



# **Investigating overtime management practices at a selected gold mine in the Witwatersrand Basin**

**FS Mokheseng**

orcid.org  **0000-0001-5993-4703**

Mini-dissertation submitted in partial fulfilment of the requirements for the degree *Master of Business Administration* at the North-West University

Supervisor: Dr G Alberts  
Co-Supervisor: Prof CJ Botha

Graduation ceremony: May 2019  
Student number: 23730870

## DECLARATION

I, **Francis Seiso Mokheseng**, solemnly declare that this work: ***Investigating overtime management practices at a selected gold mine in the Witwatersrand Basin*** is my own work. It has never, on any previous occasion, been presented in part or whole to any institution or board for the awarding of any degree.

I further declare that all the sources I have used or quoted have been indicated and acknowledged by means of complete references.

.....

Signature

**FS Mokheseng:**

.....

Date

## ACKNOWLEDGEMENTS

My sincere thanks and gratitude go to the following people whose advice, guidance, support, and motivation have helped me to complete this study.

- I would like to acknowledge my supervisor Dr. Gino Alberts for his outstanding leadership, understanding, patient and consistent guidance, which he provided throughout the research study. Dr. Gino, you're a man of God and a true leader all the best to you and your family Sir.
- I would also like to express my gratitude to my family especially my two sons (Lebohang and Bokang) for their understanding and resilience they have demonstrated during this period.
- The members of my study group who guided and supported me always. All the best Guys.
- The North-West University's Vaal Triangle and Potchefstroom Campus Libraries' staff for being so kind and for assisting me every time I needed their help. These people are true professionals.
- All the colleagues and fellow employees around various operations of Sibanye Gold who participated in completing the questionnaires, "Halala bana ba Morena."
- Mrs. Antoinette Bisschoff for the professional language and technical editing of this dissertation. Your support is highly appreciated "Mme."
- Mrs. Erika Fourie for the professional Statistical advice and detail checks. "Mme" thanks for your help and may God bless you and your family.

Table 1: List of abbreviations

<b>Abbreviation</b>	<b>Meaning</b>
ABC	Activity Based Costing
AMI	Acute Myocardial Infarction
APA	American Payroll Association
BCEA	The South African Basic Conditions of Employment Act No 75 of 1997
BW	Business Warehouse
CKE	Cooke Operations
DFT	Driefontein Operation
Dr	Doctor (Academic)
EXEC/O	Executive/ Executive Committee
HR	Human Resources
JNR	Junior
JSE	Johannesburg Stock Exchange
KLF	Kloof Operations
KPI	Key Performance Indicator
LTD	Limited
MBA	Master of Business Administration
MDE	Major Depressive Episode
MHSA	Mine Health and Safety Act No 29 of 1996
MU	Mining Unit
RSA/SA	Republic of South Africa
SNR	Senior
US/USA	United States of America
YRS	Years

## ABSTRACT

The use of overtime in organisations is common, albeit, systems and processes for its management are seldom geared for the realisation of the benefit from this practice. Various rationales for overtime exist which range from it being an inherent requirement of some jobs to being a quicker and supposedly cheaper way to acquire critical skills without recruitment. In this case study on a selected gold mine in the Witwatersrand Basin of South Africa, it was sought to obtain management and general employees perspectives on the organisational overtime management practices. A qualitative research approach was adopted using a cross sectional timeframe. A questionnaire was used to gather data from purposefully chosen participants from the case organization. A decision to use a questioner was meet in consideration of the fact that the researcher was an employee of the case organization as such use of interview would have arguably yielded biased findings. 91 Participants provided perspectives on the subject under investigation. It was established that the case organisation had formal overtime governance structures in place however, these were not effectively applied to ensure that the overtime risk was mitigated. Three themes emerged which resonated around organisational overtime governance, participant knowledge of overtime management and the role of leadership in overtime management. This study concluded that while the organisation had overtime governance structures and practices in place, leadership was not providing adequate guidance and communication on overtime practice in the organisation. Despite the fact that leadership was not visible in overtime management, the participants displayed high knowledge of organisational overtime management practices and the impact of overtime on the financial performance of the organisation. It is recommended that the organisational leadership should play an active role in overtime management and ensuring effective application of overtime management controls. The application of overtime management controls by senior organisational leadership emerged as an area on which future studies could be focused.

**Keywords:** Education, Overtime management, Employees, Senior Management, Source documents- Financial statements, Costing, Efficiencies Overtime reports, Human Capital reports

# TABLE OF CONTENTS

DECLARATION .....	ii
ACKNOWLEDGEMENTS .....	iii
LIST OF ABBREVIATIONS .....	iv
ABSTRACT .....	v
LIST OF TABLES .....	ix
LIST OF FIGURES .....	x
DEFINITION OF TERMS .....	xi
CHAPTER 1 .....	1
1. INTRODUCTION .....	1
1.1 BACKGROUND .....	1
1.2 SYNOPSIS OF CASE ORGANISATION .....	2
1.3 THE RESEARCH PROBLEM .....	4
1.4 THE PURPOSE OF THE STUDY .....	4
1.5 THE OBJECTIVES OF THE STUDY .....	4
1.6 THE RESEARCH QUESTIONS .....	5
1.7 ASSUMPTIONS .....	5
1.8 DELIMITATION OF THE SCOPE OF STUDY .....	5
1.9 CHAPTER OUTLINES .....	6
1.10 CHAPTER CONCLUSION .....	7
CHAPTER 2 .....	8
2. LITERATURE REVIEW .....	8
2.1 CHAPTER INTRODUCTION .....	8
2.2 WHAT IS OVERTIME? .....	8
2.3 OVERTIME REASONING IN SIBANYE .....	9

