., (2003). An Investigation of Ethical Behaviour of Construction Professionals in Quality Management. Second International conference on construction in the 21st

Freidson, E., 2001. *Professionalism, the third logic: on the practice of knowledge*. University of Chicago press.

FMI/CMAA (2004) Survey of Construction Industry Ethical Practices and Issues, *Management Consultant for the Construction Industry and Construction Management Association of America*, 1-18. Hamra, Wayne (2000), 'Bribery in International Business Transactions and the OECD Convention', *Business Economics* 35(4), 33–46.

- Frankel, M.S., 1989. Professional codes: why, how, and with what impact? *Journal of Business Ethics* 8,109–115.
- Freidson, E. (2001) *Professionalism: The Third Logic* (London, Polity Press).
- Guba, E.G. ed., 1990.*The paradigm dialog*.Sage Publications.
- Guba, E. and Lincoln, Y. (1994) ‘Competing paradigms in qualitative research’, in N.K. Denzin and Y.S. Lincoln (eds) *Handbook of Qualitative Research*. London: Sage, pp. 105–17.
- Hall, R. H. "Professionalization and bureaucratization." *American Sociological Review*, 1968, 33, 92-104.
- Hamzah, A., Saipo, B.A., Mohd. S.M., Mohammed A. B. and Yap X.W.(2007)Do professional ethics affect quality? Centre for Project and Facilities Management, Faculty of the Built Environment. University of Malaysia.
- Haywood – Farmer. Ian Stuart. (1990). An instrument to measure the 'Degree of Professionalism in a professional service'. *The services industries Journal*, 10, 336-347.
- Harvard business review. *Who is a professional?*.Viewed 15 April 2016.<https://hbr.org/product/who-is-a-professional/an/904047-PDF-ENG#>
- Hillebrandt, P.M. (2000) *Economic Theory and the Construction Industry*, 2nd Edition.Macmillan, Basingstoke.
- Jackson, B (2004/2005). The perceptions of experienced construction practitioners regarding ethical transgressions in the construction industry, *The International Journal of Construction Education and Research*, 1(2).
- John O., (2006). *Ethical Behaviour in the Construction Procurement Process*. Report no 2002 -62A CRC Construction Innovation. February 2006 page 5-6, 7-8. www.deakin.edu.au>Deakin Research online. Accessed on 17/3/2011
- Jamal, K. and Bowie, N.E., 1995.Theoretical considerations for a meaningful code of professional ethics.*Journal of Business Ethics*, 14(9), pp.703-714.
- Kerr, S., Von Glinow, M.A. and Schriesheim, J., 1977. Issues in the study of “professionals” in organizations: The case of scientists and engineers. *Organizational Behavior and Human Performance*, 18(2), pp.329-345.

- Lee, H.J., 2014. Attitudinal dimensions of professionalism and service quality/efficacy of frontline employees in hotels. *IJHM* 41, 140–148.
- L'etang, J., 1992. A Kantian approach to codes of ethics. *Journal of Business Ethics*, 11(10), pp.737-744.
- John O., (2006). Ethical Behaviour in the Construction Procurement Process. Report no 2002 -62A CRC Construction Innovation. February 2006 page 5-6, 7.
- Poon, J. (2004a). The Study of Ethical Perceptions of Construction Managers Proceedings of Association of Researchers in Construction Management (ARCOM) Conference, Edinburgh, Heriot-Watt University, UK, 973-983.
- Merriam, S. B. (1998). Qualitative research and case study applications in education. San Francisco, CA: Jossey-Bass.
- Miles, M. B. and Huberman, A. M. 1994. 'Qualitative Data Analysis. An Expanded Sourcebook'. 2nd ed., Sage, Thousand Oaks, CA
- Millett, A.R., 1977. *Military Professionalism and Officership in America* (No. 2). Mershon Center of the Ohio State University.
- Myers, M. D. 2009. 'Qualitative Research in Business & Management'. Sage, London
- Nduse E., (2010). Cement Producer, Builders Seek Solutions to Building Collapse. Peoples daily, December 1. www.peoplesdaily-online.com/.../1120-cement-producers-builders-seek-solutions-to-building-collapse. Accessed on 26/4/2011.
- Nijthof, A., Cludts, S., Fisscher, O. and Laan, A. (2003), "Measuring the implementation of codes of conduct. An assessment method based on a process approach of the responsible organization", *Journal of Business Ethics*, Vol. 45 Nos 1-2, pp. 65-78.
- Nkado, R. W., and Kotze, M., (2000). *Competency – Based Assessment of Professional Quantity Surveying, a South African Perspective* – Proceeding of COBRA 2000 University of Greenwich, UK. www.informalworld.com/index/930341872.pdf. Accessed on 17/3/2011.
- Noordegraaf, M., 2007. From "pure" to "hybrid" professionalism: present-day professionalism in ambiguous public domains. *Adm. Soc.* 39, 761–785.

- Omole, A. O (2000). Surveying *Input into Engineering Projects; Need for professionalism. The Quantity Surveyor*.30. Jan/March pp10 – 18.
- Olsen, M. E., Lodwick, D. G., & Dunlap, R. E. (1992).Viewing the world ecologically. Boulder, CO:Westview.
- Olson, A., 1998. Authoring a code of ethics: observations on process and organisation.Accessed 19 April 2016. Illinois Institute of technology website.<http://ethics.iit.edu/ecodes/authoring-code>
- Oxford dictionary.*Defination professionalism*.Viewed on 25 April 2016.www.oxforddictionaries.com/definition/english/professional
- Oz, E., 1992. Ethical standards for information systems professionals: a case for a unified code. *MIS Quarterly* 16 (4), 423–433.
- Pizam, A., 2007. Educating the next generation of hospitality professionals. *IJHM*26 (1), 1–3.
- Raiborn, C.A., Payne, D., 1990. Corporate codes of conduct: a collective conscience and continuum. *Journal of Business Ethics* 9, 879–889.
- Saunders, M., Lewis, P. &Thornhill, A. (2009)*Research methods for business students*, 5th ed.,Harlow, Pearson Education.
- Schriesheim, J. F., Von Glinow, M. A., & Kerr, S.(1977) "Professionals in organizations"
- Shulimson, Jack. "Military Professionalism: The Case of the US Marine Officer Corps, 1880-1898." *The Journal of Military History* 60.2 (1996): 231.
- Structural alternative," in P. Nystrom and W. Starbuck (Eds.), *Prescriptive models of organizations*.North-Holland/TIMS Studies in the Management Sciences, Vol. V,In press.
- Snizek, W. E. (1972) Hall's Professionalism Scale: an empirical reassessment. *AmericanSociological Review*, 37, 109- 114.
- Stake,R.E. (1995). The art of case study research.Thousand Oaks, CA: SAGE Publications.
- Suen, H., Cheung, S. O., and Mondejar, R. (2007). Managing Ethical Behaviour in Construction Organizations in Asia: How do the teachings of Confucianism, Taoism and Buddhism and globalization influence ethics management? *International Journal of Project Management*, 25(3), 257-265.