2.4 OVERTIME COST-BENEFIT .....	10
2.5 OVERTIME MANAGEMENT .....	12
2.5.1 Time Management.....	12
2.5.2 Cost Management .....	13
2.6 OVERTIME GOVERNANCE IN SIBANYE .....	14
2.7 OVERTIME IN THE CONTEXT OF SIBANYE.....	15
2.8 EXISTING RESEARCH THRUSTS .....	18
2.9 CHAPTER CONCLUSIONS .....	19
CHAPTER 3 .....	20
3. THE METHODOLOGY .....	20
3.1 CHAPTER INTRODUCTION .....	20
3.2 THE RESEARCH PROCESS .....	20
3.3 THE RESEARCH DESIGN.....	21
3.4 THE POPULATION. ....	22
3.5 THE SAMPLE .....	23
3.6 SAMPLING TECHNIQUES.....	24
3.7 DATA SOURCES .....	25
3.8 DATA COLLECTION TECHNIQUES.....	25
3.8.1 Choice of data collection technique .....	25
3.8.2 Advantages of Questionnaires.....	26
3.8.3 Disadvantages of Questionnaires .....	27
3.8.4 Questionnaire Design .....	28
3.8.5 Self-administered questionnaires.....	28
3.8.6 Investigator-Administered Questionnaires .....	29
3.8.7 Types of Questions.....	29
3.9 PILOT STUDY .....	31

3.10 ISSUES OF RELIABILITY AND VALIDITY .....	32
3.11 DATA ANALYSIS AND INTERPRETATION .....	33
3.12 ETHICAL CONSIDERATIONS .....	34
3.12.1 Confidentiality .....	34
3.12.2 Informed Consent. ....	34
3.12.3 Debriefing, Counselling And Additional Information.....	34
3.13 CHAPTER CONCLUSION.....	35
CHAPTER 4 .....	36
4. RESEARCH FINDINGS.....	36
4.1 CHAPTER INTRODUCTION .....	36
4.2 DEVELOPMENT OF THE EVALUATING INSTRUMENT .....	37
4.3 RESEARCH FINDINGS.....	37
4.3.1 Sample Description.....	38
4.3.2 Participants' Responses To The Questions In Part A .....	40
4.3.3 Participants' Responses To The Questions In Part B .....	41
4.3.4 Research Findings Pertaining To Objective 1 .....	43
4.3.5 Research Findings Pertaining To Objective 2.....	46
4.3.6 Research Findings Pertaining To Objective 3.....	48
4.4 QUALITY CONTROL MEASURES.....	50
4.5 CHAPTER CONCLUSION.....	51
CHAPTER 5 .....	52
5 CONCLUSIONS AND RECOMMENDATIONS.....	52
5.1 INTRODUCTION .....	52
5.2 SUMMARY OF MAIN FINDINGS .....	52
5.2.1 Overtime Governance(Systems, Processes And Practices) .....	53
5.2.2 Knowledge on Organisational Overtime Management.....	53



5.2.3 Leadership in Overtime Management.....	54
5.3 CONCLUSIONS, AND RECOMMENDATIONS.....	55
5.3.1 Conclusions.....	55
5.3.2 Recommendations.....	55
5.4 LIMITATIONS.....	56
5.5 IMPERATIVES FOR FUTURE RESEARCH.....	56
5.6 CHAPTER SUMMARY.....	57
LIST OF SOURCES.....	58
APPENDICES.....	80
APPENDIX A: COVER LETTER TO QUESTIONNAIRE.....	65
APPENDIX B: QUESTIONNAIRE.....	66
APPENDIX C: REQUEST TO CONDUCT RESEARCH.....	73
APPENDIX D: PERMISSION TO SUBMIT.....	74
APPENDIX E: CERTIFICATE OF VERACITY ( STATISTITIAN).....	75

#### LIST OF TABLES

Table 1: List of abbreviations.....	iv
Table 2: Advantages and Disadvantages of open-ended questions.....	29
Table 3: Responses gathered from Questions in Part BA.....	40
Table 4: Response gathered from Questions in Part BB.....	42
Table 5: Findings pertaining to research objective 1.....	45
Table 6: Research findings pertaining to research objective 2.....	47
Table 7: Findings pertaining to research objective 3.....	49
Table 8: Quality Control Measures.....	50

## LIST OF FIGURES

Figure 1: Area of Research (Google Maps, 2018) .....	3
Figure 2: Overtime Cost 2015 vs. 2016 (Source: Sibanye, 2016b).....	15
Figure 3: Overtime Breakdown per Mining Unit (Source: Sibanye, 2016b).....	16
Figure 4: Gold Production per Mining Unit (Source: Sibanye, 2016c).....	17
Figure 5: Sampling design .....	24
Figure 6: Data analysis spiral .....	33
Figure 7: Sample Gender .....	38
Figure 8: Sample Race .....	
Figure 9: Sample Age groups .....	39
Figure 10: Years of Experience .....	
Figure 11: Employment Level .....	
Figure 12: Highest Qualification.....	

## DEFINITION OF TERMS

**Overtime** – as defined in the Basic Conditions of Employment Act (BCEA).

**Emergency work** – refers to work that must be done without delay because of circumstances for which the employer could not reasonably have been expected to make provision and which cannot be performed by employees during their ordinary hours of work. Emergency work excludes the performance routine maintenance work outside normal working hours.

**Unstructured overtime** – is programmed/planned overtime over which the employer has control and for which prior approval is required (for example, the performance of routine maintenance work outside normal working hours) that continues or takes place after normal working hours.

**Structured overtime** – is where payment is compulsory in terms of the Basic Conditions Of Employment Act due to Sundays and Public Holidays. Structured overtime is exclusively for shift workers.

**Shift worker** – is an employee engaged in a scheduled continuous process which activity is deemed to be one in which continuous working using daily shifts are necessary.

## **CHAPTER 1**

### **ORIENTATION, INTRODUCTION, AND MOTIVATION OF THE STUDY**

#### **1.1 BACKGROUND**

In many organisations, the use of overtime is understood to be a flexible way of staffing that supposedly reduces costs associated with hiring and training new staff. However the variability and unpredictability of the over time expenditure undermines budget planning and the ability to provide services (Clayton et al., 1997; Camden & Ludwig,2013). Furthermore, Camden and Ludwig ,2013 identified additional problems associated with overtime as being that, it allows fatigued employees to stay on the job while performing at lower productivity and increasing absences on subsequent days.

According to Beckers et al., 2007, literature has not made clear distinction between overtime and long work hours. These authors make the distinction between the two concepts, which will be considered in the following chapter of this research report. However, overtime and long work hours are often used interchangeably. From an occupational health and labour practice points of view, overtime has received much attention due to the impact it has on employees (Basic Conditions Of Employment Act No 75, 1997). On the other hand, from a business point of view, it is the cost to benefit trade off of overtime that draws attention to the practice.

Despite the limited understanding of the distinction between overtime and long work hours noted by Beckers et al., 2007, organisations engage in the overtime practice with an objective of deriving a financial benefit. This financial benefit is sometimes not realised due to the planning, monitoring and control inadequacies that result in abuse of overtime for individual benefit at the expense of the organisation (Sibanye, 2016b).

According to a study done by Hart (2004), affirmed by Gregg *et al.*,2008, based on a British setting, 25% of employees that claimed to have worked overtime sated that it was an inherent requirement of their job to work overtime. This finding raises interest

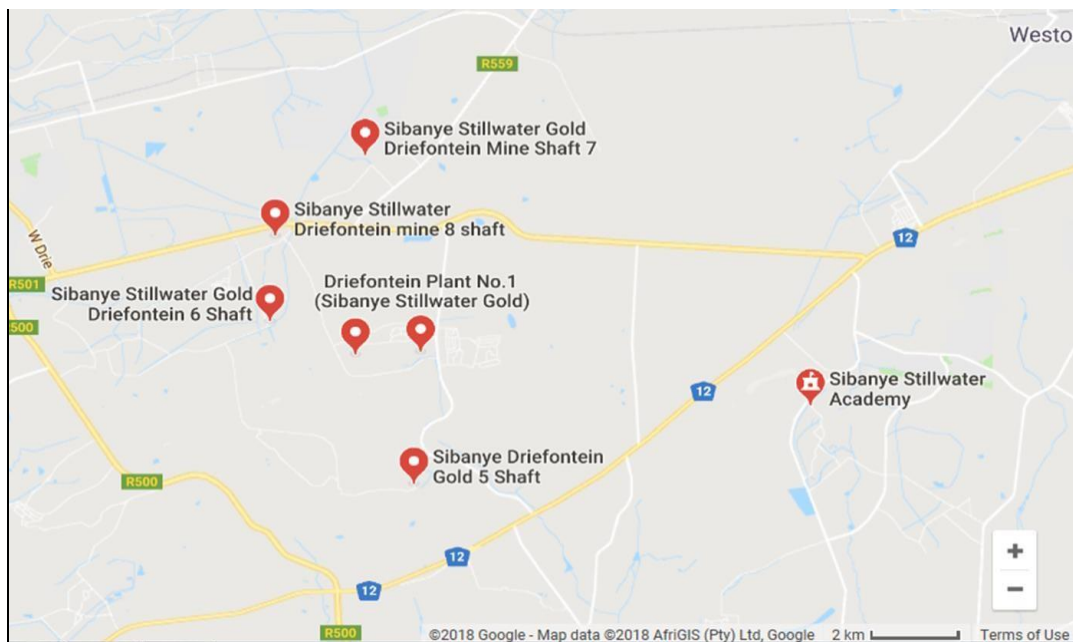
into the overtime management practices, albeit, in a South African context, to understand what underpins the overtime work and hence the expenditure. The South African mining industry is highly regulated from labour practice and health and safety perspectives with regards to use and or abuse of overtime (Mine Health And Safety Act No 29 of 1996; Basic Conditions Of Employment Act No 75, 1997). An investigation into the overtime management practices in a Gold mining environment presented a significant area of study hence this study was initiated, which shall be the subject of discussion in this report. It is a significant study in that it provides insights into overtime management systems and processes within an organisation, not only from a legal compliance objective but from a cost management and profitability perspective. Overtime management practice is an under-researched area thus, this study contributed to the body of knowledge on a subject with a dearth of literature.

## **1.2 SYNOPSIS OF CASE ORGANISATION**

When Gold Fields Ltd unbundled South African assets from the rest of its portfolio in 2013, Sibanye Gold Ltd (hereafter referred to as Sibanye or the case organisation or the company) was established. Domiciled in South Africa with listings on the Johannesburg and New York stock exchanges, Sibanye has grown into South Africa's largest single gold producer and among the world's top ten producers of the yellow metal. (Dick & Naidoo, 2015). The organisation's corporate office is situated near Westonaria, in the province of Gauteng, where its West Witwatersrand operations are located.

The company owns and operates four underground and surface gold operations in South Africa i.e. the Cooke, Driefontein and Kloof operations in the West Witwatersrand region, as well as the Beatrix Operation in the southern part of the Free State province of South Africa. In addition to its mining activities shown in Fig 1, Sibanye owns and manages significant extraction and processing facilities at its operations where gold-bearing ore is treated and beneficiated to produce gold (Sibanye, 2016b).