Tahir N. And Amjad, A.I.(2013) Unethical Practices in Pakistani Construction Industry,European Journal of Business and Management, Vol.5, No.4, 2013.

Tow, D.And Loosemore, M. (2009) Corporate Ethics in the Construction and EngineeringIndustry.” Journal of Legal Affairs and Dispute Resolution in Engineering and Construction, August 2009, Vol. 1, No. 3: pp. 122-129.

Vee, C. and Skitmore, R.M. (2003) Professional ethics in the construction industry.*Engineering Construction and Architectural Management* 10(2) :pp. 117-127.

Vollmer.M., & Mills.I. (1966) *Professionalization*. Englewood Cliffs, NJ:Prentice-Hall.

Wikipedia.*DefinationProfessional*.Viewed 25 April 2016. <https://en.wikipedia.org/wiki/Professional>

Wilensky, H. L. "The professionalization of everyone?" *American Journal of Sociology*,1964, 70, 137-158.

Wiley, C., 2000. Ethical standards for human resource management professionals: a comparative analysis of five major codes. *Journal of Business Ethics* 25, 93–114.

Velasquez, M., Andre, C., Shanks, T., Meyer, M.J. and Meyer, M.J., 1987. What is ethics? *Issues in Ethics*, 1(1), pp.1-2.

Yin, R.K. (2003) *Case Study Research: Design and Method* (3rd edn). London: Sage.

APPENDICES

APPENDIX A

SACPCMP Code of Conduct



SCHEDULE

1. Definitions:

The Act – means the Project and Construction Management Professions Act, 48 of 2000.

Council - means the South African Council for the Project and Construction Management Professions established by Section 2 of the Act, 48 of 2000.

Project – means the Total Development envisaged by the client including the Professional Services.

Registered Persons – means persons registered in terms of section 19(2) of the Act.

2. Introduction

All persons registered with the South African Council for the Project and Construction Management Professions shall uphold and advance the honour and dignity of these professions in keeping with high standards of ethical conduct and shall:

2.1 act with integrity and sincerity in serving their employers, clients and the public with diligence and care.

2.2 strive to increase their competence and the prestige of their profession.

2.3 shall apply their skill and knowledge to advance human welfare.

2.4 not engage in any act of dishonesty, corruption or bribery.

3. Relations with the public

Registered Persons shall:

3.1 in carrying out their responsibilities have full regard to the public interest.

3.2 uphold the honor and dignity of their profession.

3.3 be objective and truthful in professional reports, statements, or testimonies, including all relevant and pertinent information therein.

3.4 have due regard for the safety, health and welfare of the public and the environment.

3.5 express an opinion on a project or construction management subject only when it is founded on adequate knowledge and honest conviction.

4. Relations with employers and clients

Registered Persons shall:

4.1 discharge their duties to their employers and clients in a responsible and competent manner.

4.2 act in all matters as faithful agents or trustees of each employer or client.

4.3 not accept compensation from more than one party for the same service, or for other services pertaining to the same project, without the consent of all interested parties.

4.4 disclose to their employers and clients any interest, whether direct or indirect, with other parties dealing with or relating to or in conflict with the business of their employers and clients.

- 4.5 disclose, in writing, to their employers and clients, the status of their professional indemnity cover insurance.
- 4.6 not unless required by law or by this code, divulge any information of a confidential nature which they obtained in connection with an appointment.

5. Relations with other professionals

Registered Persons shall:

- 5.1 Act with integrity, sincerity and honesty in all dealings with all other professionals.
- 5.2 not maliciously or recklessly injure or attempt to injure, whether directly or indirectly, the reputation, prospects or businesses of others.
- 5.3 not discriminate on grounds of gender, race or ethnic origin, sexual orientation, marital status, creed, nationality, disability or age.
- 5.4 not request, propose, or accept professional commissions on a contingency basis under circumstances that may compromise their professional judgement.

6. Standards of Professional performance

Registered Persons shall:

- 6.1 undertake work only for which they possess the necessary skills, knowledge and resources.
- 6.2 not falsify or permit misrepresentation of their own or their associates' academic or professional qualifications.
- 6.3 endeavour to provide opportunities for professional development and advancement of candidates in their employ or under their supervision.
- 6.4 undergo regular continuing professional development as prescribed to enhance and maintain their personal professional competence.
- 6.5 notify the Council immediately on becoming aware of a violation of this code by any other Registered Person.
- 6.6 notify the Council immediately of becoming insolvent.
- 6.7 Comply with all requirements or provisions of Act, 48 of 2000.

7. Disciplinary procedures

In the event of a complaint the disciplinary procedures as set out in the Act (48 of 2000) will be applied as follows:

- 7.1 Sect. 28: Investigation of charge of improper conduct.
- 7.2 Sect. 29: Charge of improper conduct.
- 7.3 Sect. 30: Appointment of Disciplinary Tribunal.
- 7.4 Sect. 31: Disciplinary Hearing.
- 7.5 Sect. 32: Proceedings after hearing.
- 7.6 Sect. 33: Appeal against decision of Disciplinary Tribunal

APPENDIX A - SACPCMP CODE OF CONDUCT

SACPCMP Code of Conduct



SCHEDULE

1. Definitions:

The Act – means the Project and Construction Management Professions Act, 48 of 2000.

Council - means the South African Council for the Project and Construction Management Professions established by Section 2 of the Act, 48 of 2000.

Project – means the Total Development envisaged by the client including the Professional Services.

Registered Persons – means persons registered in terms of section 19(2) of the Act.

2. Introduction

All persons registered with the South African Council for the Project and Construction Management Professions shall uphold and advance the honour and dignity of these professions in keeping with high standards of ethical conduct and shall:

- 2.1 act with integrity and sincerity in serving their employers, clients and the public with diligence and care.
- 2.2 strive to increase their competence and the prestige of their profession.
- 2.3 shall apply their skill and knowledge to advance human welfare.
- 2.4 not engage in any act of dishonesty, corruption or bribery.

3. Relations with the public

Registered Persons shall:

- 3.1 in carrying out their responsibilities have full regard to the public interest.
- 3.2 uphold the honor and dignity of their profession.

3.3 be objective and truthful in professional reports, statements, or testimonies, including all relevant and pertinent information therein.

3.4 have due regard for the safety, health and welfare of the public and the environment.

3.5 express an opinion on a project or construction management subject only when it is founded on adequate knowledge and honest conviction.

4. Relations with employers and clients

Registered Persons shall:

4.1 discharge their duties to their employers and clients in a responsible and competent manner.

4.2 act in all matters as faithful agents or trustees of each employer or client.

4.3 not accept compensation from more than one party for the same service, or for other services pertaining to the same project, without the consent of all interested parties.

4.4 disclose to their employers and clients any interest, whether direct or indirect, with other parties dealing with or relating to or in conflict with the business of their employers and clients.

4.5 disclose, in writing, to their employers and clients, the status of their professional indemnity cover insurance.

4.6 not unless required by law or by this code, divulge any information of a confidential nature which they obtained in connection with an appointment.