Figure 1: Area of Research (Google Maps, 2018)



According to company sources, part of Sibanye's 2015-2016 objectives after the 2015 financial year, was to improve cost efficiencies (cost to production ratio) to align to the South African industry norms in order to improve organisational profitability and competitiveness. At the end of 2014, Sibanye employed 44,411 people; 39,232 of whom were permanent employees (88%) and 5,179 contractors (12%) (Sibanye, 2016a). The acquisition of Cooke led to an additional 5,570 permanent employees and 2,051 contractors being integrated into the company.

Since the integration of the Cooke operation into the organisation, the company's costs increased by more than average South African inflation rate, consequently, in its annual financial statement of 2016, the organisation reported of note, an overtime cost of R736.4 million against a plan of R426.6 million (9% of total payroll) (Sibanye, 2016b). This meant that the organisation had exceeded its overtime budget for 2016 by R309.8 million, meanwhile, it had underperformed against its target of 55 Tons by achieving only 47 Tons of gold. This practice highlighted the existence of a problem that there was no apparent financial benefit to the organisation arising from the overtime expenditure. The organisation's overtime included Sundays, public holidays, Weekday, Voluntary, Callouts and other overtime, of which engineering

and mining sections constituted 65% and 30% of overtime cost respectively (Sibanye, 2016b). It was in the back of this apparent significance of the overtime management in the organisation that this case study was carried out. The size of Sibanye by gold output and market share made it a significant case study as its successful overtime management and hence positive financial performance would benefit the South African economy at large.

### **1.3 THE RESEARCH PROBLEM**

The use of overtime in organisations is common, albeit, systems and processes for its management are seldom geared for the realisation of the benefit of this practice (Clayton et al., 1997; Camden & Ludwig, 2013). This supposedly variable cost ends up becoming a fixed cost that employees become accustomed to as part of their routine remuneration (Hetrick, 2000). Anecdotally, attempts to clamp down on overtime expenditure have often met resistance and revolt from the impacted employees as their earnings are affected. Organisations often lack systems and processes for management of overtime and or do not effectively apply adopted overtime management controls, resulting in financial risk to the organisation, arising from over expenditure and diminished profitability (Sibanye, 2016b).

### **1.4 THE PURPOSE OF THE STUDY**

The aim of the study was to investigate, using a semi-structured questionnaire, the perspectives of management and employees on the overtime management practices in Sibanye Gold Ltd (Sibanye), a South African Gold mine located on the Witwatersrand Basin. Management perspectives were considered significant in providing insights into organisational processes and practices employed to manage overtime and effectively the financial risk arising from its abuse.

### **1.5 THE OBJECTIVES OF THE STUDY**

The study intended to:

1. Obtain management and employees perspectives on the existence of overtime management processes and systems in the organisation.

2. Assess the levels of appreciation by management and employees, of the significance of overtime management in the realisation of financial goals within the organisation.

3. To gather management and employees' opinions on the effectiveness of overtime management in the case organisation.

## **1.6 THE RESEARCH QUESTIONS**

Three research questions were developed which were informed by the research objectives and overarching research problem:

1. Does Sibanye have overtime management systems and processes in place to effectively manage overtime in the organisation?

2. Do management and employees of the organisation appreciate the impact overtime management has on organisation financial performance?

3. How effective are the overtime management systems and processes employed by the organisation in curbing overtime abuse and over expenditure?

## **1.7 ASSUMPTIONS**

The following assumptions were made:

- ❖ Managers and employees in Sibanye would be familiar with organisational systems and processes including overtime management.
- ❖ The responses provided represented honest views of participants and were not researched responses or group views.
- ❖ Participants would complete the questionnaires themselves and not delegate subordinates to do it on their behalf.

## **1.8 DELIMITATION OF THE SCOPE OF STUDY.**

The scope of the study was limited to the case organisation i.e. Sibanye, to investigate overtime management within the organisation from managers and employees' perspectives. The organisation business units of investigation belonged to the Sibanye Gold Division, that is, excluding the Sibanye Platinum Division, which comprised recently acquired assets. It was anticipated that organisational systems and processes to manage overtime would be at a more mature state in the Gold



Division compared to the Platinum Division given that the former had been part from Sibanye from the inception of the organisation. The scope of the study was limited investigating organisational systems and processes in place to manage overtime without attempting to prove a business case for overtime use in organisations.

## **1.9 CHAPTER OUTLINES**

This research report is broken down into five chapters as outlined below:

**Chapter 1 (one)** – introduces the study and outlines what to anticipate in the report. The sub-headings covered in this section include an introduction and background of the study; the research problem; the aim and objectives of the study; the research questions; and the scope delimitation.

**Chapter 2 (two)** – reviews the existing body of knowledge on overtime and its management in organisations. It justifies the requirement for the study carried out on the case organisation by identifying a gap in literature on overtime management in organisations.

**Chapter 3 (three)** – covers relevant the research methodology followed in this research. It outlines the research design, data collection techniques and describes the population and sample.

**Chapter 4 (four)** – covers the research findings of the study in the context of the objectives and research questions.

**Chapter 5 (five)** – offers the conclusions and recommendations on the research findings from the research. It also highlights the limitations of the study and identifies imperatives for future research on the subject of overtime management.

## **1.10 CHAPTER CONCLUSION**

This chapter introduced the study by providing the background of the study and highlighting the existence of the research problem. The significance of overtime management in organisations was highlighted in the synopsis of the case organisation. The research problem was identified as being that, organisations lack overtime management systems and processes to ensure that the overtime practice is effectively controlled to bring about financial benefit to organisations. Furthermore, the supposedly variable cost of overtime that brings about flexibility in getting additional human resources, often becomes a fixed cost resulting in deteriorated financial performance thus posing a risk in organisations. The research aim and objectives were detailed in sections 1.4 and 1.5 respectively of this chapter. Three objectives of the study were developed which would be met by attempting to answer three questions as set out in sections 1.5 and 1.6 of this report. The scope of the research was defined as limited to the perspectives and perceptions of management and employees on the overtime management practices in the case organisation.