5. Relations with other professionals

Registered Persons shall:

5.1 Act with integrity, sincerity and honesty in all dealings with all other professionals.

5.2 not maliciously or recklessly injure or attempt to injure, whether directly or indirectly, the reputation, prospects or businesses of others.

5.3 not discriminate on grounds of gender, race or ethnic origin, sexual orientation, marital status, creed, nationality, disability or age.

5.4 not request, propose, or accept professional commissions on a contingency basis under circumstances that may compromise their professional judgement.

6. Standards of Professional performance

Registered Persons shall:

- 6.1 undertake work only for which they possess the necessary skills, knowledge and resources.
- 6.2 not falsify or permit misrepresentation of their own or their associates' academic or professional qualifications.
- 6.3 endeavour to provide opportunities for professional development and advancement of candidates in their employ or under their supervision.
- 6.4 undergo regular continuing professional development as prescribed to enhance and maintain their personal professional competence.
- 6.5 notify the Council immediately on becoming aware of a violation of this code by any other Registered Person.
- 6.6 notify the Council immediately of becoming insolvent.
- 6.7 Comply with all requirements or provisions of Act, 48 of 2000.

7. Disciplinary procedures

In the event of a complaint the disciplinary procedures as set out in the Act (48 of 2000) will be applied as follows:

- 7.1 Sect. 28: Investigation of charge of improper conduct.
- 7.2 Sect. 29: Charge of improper conduct.
- 7.3 Sect. 30: Appointment of Disciplinary Tribunal.
- 7.4 Sect. 31: Disciplinary Hearing.
- 7.5 Sect. 32: Proceedings after hearing.
- 7.6 Sect. 33: Appeal against decision of Disciplinary Tribunal

APPENDIX B - QUESTIONNAIRE TEMPLATE

 SCHOOL OF CONSTRUCTION ECONOMICS & MANAGEMENT		APPENDIX B SURVEY QUESTIONNAIRE		 UNIVERSITY OF THE WITWATERSRAND JOHANNESBURG		
Please read the accompanying Information sheet first. Do NOT write your name anywhere on this questionnaire. Your responses will remain anonymous and will never be linked to you personally. If there are items you do not feel comfortable answering kindly skip them.						
Item 1.0 to item 5.0 below shows a breakdown of obligations imposed to you as a project and construction management professional by your code of conduct. Please tick appropriately in the corresponding column whether you comply, partially comply or you do not comply . Subsequent columns are optional, please tick where you comply, partially comply or not comply with challenges. Consequently name challenges faced.						
PROFESSIONAL OBLIGATIONS ACCORDING TO PROFESSIONAL CODE OF CONDUCT		COMPLIANT	PARTIALLY COMPLIANT	NOT COMPLIANT	OPTIONAL PLEASE TICK IF YOU FACE CHALLENGES IN COMPLYING	OPTIONAL GIVE DETAILS OF CHALLENGES FACED
1.0	Introduction					
1.1	Shall keep high standards of ethical conduct					
1.2	Shall be honest in serving their employers					
1.3	Shall be honest in serving their clients					
1.4	Shall be honest in serving the public					
1.5	Shall always aim to improve their competence					
1.6	Shall aim to uphold the prestige of their profession					
1.7	Shall not engage in any act of dishonesty, corruption or bribery					
2.0	Relations with the public					
2.1	Shall always fully consider the public in carrying out all their duties					
2.2	Shall uphold the respect of the profession					
2.3	Shall be rational and truthful in providing information whether written or verbal					
2.4	Shall apply due consideration for the safety, health and welfare of the public					
2.5	Shall apply due consideration for the safety, health and welfare of the environment					
2.6	Shall not express an opinion on matters of construction project management without sufficient knowledge					
2.7	Shall not express an opinion on matters of construction project management without honest and certainty					
3.0	Relations with employers and client					
3.1	Shall execute their duties to their employers in a responsible and competent manner					
3.2	Shall execute their duties to their clients in a responsible and competent manner					
3.3	In representing their employers shall act in all faithfulness					
3.4	In representing their clients shall act in all faithfulness					
3.5	Shall not accept reimbursement from more than one party for the same service without consent of all involved parties					
3.6	Shall not accept reimbursement from more than one party on the same project without consent of all involved parties					
3.7	Shall declare to their employers any dealings with other parties doing the same or conflicting business					
3.8	Shall declare to their clients any dealings with other parties doing the same or conflicting business					
3.9	Shall notify their employers in writing about the status of their professional indemnity insurance cover					
3.10	Shall notify their clients in writing about the status of their professional indemnity insurance cover					
3.11	Shall not disclose any confidential information accessed by appointment unless required to do so by this code or by law					
4.0	Relations with other professionals					
4.1	Shall act with honesty towards other professionals					
4.2	Shall not in any way possible damage the reputation or injure the business of others					
4.3	Shall not discriminate be it by race, gender, ethnic, sex, marital, creed, nationality, disability or age					
4.4	Shall not seek and or accept professional commission under conditions that will influence their judgement on professional matters					
5.0	Standards of Professional performance					
5.1	Shall only engage themselves in work they have relevant skills					
5.2	Shall only engage themselves in work they have relevant knowledge					
5.3	Shall only engage themselves in work they have relevant resources					
5.4	Shall not fabricate or allow distortion of their own academic qualifications					
5.5	Shall not fabricate or allow distortion of their associates' academic qualifications					
5.6	Shall always seek to create opportunities for professional development of candidates under their management					
5.7	Shall always engage themselves in professional development as required by the council					
5.8	Shall bring to the attention of the council any breach of the code of conduct by any registered person/s					
5.9	Shall notify the council should they become insolvent					
5.10	Shall comply with Act, 48 of 2000					

APPENDIX C - QUESTIONNAIRE COVER LETTER



QUESTIONNAIRE COVER LETTER

University of Witwatersrand
Academic research, 2016

This survey aims to investigate the challenges faced by project and construction managers in complying with their code of conduct in South Africa.

Please feel free to participate. Your participation will help in supporting construction project management professionals and overly improve professional conduct in construction. Any information you provide will remain confidential and will not be associated with you. This questionnaire is estimated to take 10 minutes to answer. Completed questionnaires should be returned to the sender before.....2016. A summary of the findings will be forwarded to you by return e-mail.

I hope you will find this interesting. Thank you for supporting an academic endeavour.

Should you require further information, kindly contact the undersigned on the contact details provided.

Regards

Learnmore Kamanda
Student – MSc (Building) Construction Project Management
School of Construction Economics and Management
University of Witwatersrand
074 350 7366
1259499@students.wits.ac.za



APPENDIX D - RESPONDENT CONSENT FORM

RESPONDENT CONSENT FORM

**RESEARCH TITLE:**

Challenges faced by construction project managers in complying with their code of ethics in South Africa, SACPCMP case study

NAME AND POSITION OF RESEARCHER:

Learnmore Kamanda, Student, School of construction Economics and Management, University of Witwatersrand

Please initial inside box

1. I hereby agree to the contents of the information sheet attached.

2. I further agree that I have been given an opportunity to ask questions.

3. I voluntarily agree to participate in this research study.

Please tick appropriately

Yes

No

4. I consent to the use of anonymised codes in publications.

☐☐

Please insert date and signature below.

NAME OF RESPONDANT**DATE****SIGNATURE****RESEARCHER NAME****DATE****SIGNATURE**

Learnmore Kamanda

2/23/2017



SCHOOL OF CONSTRUCTION
ECONOMICS & MANAGEMENT

APPENDIX E - INTERVIEW SCHEDULE TEMPLATE

SEMI STRUCTURED INTERVIEW SCHEDULE APPENDIX D



Introductions

My Name is Learnmore Kamanda, a student from the University of Witwatersrand - School of construction economics and management, studying MSc (Building) in construction project management.

Give an opportunity to the respondent to introduce himself/herself

I am undertaking a research as a requirement of my studies. The aim of this research is to identify and examine the challenges faced by construction project managers in construction project management. Findings of this research will help in supporting construction project managers in carrying out their duties as well as improving professional conduct in the construction sector which is a key driver of our economy. Kindly confirm that you received the information sheet and you signed the consent form.

Feel free to participate. Any information you disclose will be treated in strictest confidence and anonymity. Your name is not associated to this research in any way.

Warm - up (Background questions)

What is your background?
What are your experiences with SACPCMP?

Interview

To what extent do you think you comply to the code of conduct?

PROBE in what ways

PROBE can you give examples

What do you think are the main challenges you faced in complying

PROBE is that so?

PROBE can you give examples

PROBE Explain more where you complied with challenges

What enables you to comply?

How do you think the challenges can be addressed?

End

Thank you so much for participating. Findings of this research will be sent to via email.



APPENDIX F - DATA DOCUMENT R1

DATA DOCUMENT	
PSEUDONYM: P1	OTHER INFORMATION
CITY: Johannesburg/ Gauteng	Ms; PrCM; Self-employed
DATE: 23-02-2017	TIME: 10H00
Transcribed Notes	Coding
Greetings and welcome.	
I: [Reads]... Thank you for participating in both the questionnaire survey and this interview... I must say you well appreciated...[Pauses]. Thank you for supporting an academic endeavour... This interview is scheduled to take 30 minutes, please bear with me as I will be taking down notes. Please note that no recording device will be used as stated earlier on... Please feel free to participate any information you disclose will be treated with strictest confidentiality and anonymity[Reads]. Your name will not be associated with your responses in anyway [pause]. All interview schedules are coded for anonymity, participation is voluntary and you can quit at any point. Please kindly complete the consent form, to acknowledge your consent[Pauses for a while]...This interview seeks to make a follow up on your previous responses to the questionnaire. [I issues copy of questionnaire previously completed by participant][Pause]... because of time , I will focus only on those obligations that you mentioned that you do not comply or you partially comply. As I read them out we will then discuss the challenges you face in complying with them. I request your honest opinion in order for this research to be valid [smiles]. Please ask questions as we go.	
I: Thank you... and welcome once again... Item 2.3... expects you to be rational and truthful in providing information whether written or verbal...? You partially comply? What are the challenges that hinder you from fully complying ?[laughs]	
P: [laughs] Thank you... Thank you fo having me...[pause]. I said partially comply because in some cases <u>the information we provide can be edited to suit my company.</u>	suit my company
I: Item 3.5, shall not accept reimbursement from more than one party for the same service without consent of all involved. You do not comply?	
P: Correct. As long as they know that they all paying, <u>I do not see anything wrong.</u>	Do not see anything wrong
I: Why would you do that?	
P: <u>If it makes sense</u> ... I would do it, as long as it is within the limits of the law and it is morally right... I would do it.	If it makes sense
I: In 3.6, shall not accept reimbursement from more than one part on the same project without consent of all parties. You do not comply?	
P: I do not think consent is of value. I think as long as every party knows that they are paying. In business if get an opportunity to <u>maximise your earnings</u> you have to, justifiably so it has to be within ethical limits.	
I: Item 3.7, you shall declare to your employer any dealings with other parties doing the same or conflicting business. You partially	
P: I don't declare such relationships not with standing the fact that <u>there other interests</u> or not, I think ... as long as this does not compromise our work relationship at work on representing my client...[Pause]	other interests
I: Item 3.8 Shall declare to their clients any dealings with other parties doing the same business or conflicting.	
P: I don't declare... like what I mentioned earlier on... <u>if I see it morally right</u> ... I will do exactly that but if I see that its not right even in terms of the law I wont do it...	if I see it morally right
I: Item 5.1, you shall only engage yourself in areas where you have relevant skills? You do not comply.	
P: I am a business person I will do that job, If I don't know I will get someone who knows to support me, <u>what is wrong with that</u> ...[pause]... similarly to 5.2 and 5.3. That is part of business. As long as you remain morally in good standing with your clients.	What is wrong with that

APPENDIX F - DATA DOCUMENT R2

DATA DOCUMENT	
PSEUDONYM: P2	OTHER INFORMATION
CITY: Pretoria/ Gauteng	Mr; PrCPM
DATE: 25-02-2017	TIME: 10H00
Transcribed Notes	Coding
Greetings and welcome.	
I: [Reads]... Thank you for participating in both the questionnaire survey and this interview... I must say you well appreciated...[Pauses]. Thank you for supporting an academic endeavour... This interview is scheduled to take 30 minutes, please bear with me as I will be taking down notes. Please note that no recording device will be used as stated earlier on... Please feel free to participate any information you disclose will be treated with strictest confidentiality and anonymity[Reads]. Your name will not be associated with your responses in anyway [pause]. All interview schedules are coded for anonymity, participation is voluntary and you can quit at any point. Please kindly complete the consent form, to acknowledge your consent[Pauses for a while]...This interview seeks to make a follow up on your previous responses to the questionnaire. [I issues copy of questionnaire previously completed by participant][Pause]... because of time , I will focus only on those obligations that you mentioned that you do not comply or you partially comply. As I read them out we will then discuss the challenges you face in complying with them. I request your honest opinion in order for this research to be valid [smiles]. Please ask questions as we go.	
I: I have handed you a copy of your questionnaire you completed. Item 2.5 reads, shall comply due consideration for the safety,health and welfare of the environment. You indicated that you Partially comply, would you explain further?	
P: At times I work on public projects like schools, houses, clinics etc. <u>There is usually pressure from the community to work</u> against the requirements of the act in certain instances. I remember at one point in time we had to work in the periphery of a wetland because the community demanded development encoaching that area. Although Department of Environmental Affairs was engaged that was partial compliance. In fact the water use license should have been acquired prior to construction not during construction.	pressure from community
I: Item 2.6 you partially comply. This item refers to yourself expressing an opinion to matters of project management without sufficient knowkedge.	
P: The meaning of sufficient knowledge should be further defined, how do you quantify that, In some instances <u>there is no right or wrong answer</u> . I stand to be corrected but the code of conduct should be explicit [sighs]	No wrong or right answer
I: Item 3.4 you indicated partial compliance. In representing their client registered persons should act in all faithfulness.	
P: I am faithful to the Client but remember I do not work for the client, I work for my organisation yet my organisation is employed by the client, so <u>I am biased towards my organisation</u> , unfortunately I am not the best person to represent the client.	bias towards on organisation
I: Item 3.7, you shall declare to your employer any dealings with other parties doing the same or conflicting business. You partially comply to this one?	
P: I do assist other contractors during my spare time. I can not disclose this to my employer.	
I: why wouldn't you tell your employer?	
P:My employer might not understand the boundaries of <u>my relationship</u> with that contractor but I do know, so that is going to create a lot more confusion.	my relationship
I: Shall declare to the client any dealings with other parties doing the same or conflicting business. Not complying?	
P: I would rather not engage in that business that to declare such act for the same reasons.	
I: Why would you assist the contractor if its going to create trouble for you, like you said? What are the benefits.	
P: I think its entrepreneurship, we all need the rewards that comes with that, this is not a bribe [raises voice] as long as this relationship doesn't compromise my work, <u>I do not see a problem with that</u> , its just that people see things differently <u>after all everyone does that</u> .	I do not see a problem
I: 4.3 Shall not discriminate?	
P: I do have preferances at times in terms of gender, I feel some work is better done by females and some better done by males. I also think that they are people who require to be promoted, those who are historically disadvantaged like women or disabled people for example. We all need to <u>be rational</u> to some extent.	Be rational
I: Item 5.8 shall bring to the attention of the council any breach of the code of ethics. You do not comply at all [smiles]	
P: Correct. Does the council have <u>a support mechanism in place for us to report anonymously</u> , what if the person or people involved finds out? The Council should give us guidelines to follow.	a support mechanism for us to report
I: Item 5.9 shall notify the council should they become insolvent.	
P: I will not because of the consequences involved chances are <u>I will loose my membership</u> , which in any case I will loose if I am found in breach of the same obligation.	fear to lose membership