## **CHAPTER 2**

### **2. LITERATURE REVIEW**

#### **2.1 CHAPTER INTRODUCTION**

This chapter considers the existing literature on overtime management in organisations to provide insights on the subject and its significance. The existence of the problem will be demonstrated through a consideration of the research developments in the field of management accounting with specific focus on overtime management. This will establish a theoretical foundation for this study on overtime management systems and practices in the case organisations. Through this review of literature, a gap in theory will be identified as this study on overtime management is placed in broader space of academic research thus justifying the requirement for the study and the existence of the research problem.

#### **2.2 WHAT IS OVERTIME?**

According to the Basic Conditions Of Employment Act No.75, 1997, overtime refers to time that any employee works during the day or week in excess of ordinary hours of work as stipulated in S9 and or agreements referred to in S11 or 12 of the same act. The overarching objective of overtime regulation is to enhance adherence to occupational health and safety practices that enhance worker health. Beckers *et al.*, 2007 make a distinction between overtime and long work hours as being that: long work hours are those work hours that exceed standard full time work week while overtime are those work hours in excess of contractual work hours. The significance of this distinction is that, long work hours imply overtime whereas overtime does not necessarily always imply long work hours e.g. in the case of Sunday and or public holiday hours worked. The definition of working hours in one's contract of employment is thus imperative in defining what is to be deemed as overtime and how it is to be compensated.

While ideally workers ought to adhere to ordinary hours of work, there often exist operational issues that make it imperative for workers to work overtime. Three distinctions overtime have been made in the Basic Conditions Of Employment Act No. 75, 1997 i.e. overtime during the week, Sunday, and public holiday overtime. S10(2) stipulates that overtime work must be compensated at a rate of 1.5 time the employee normal wage, while S16 (l) and S18(2) b(ii) of the same act stipulate that Sunday and public holiday overtime must be compensated at double the normal rate. Arguably, it is the financial incentive of overtime that lures employees to working overtime while the burden of additional remuneration to employees perceivably should be a deterrent for employers from asking employees to work overtime. The requirement for overtime management in organisations is thus from compliance and cost management objectives. In the absence of robust overtime controls, the facility is subject to abuse resulting in unnecessary expenditure and breach of the law.

## **2.3 OVERTIME REASONING IN SIBANYE**

According to Public Service Commission Report (SA, 1999) the performance of remunerated, Sunday and voluntary overtime are common practices. Sibanye Gold reasons provided by the report (Sibanye, 2004) for the performance of overtime were quite diverse and were mostly linked to the unique circumstances attached to different occupations within the organisation. Sibanye Gold B4 Overtime manual (Sibanye, 2004) indicated the following reasons being general reasons for performed overtime at Sibanye Gold:

Work environment where continuity of service is required e.g. for water pumping chambers to avoid flooding of the mine;

- ❖ Additional tasks in respect of which prior planning was not possible, e.g. an engineering equipment breakdown;
- ❖ Work that cannot be performed during official hours such as engineering and legal work;
- ❖ Shortage of staff due to on-leave and sick employees;
- ❖ Lack of trained staff with appropriate experience particularly electricians, winding engine drivers inter alia;

- ❖ Inefficient work procedure due to poor supervision and supervisory incompetency;
- ❖ High absenteeism: increase in sickness and poor leadership; and
- ❖ The backlog of work: lack of capacity and competency.

Acknowledgement of the requirement for overtime and the reality of overtime spend case organisation make it worthwhile to consider the overtime cost-benefit.

## **2.4 OVERTIME COST-BENEFIT**

In a study done by Liu and Tanaka (2002) cited in Vyas *et al.*,(2012) focused on Japanese men which sought to examine the relationship between working hours and hours of sleep vis a vis the risk of acute myocardial infarction (AMI), it was established that the odds of AMI increased with long work hours and reduced hours of sleep. It is from this view point that the regulation of overtime and work hours becomes an occupational health and safety imperative. By extension, having overtime controls in an organisation is thus a legal and ethical issue much as it is cost management effort. The ethical issue that arises from overtime is that, is there any amount of business benefit from overtime practice that is worth putting the health and safety of employees in jeopardy? The law has attempted to strike the cost-benefit balance for employees by gazetting limits to hours that can be worked daily and weekly and as overtime (S7;10;11&12 of the Basic Conditions Of Employment Act No.75.1997). This regulation of overtime can be interpreted as a legal attempt to address the potential downfall arising from the overtime compensation incentive. Arguably, the employee overtime cost-benefit analysis involves a rational evaluation of the value placed on the time versus the envisaged compensation.

In an analysis of the overtime cost-benefit in the healthcare industry in America by Quinn (2002), it was apparent that when there is a scarcity of skill, recruitment costs which may include an upfront signing bonus, may be deterrent to recruitment and an incentive to ask existing employees to work overtime. On the other hand, in the

same healthcare industry case, it was established that the productivity and quality of service rendered by nurses working overtime deteriorated, resulting in increased patient and family complaints. The parallels that can be drawn from the healthcare case in relation to the case study detailed in this report are that, while there may be apparent cost saving in using overtime as a substitute to recruitment, there exist hidden costs in the form of lowered productivity of employees working overtime (Quinn, 2002). According to Olivia and Sterman (2001), cited in Spohrer and Maglio, 2008, the combination of hiring policies that are cautious, recruitment delays, and prolonged training requirements impact on service capacity to react to changes in demand. Consequently, temporary variations in work pressure arise which must be accommodated through overtime or quality erosion.