APPENDIX F - DATA DOCUMENT R3

DATA DOCUMENT	
PSEUDONYM: P3	OTHER INFORMATION
CITY: Pretoria/Gauteng	Mr; PrCPM
DATE: 04-03-2017	TIME: 10H00
Transcribed Notes	Coding
P: Hello [I], How are you? Have a seat.	
I: ... Thank you, let me begin by extending my sincere gratitude to you for participating in this research by firstly responding to the questionnaire survey and further making yourself available for this interview [...]. You are really appreciated [laughs]. Thank you for supporting an academic project.	
P: ...Well [laughs] [nodes]	
I: Okay... My name is [I], a student at the University of Witwatersrand...	
P: [nodes]	
I: For record you are registered in the category of Professional Construction Project Manager [...] Let me also say [pause] the interview is expected to take up to 30 minutes, please bear with me, I would be very slow, since I will be writing as well. I choose this option due to the sensitivity of the study.	
P: I do understand	
I: Please feel free to participate any information you disclose will be treated with strictest confidentiality and anonymity. Your name will not be associated with your responses in anyway [pause]. All interview schedules are coded for anonymity, participation is voluntary and you can quit at any point.	
P: [nodes]	
I: Please kindly complete for me the consent form...	
P: [Signs consent form]	
I: [I, explains the research topic, aim and objectives]...	
P: [Nodes]	
I: This interview seeks to make a follow up on your previous responses to the questionnaire. [I issues copy of questionnaire previously completed by participant][Pause]... for the purpose of time , I will focus only on those obligations that you mentioned that you do not comply or you partially comply. As I read them out we will then discuss the challenges you face in complying with them. I request your honest response in order for this research to be valid [laughs].	
P: [Chuckles] listen... I have also been straight forward with you from the questionnaire... at the end of the day it is what it is.	
I: [Reads] Item 2.1 you indicated that you do not comply with this obligation which reads “shall also fully consider the public in carrying out your duties?” What are the challenges that you face in complying?	
P: [Hm] That’s correct. [clears throat] In some instances my hands are tied I do not comply as a result of circumstances...my experience is to <u>protect my employer</u>	to protect employer
I: Is it a directive by the employer or its your decision.	
P: Its not a directive but it is expected... <u>my superiors expect me to act in favour of the company in all my dealings</u> . This is an unwritten rule.	to act in favour of own company
I: Next is Item 2.2, [Reads] Shall uphold the respect of the profession. You indicated on the questionnaire that you partially comply. What challenges do you face in complying?	
P: [Laughs] Correct. In some cases as an employee who works within an organisation <u>my way of thinking is adversely influenced by those around me</u> and this may affect the profession.	thinking influenced by colleagues
I: Thank you. [Pause]. Item 2.3. You mentioned that you partially comply to this obligation. You shall be rationale and truthful in providing information whether written or verbal.	
P: The same applies as in 2.1, <u>if I give out information that is against my employer whether written or verbal I will be risking loosing my job</u> . As a result I always consider the implications of the information in question before I release it or otherwise I would have to engage my line manager. [Pause]	fear of loosing job
I: Oh... engage your manager in what way?	
P: ... <u>to approve the release of such kind of information</u> .	Requires approval by line manager
I: Item 2.4. You shall apply due consideration, for the safety and health of the public? You do not comply to this one.	
P: I work within an organisation and as such <u>my actions are limited by that organisation</u> . My organisation does not prioritise Health and Safety.	limited actions
I: Did you try to engage your superiors and explain your dilemma to them and also the fact that health and safety is an act of parliament.	
P: I have politely engaged them, I cannot be radical about it, eventually I have to <u>fit in the organisation</u> otherwise I will be viewed as oppsition.[Laughs]	fit in the organisation
I: Item 2.5 You partially comply to the consideration of Health and Safety to the environment.	
P: Same applies with 2.4	
I: Item 2.6. You shall not express an opinion on matters of construction project management without sufficient knowledge, you indicated partial compliance.	
P: In most instances <u>I am expected by fellow workmates to give my opinion</u> , I cannot keep quite, I will have to say something.	I am expected by fellow workmates
I: Item 2.7. Shall not express an opinion on matters of construction project management without honest and certainty.	
P: As highlighted in 2.6 above. <u>I am expected and I have to give my opinion</u> and obviously as a Project Manager I will do so with certainty.	I am expected by my colleagues
I: You mentioned that you are expected ...you are expected by who?	
P: By my colleagues, all parties, remember a PM is a central person.	
I: But how do you know the expectation, do they say they expect you to say something?	
P: Not really... though at times they I ask for my opinion.	
I: OK... Thank you for your responses this far... we now move on to the next segment. Relations with employer and client. [Pause]	
I: Proceeds...Item 3.1. Shall execute their duties to their employers in a responsible and competent manner? You indicated in your previous response that you partially comply.	
P: Correct. I partially comply. Unfortunately <u>I do not have enough time to complete all work assigned to me</u> , because of that pressure I tend to be unorganised at times.	Limited time
I: Item 3.2, shall execute their duties to their Clients in a responsible and competent manner	

P: Same as above. <u>My work load is a bit high so this affects negatively on the quality of my work.</u>	High work load
I: Have you requested additional resources... support...from your Manager	
P: I have done so and I am still waiting.	
I: Thank you. [Pause]. [Reads]. Item 3.3. In representing your employer you shall act in faithfulness?	
P: I partially comply... Look...[Pause]. I am very frank here... I do not want to give you a wrong impression, by acting as if I comply to all the obligations. That's a pretty much ideal situation.	
I: I appreciate that, unfortunately its not all respondents who are like you. Thank you for your honest contribution. What is your take on 3.3?	
P: I also <u>offer my services privately</u> which is contrary to my agreemet of employment although this dopes not conflict with my work	offer services else where
I: Item 3.4. What are your experiences in representing your client? You mentioned you partially comply.	
P: I am faithful in representing my client... to be honest at times <u>I reveal out the client's confidential information to our colleagues or friends and possibly other project stakeholders.</u>	Revealing confidential information to others
I: Item 3.7. shall declare to their employees any dealings with other parties doing the same business or conflicting.	
P: I do not declare in instances where <u>I offer my services on part time basis</u>	offer my services on part time basis
I: Item 3.8 Shall declare to their clients any dealings with other parties doing the same business or conflicting	
P: I partially comply... at times <u>I undertake part time draughting work</u> and this I cannot be disclose to my employer.	undertakes part time draughting work
I: It is regarded by who?	
P: By my employer.	
I: How do you know? Did they tell you?	
P: The code of ethics says so... even the SACPCMP code of conduct says so.	
I: Item 3.11. [Reads]. Shall not disclose any confidential information accessed by appointment unless required to do so by this code or by law.	
P: I partially comply. Some of the <u>members of the client organisation, are peers so we get talk about work.</u>	Disclose confidential information to other members
I: Once again we have come to the end of our second segment, we now move on to our third segment[Pause].	
I: [Proceeding] Item 5.1 shall only engage yourself in work that you have relevant experience?	
P: Partially comply, because at times you do not have work and the only offer that comes your way ...do not have relevant skills for it...look... you may not have <u>the luxury to choose</u> ... I would take that opportunity and try to learn..	the luxury to choose
I: Item 5.2. Shall only engage themselves in work that they have relevant knowledge.	
P: If I look at it. Item 5.1; 5.2 and Item 5.3 are all <u>due to that need for work instead of doing nothing.</u>	need for work instead of doing nothing.
I: Item 5.4 shall not fabricate or allow distortion of your academic qualification.	
P: I partially comply because personnaly I would not distort my qualification, but if <u>my employer distortes my CV I do not have control over that.</u>	No control over employer
I: Item 5.6. shall always seek to create opportunities for professional development of candidates under their management? You partially comply.	
P: Again... As I have highlighted before, some of these issues are <u>based on the company requirements.</u> In some cases I decline candidates on apportunity because its an <u>instruction from above.</u> We have issues of conduct with candidates, so our organisation is becoming strict.	Superior's instruction
I: Item 5.7. You shall always engage in professional development as required by the council. You indicated that you partially comply as well?	
P: Correct. [Sighs]Due to <u>time and constraints at times I struggle to make it.</u>	time constraints
I: Item 5.8.[Reads] You shall always bring to the attention of the coucil any breach of the code of conduct by any registered person/persons.	
P: This is a tough one [laughs]. To report a colleague might not be the best thing to do. I think it's too high a step... because of the consequences involved. In most cases I prefer that I report the person to the organisation ... since most organisations have their own code of conduct. If this does'nt work then I would consider the council.	
I: This is interesting as we don't often meet people who think like you. Can you please explain to me what is difficult in reporting non compliance?	
P: Hmm. <u>I feel I am equally obligated to do unto others what I would also expect them to do unto me... I think we should all be considerate.</u> Not saying that people should walk court free but then... I believe these issues can be resolved at the company level... unless otherwise. [Pause]	shall be considerate
I: Next... [Reads].shall notify the council should you become insolvent. You ticked on... partially comply	
P: I have not been insolvent before...[Pause]. But I do not think that it would be easy for me to inform the coucil because of the consequences involved.	
I: Item 5.10. You shall comply with Act 48 of 2000. ... Partially comply?	
P: Based on the above responses I think overally I partially comply with the Act 48 of 2000.	

APPENDIX F - DATA DOCUMENT R4

DATA DOCUMENT	
PSEUDONYM: P4	<u>OTHER INFORMATION</u>
CITY: Johannesburg/ Gauteng	Mr; PrCPM
DATE: 18-03-2017	TIME: 13H00
Transcribed Notes	Coding
Greetings and welcome	
Interviewee reads key aspects of the Research from the information sheet and consent form. Consent form is signed by participant.	
I: [Reads] Item 2.1 you indicated that you do not comply with this obligation, shall fully consider the public in carrying out your duties. What are the challenges that you face in complying, since you said you partially comply?	
P: As long as there is no legal framework, the tendency is to <u>prioritise company benefit</u> . Or if there are no adverse consequences like harm or death...usually public is not considered.	prioritise company benefit
I: Next is Item 2.2, [Reads] Shall uphold the respect of the profession. You partially comply. What challenges do you face in complying?	
P: I think at times we tend to compromise... <u>the business value</u> and profession. Profession usually comes last.	business value
I: You shall be rationale and truthful in providing information whether written or verbal. You mentioned that you partially comply to this obligation. Item 2.3.	
P: At times <u>I do not release information that implicates me</u> or my organisation.	Not release negative information
I: You shall apply due consideration, for the safety and health of the public? Item 2.4.	
P: I partially comply. I always enforce Health and Safety regulations on all my projects, but at times <u>my company let me down</u> . At the end of the day I can not pernalise myself.	My company let me down
I: Item 2.5 You partially comply to the consideration of Health and Safety to the environment.	
P: In our south African context environmental issues are always held second to issues of health and safety. If the law does not promote an environmental awareness culture, <u>no one cares</u> .	no one cares
I: Item 2.6. You shall not express an opinion on matters of construction project management without sufficient knowledge, you indicated partial compliance.	
P: We always work with the knowledge we have, and we always endeavour to increase our knowledge base. We reasonably use what we have to make things work.	