A bold attempt to harness employee productivity through incentives was taken by Perpetual Guardian's CEO, who experimented, with a view of eventually rolling out, a *Four days' work for five days' pay* initiative in the New Zealand organisation (Haar, 2018). In this initiative, employees would work four days in a week and be remunerated for five days of that week thus effectively given employees a paid leave day every week. The benefits of the initiative remain to be seen however. The thinking in coming up with such a drive is interpreted as having been informed by an understanding of the significance of rest in employee productivity and that the benefit there is in having a productive workforce that worked short work hours outweighed the cost of remunerating them for a day off work each week. If an organisation is optimizing, it would allocate expenditures in such a way that, the same worker satisfaction is produced from the marginal dollar spent on each form of compensation (Lazear, 2018). The necessity of overtime in organisations goes beyond the financial benefit to the organisation. According to Taljaard, (2016), in certain instances, circumstances beyond the employer's control may arise which may impose the requirement to work overtime on employees, of which refusal by the employee would be tantamount to misconduct ([www.fin24.com](http://www.fin24.com)).

It is emergent from the cost-benefit consideration of overtime that a business case for overtime is not necessarily always easy to prove. The cost of overtime is not

necessarily in monetary spend on compensation but also the ripple effects it has on productivity and legal repercussions if not managed correctly. It is thus imperative to have overtime management systems and processes in place that are working effectively in order to avoid the risk to the organisation that would arise from its poor management (legal and financial risk). Overtime management is considered in detail in the following section.

## **2.5 OVERTIME MANAGEMENT**

In attempting to manage overtime in an organisation, it is imperative to understand the hours worked by employees precisely and to allocate the cost accordingly through time and cost management controls.

### **2.5.1 Time Management**

Perspectives from payroll systems experts indicate that effective overtime management alone, one of many aspects of human resources, can yield cost savings of between 10% - 15% (Ryan, 2006). This means that there is a significant financial risk in poor overtime management and a business upside in effectively managing it. There is a requirement to keep a close eye on overtime in organisations as this practice is notorious of getting out of control if employees clock in a bit early and or a little late on a regular basis (Arnold, 2009). According to Amy Bailey (from the US firm TSheets), in tough economic times, employees habitually work extra hours which they do not necessarily include in their time sheets in a bid to prove themselves as hard workers (Visser, 2017). Employers have also expressly or tacitly condoned this behaviour by not having strict controls on overtime in their organisations. This may have adverse financial consequences in the event that the same employees that habitually and voluntarily work extra hours decide to pursue legal action for misclassification or time worked without pay (Visser, 2017). Overtime management is thus a business imperative if financial and legal risk is to be averted.

Effective overtime management requires automated time and attendance systems for monitoring and controlling hours worked by employees (Taylor-Arnold, 2009). According to the American Payroll Association (APA), companies that lack automated timekeeping have up to an eight percent error rate on their payroll ([www.thepayrollcenter.com](http://www.thepayrollcenter.com)). System managed time and attendance provides real time employee clocking data and information on those employees approaching their overtime limit. However, any system employed by an organisation for management is as good as the management controls deployed for ensuring that it is effectively and consistently applied throughout the organisation (Madondo, 2018). It is thus important to have the overtime controls in place in an organisation but also equally important would be the application of those controls to achieve the desired outcomes.

### **2.5.2 Cost Management**

If the overtime time cost is to be managed effectively, it is critical to unpack it through application of Activity-Based Costing (ABC) (Pazarceviren & Celayir, 2014). According to Ray and Gupta (1992), ABC is a relatively new cost accounting system constituted of by data on the financial and operational performance of a company's business-related activities. The importance of ABC is that it provides accurate cost information on each activity in the organisation thus enabling detailed understanding of what makes up the total cost (Garg & Rafiq, 2002; Maiga & Jacobs, 2008). Studies based on US firms have revealed an increased performance in those firms that applied ABC (Shim & Stagliano, 1997). Further empirical evidence was provided by Kennedy and Affleck-Graves (2001) who suggested a significant improvement in firm performance for ABC firms compared with their matched non-ABC firms, with respect to both market and accounting-based measures. Cagwin and Bouwman (2002) did an investigation into association of the ABC application and the improvement in financial performance and established a positive association between the two. The existing body of knowledge highlights the importance of ABC in cost effective cost management in general, however in this research report, its application is considered in the context of overtime management.



Applying ABC in managing the overtime would require allocation of the cost per organisational department and for each activity that the cost is incurred. ABC analyses activities by distinguishing the activities that add value from those that do not add value to the organisation or its outputs (James& Elmezughi, 2010). The application of ABC in overtime management would highlight problem areas in the organisation as far as time and cost management of overtime are concerned avoiding the distortion of product and service costs, which would mislead strategic decisions related to productivity and profitability

## **2.6 OVERTIME GOVERNANCE IN SIBANYE**

According to Sibanye Gold B4 Overtime manual (2004) the performance of planned overtime at Sibanye Gold (Witwatersrand region) occurs either on an ad hoc basis or continuously throughout the year. In cases where it is performed on an ad hoc basis, the objective is normally to deal with emergency situations or to complete specific tasks to align to production targets, mostly within a present time-frame. This overtime throughout the year is normally directed at dealing with the day-to-day activities of the business. It further states that approval for remuneration overtime in these components is granted as once-off at the beginning of the financial year and applies for the entire year (budgets). In the majority of sections investigated within Sibanye Gold not all the staff members adhere to budgets alignment when performing overtime (Sibanye, 2017).

According to the Basic Conditions Of Employment Act No. 75, 1997 an employee/s should not work more than 40 overtime hours in any given month or pay cycle. Sibanye policy under section 4 details this procedure. The attendance data pointed that some operations had the top 20 overtime workers for the 2016 financial year per operation (meaning above 40 hours). It should further be noted that the numbers include line supervisors who infrequently worked overtime during the 2016 financial year. There are employees and officials that worked up to 100 hours overtime average per month and 1200 for the year average in 2016, translating to R25,000

per month or R300,000 a year on average. These excessive hours of overtime duty were performed during voluntary shifts for production-related reasons, Sunday overtime for engineering, legal or sometimes cleaning operations and public holidays for closing production gaps against the production plan (Sibanye, 2017). These organisational facts highlight the existence of an overtime management problem hence this study set out to understand the problem from the view point of management and employees.

## 2.7 OVERTIME IN THE CONTEXT OF SIBANYE

According to company sources, overtime expenditure increased significantly in the 2014 and 2015 financial year and even more dramatically in the 2016 financial year. The total amount of overtime expenditure for the three categories of Mines investigated increased sharply from R371 million in the 2015 financial year to R454 million in the 2016 financial year, as indicated in figure 2 below.

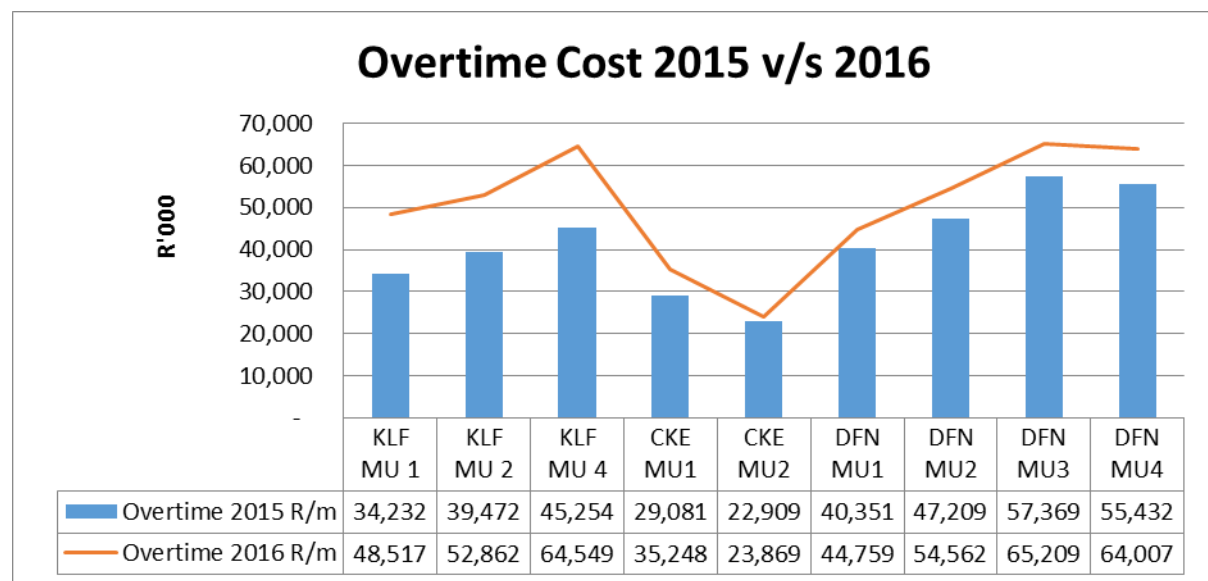


Figure 2: Overtime Cost 2015 vs. 2016 (Source: Sibanye, 2016b)

The reasons for the increase in overtime expenditure since 2015 to 2016 provided by the organisation were two-fold. Firstly, there had been an increase in the number of hours overtime performed per year by employees including officials and secondly,

the basis for the calculation of the overtime tariff had been adjusted as per the yearly inflation percentage, effectively from July 2015 and January 2016 (Sibanye, 2017).

In reviewing the overtime pattern in the organisation, the researcher could not establish any defined trend in the percentage of overtime cost/ expenditure as versus total personnel expenditure. Figure 3 below illustrates the overtime % split per Mining Unit (MU).

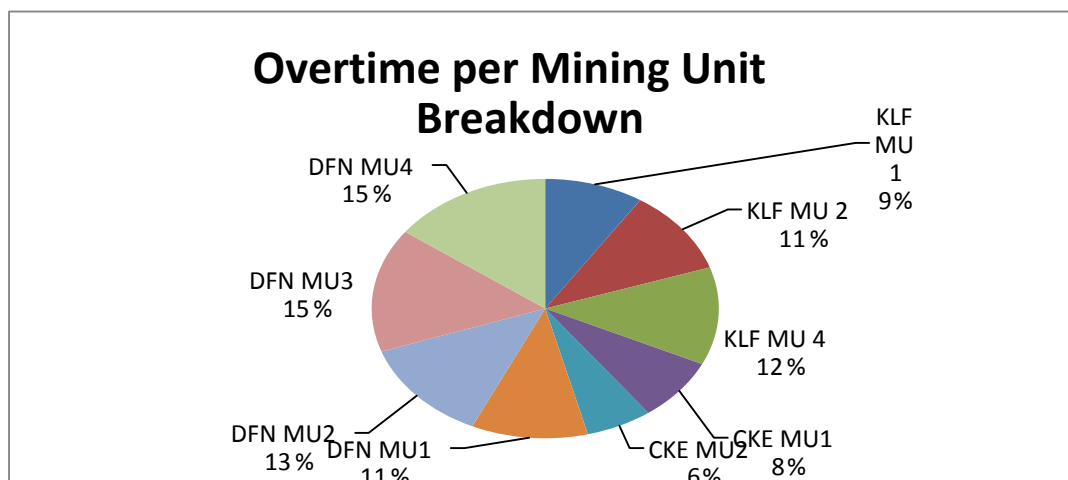


Figure 3: Overtime Breakdown per Mining Unit (Source: Sibanye, 2016b)

Thus, with reference to fig 3 above, it is evident that Driefontein Mining unit 4 (DFN MU4), and Driefontein Mining Unit 3 (DFN MU3) were the biggest overtime spenders individually making up are 15% of the total organisational overtime expenditure. The same mining units deteriorated in their Gold production year on year as shown in fig 4 below, highlighting that there had not been any financial benefit from the additional overtime expenditure.