I: Item 2.7. Shall not express an opinion on matters of construction project management without honest and certainty.	
P: At times <u>we use our own theories to resolve problems</u> and it works.	We use our own theories to resolve problems
I: Partially comply to Item 3.4, be faithful in representing the client.	
P; I am faithful to the client, but <u>I cannot penalise my company</u> in favour of client.	I cannot penalise my company
I: Item 3.7. shall declare to their employees any dealings with other parties doing the same business or conflicting.	
P: My contract of employment with my employer does not allow me to be engaged elsewhere whether part time or full time, so I cannot declare that I am doing something that I know is against my company policy.	
I: Item 3.8 Shall declare to their clients any dealings with other parties doing the same business or conflicting	
P: My judgement tells me there is nothing wrong with not declaring.	morally right
I: 4.3 Shall not discriminate?	
<u>I do not call it discrimination but rather preference</u> , at times its preferrable to hire an unmarried person over a married person because of the level of commitment required by the role, in the same way at times you prefer a person from the west over a person from the east to overcome the knowledge barrier. So I think we must not follow this blindly but rather see how best this can be done without hurt, hate or harm to others.	I do not call it discrimination but rather preference

APPENDIX F - DATA DOCUMENT R5

PSEUDONYM: P5	
CITY: Ladysmith/ Kwazulu Natal	
DATE: 11-03-2017	TIME: 10H00
Transcribed Notes	
Greetings and welcome.	
I:[Reads] ... Thank you for participating in both the questionnaire survey and this interview... I must say you well appreciated...[Pauses]. Thank you for supporting an academic endeavour... This interview is scheduled to take 30 minutes, please bear with me as I will be taking down notes. Please note that no recording device will be used as stated earlier on... Please feel free to participate any information you disclose will be treated with strictest confidentiality and anonymity[Reads]. Your name will not be associated with your responses in anyway [pause]. All interview schedules are coded for anonymity, participation is voluntary and you can quit at any point. Please kindly complete the consent form, to acknowledge your consent[Pauses for a while]...This interview seeks to make a follow up on your previous responses to the questionnaire. [I issues copy of questionnaire previously completed by participant][Pause]... because of time , I will focus only on those obligations that you mentioned that you do not comply or you partially comply. As I read them out we will then discuss the challenges you face in complying with them. I request your honest opinion in order for this research to be valid [smiles]. Please ask questions as we go.	
I: Our first question is Item 2.3, you shall be rational and truthful in providing information whether written or verbal, you indicated partial compliance in your response?	
P: I always with hold information that I consider detrimental...[Pause]	
I: detrimental in what way?	
P: In any way, information should be managed[sighs]	
I: Item 2.4 ... Shall apply due consideration for health and safety of the public. You partially comply here?	
P: There are a lot of health and safety requirements that <u>delays the project</u>, I do comply but I prioritise production.	
I: Item 3.3 In representing you employer you shall act in all faithfulness. Partially comply.	
P: <u>Where the employer expects me to do wrong</u>, I will not deny but I will not do it.	
I: Partially comply to Item 3.4, be faithful in representing the client.	
P: same applies wher the <u>client expects me to do wrong</u>.	
I: Item 3.5, Shall not accept reimbursement from more than one party for the same service without consent of all involved. You partially comply as well?	
P: If they have to pay all of them they will have to. As long as I am morally correct. <u>We all need business</u>.	
I: In 3.6, you also mentioned that you partially comply. Shall not accept reimbursement from more that one part on the same project without consent of all parties.	
P: Look, I do not need their consent as long as they all know that they all paying, <u>and as long as I am correct in doing so</u> they don't have to consent. Once you open that discussion no one is going to pay you. People don't want to pay.[shouts]	
I: Item 3.7, shall declare to their employers any dealings with other parties involved in the same business or conflicting, you said you partially comply?	
P: Yes at times I do comply at times I don't, it depends, <u>according to me there is nothing wrong with that</u>, at times you may be misinterpreted by the employer if you declare.	
I: Item 5.1, you partially comply, you shall only engage yourself in areas where you have relevant skills?	
P: At times <u>I also need to acquire skills that I do not have</u>. You cannot stay the same, you need to grow.	
I: 5.2... Partially comply.... You must only engage yourself to work that you have relevant knowledge?	
P: <u>Knowledge is acquired so as long as its in my field of work</u>... I will take the challenge... yes ... partially meaning that at times if too complicated I would bother...	
I: 5.3.. Shall only engage yourself where you have relavant resources? Partially comply?	
P: You can not leave work because you do not have resources... you will acquire those as time goes... if you <u>don't have work</u> you will take it... and negotiate the issue of resources with the client.	

INFORMATION DOCUMENT

Study title: Challenges faced by construction professionals in complying with their code of conduct, an SACPCMP case study

Greetings:

I, Learnmore Kamanda, a registered student at the University of Witwatersrand studying MSc (Building) Construction Project Management, am conducting a research on challenges facing construction project managers in South Africa in complying with their code of conduct.

The aim of this research is to identify and examine the challenges faced by construction project managers in South Africa in complying with their professional code of conduct. This study is for academic purposes only.

I am inviting you to take part in this research study, by completing the attached questionnaire. The questionnaire seeks to gather valid and reliable data from Respondents to enable the Researcher to answer the question "what are the challenges faced by construction project managers in south Africa in complying with their professional code of conduct?" All the questions on the questionnaire are based on the SACPCMP code of conduct. Your responses will be according to your knowledge and experiences. The research targets a total of twenty Respondents all registered with the SACPCMP either as Professional construction manager or Professional construction project manager.

There are no risks that have been identified associated with participating in this academic research. Your participation will be in support an academic endeavor that seeks to fill a gap in the body of knowledge and further contribute to solving problems of professional conduct in the construction industry. The SACPCMP and other related professional bodies either falling under the Council for built environment or beyond will find this information useful in addressing issues of unethical practices. This study is intended to benefit but not limited to client organizations, funding agencies, professional firms, and professionals in the construction sector and the public at large.

As a Respondent you will be given pertinent information on the study while involved in the project and after the results are available.

Participation is voluntary refusal to participate will involve no penalty or loss of benefits to which the Respondent is otherwise entitled, as a subject you may discontinue participation at any time without penalty or loss. The research may be terminated by the Researcher without any regard to the Respondent's consent.

There shall be no reimbursements for any cost or expenses incurred by the Respondent as a result of participation.

Personal information will be kept in a confidential and non-traceable format. This research requires a high degree of honest to remain valid. Respondents are further requested to be straightforward and truthful in their responses.

The only organizations that may inspect and/or copy your research records for quality assurance and data analysis are the University of Witwatersrand, Faculty of Engineering and the built environment and the SACPCMP.

Significant new findings developed during the course of the research which may relate to the Respondent's willingness to continue participation will be provided to you.

Contact details of Researcher – for further information

Cell: 074 350 7366

Contact details of Research Supervisor – for reporting of study related adverse events.

Dr Sam Laryea – School of Construction Economics and Management

Telephone: 011 717 7663

Contact details of Research and Ethics Committee Administrator and Chairperson – for reporting of complaints / problems.

Dr Kola Ijasan - School of Construction Economics and Management

Telephone: 011 717 7663

Email: 1259499@students.wits.ac.za

Table 6: Data Matrix

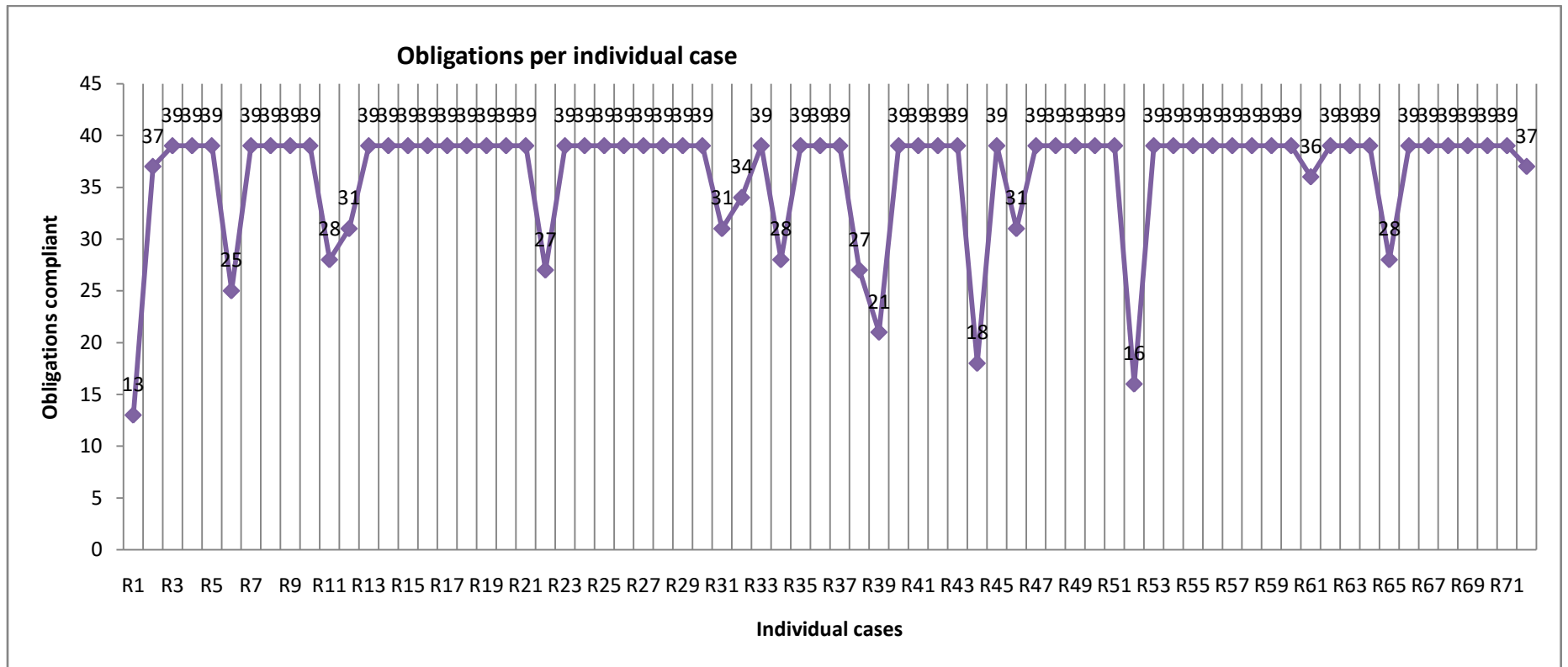
R = Respondent; C = Compliant; PC = Partially compliant; NC = Not compliant; NR No response % = Percentage

C	PC	NC	MS	TAM	NC	SAC	NAC	SNAC	SNAC
57	2	0	1	71	96	2	0	1	1
57	1	0	1	71	96	1	0	1	1
58	1	0	0	71	96	1	1	1	1
58	2	1	1	71	96	2	1	1	1
58	2	0	1	71	96	2	0	1	1
58	1	0	1	71	96	1	0	1	1
58	0	0	0	66	100	0	0	0	0
57	2	0	1	71	96	2	0	1	1
57	1	0	1	71	96	1	0	1	1
58	7	1	0	71	96	10	1	1	1
55	1	0	1	71	96	1	0	1	1
55	2	0	1	71	96	2	0	1	1
58	1	0	1	71	96	1	0	1	1
58	1	0	1	71	96	1	0	1	1
55	3	0	1	71	96	3	0	1	1
55	2	0	1	71	96	2	0	1	1
58	2	1	0	71	96	2	1	0	1
51	5	1	0	66	100	5	1	0	1
58	2	0	1	71	96	2	0	1	1
57	2	0	1	71	96	2	0	1	1
57	2	0	0	72	92	2	0	0	1
54	3	1	0	72	90	4	1	0	1
58	0	0	0	72	90	0	0	0	1
58	0	0	0	72	92	0	0	0	1
70	0	0	0	72	92	0	0	0	1
70	0	0	0	72	90	0	0	0	1
70	0	1	1	71	90	0	1	1	1
70	0	0	1	71	90	0	0	1	1
55	0	0	1	71	90	0	0	1	1
55	0	0	2	68	97	0	0	2	1
54	3	0	0	71	90	4	0	0	1
54	1	0	1	71	90	2	0	0	1
54	1	0	0	71	90	2	0	0	1
70	0	0	0	71	90	0	0	0	1
70	0	0	1	71	90	0	0	1	1
57	2	0	1	71	96	2	0	1	1
57	1	0	1	71	96	1	0	1	1
70	0	0	1	71	90	0	0	1	1
70	0	0	1	71	90	0	0	1	1

[illegible][illegible]

Appendix J

Figure 5 – Number of obligations per individual case



LT KAMANDA 1259499

Examiner's comments

BUQS 7027

16 July 2018

Re-examination of report submitted on the 30st of March 2018.

The author would like to thank the examiner for the valuable feedback on the research report submitted on the 31st of March 2018. This current report has now been revised (as indicated in the response column below) in relation to the feedback provided, which, hopefully, satisfactorily addresses the comments.

Reviewer's Comments/ Candidate's Responses

No.	Comment	Response
1.0 General Overview		
1.1	The document has been substantially reworked and extensively extended and altered. The document has been tidied up and reformatted and now reads reasonably well. The student has largely addressed the examiners previous comments however a few points that still need attention are identified below.	
2.0 Introduction		
2.2	Introduction section does not introduce the concept of the professional, professional ethics and hence why a code of conduct exists.	Page 10; Section 1.1 paragraph 2
3.0 Literature Review		
3.1	A question is raised whether the research can be presented as inductive given that variables has been identified in advance of the empirical work.	The analysis of SACPCMP Code of conduct section is moved from Chapter 2 Literature review to the Chapter 3 Research design and methods Section 3.3 Research methods and is presented as a source of variables used in the survey instrument design.
4.0 Research Methodology		
4.1	The examiner is likewise still unconvinced that this is a case study, as opposed to a study of the SACPCMP	A study of the SACPCMP registered professionals

LT KAMANDA 1259499

Examiner's comments

BUQS 7027

16 July 2018

No.	Comment	Response
	registered professionals.	
5.0 Research Findings and Analysis		
5.1	The data analysis is much improved although there is still a failure to consider the correlations between variables, which are still assumed independent.	The Researcher's opinion is that the correlation between variables is not necessary in answering the research question
5.2	Chapter 4 and 5 are still separated and again the point is made that these would better read as combined.	The report structure adopted is in line with the recommendations of the University of Witwatersrand School of Construction Economics and Management
5.3	The coded data should be analysed statistically.	The Researcher's opinion is that in answering the research question it is not necessary to analyze qualitative data quantitatively
5.4	The discussions are not tied back to literature to see if the challenges reflect those now identified in literature.	Table 15 page 87