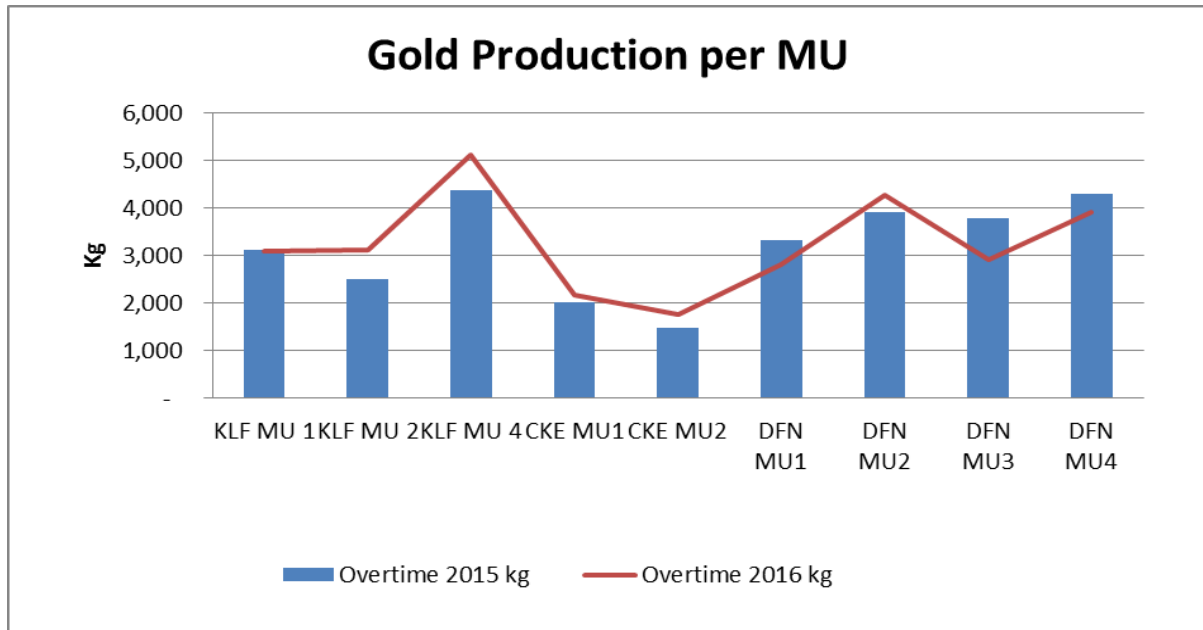


Figure 4: Gold Production per Mining Unit (Source: Sibanye, 2016c)

The above graph emphasises the fact that overtime cost increased by 22% year on year from R371 million to R454 million, but production increased only by 1% from 8,834 kilos of Gold in the 2015 financial year to 29,190 kilos in the 2016 financial year.

During 2015-2016, Sibanye employed 44,411 people; 39,232 of whom were permanent employees (88%) and 5,179 contractors (12%). The net increase in employees at Cooke led to an additional 5,570 permanent employees and 2,051 contractors being integrated into the Group. Since the inception of Cooke operation to the group, the company R/ton cost has increased by more than normal inflation. (Sibanye, 2016a).

The performance of remunerated overtime within the Gold division (Witwatersrand) poses significant financial implications for the employer, especially when production is not improving. By the figures obtained from Sibanye's Business Warehouse (BW) report (2016:1) the Gold division (Witwatersrand region) reported overtime cost of R371 million against a plan of R125 million (9% of total payroll). This means that the division has over utilised its overtime budget for 2016 by R246 million, while the division underperformed on its Gold target of 41,187 kg against an actual of 21,190

kg in the 2016 financial year, losing +- 11.7 billion Rand in terms (19,997 kilos by R587,000/kg) of revenue in 2016 alone (Sibanye, 2016c).

Hanna, Taylor and Sullivan (2005) highlight the impact of overtime on employers as being the higher pay rates, increased absenteeism and lower morale. Arguably, employees participating in overtime work get fatigued and would at some stage be on paid absence from work with a further repercussion of demoralising those at work, who have to compensate for the absence of their colleague. The reviewed organisational facts as shown in figure 2, 3 and 4 reveal an apparent cost and productivity problem of overtime in the case organisation, hence understanding the practices employed in managing overtime was an area of study for this research.

## **2.8 EXISTING RESEARCH THRUSTS**

Vertanen *et al.*, (2012) investigated the association between overtime work and the onset of a major depressive episode (MDE). In this longitudinal study, Vertanen *et al.*, (2012) established that those employees that worked longer hours became more predisposed to MDE, and this held true after adjustment for the impact of smoking, alcohol use, job strain, chronic physical disease, and work-related social support on this association. These findings make a case for enhancing productivity in organisations within stipulated work hours, to avoid use of overtime in a bid to avoid its negative impact on health. Caruso (2006) conducted a similar study, albeit, linking overtime to a range of risks to workers, employers, families and community at large. These risks were understood to emanate from less time to rest, lengthy exposure to occupational hazards, and unavailability to attend to non-work responsibilities. Rosa, Bonnet and Cole (1998) conducted a study based on a laboratory simulation of an assembly task and established that upper extremity of fatigue increases with time on the shift. Complimenting the findings by Rosa *et al.*, (1998) were the conclusions made by Folkard and Lombard (2011) based on four other studies, that a 10 hours at work increased the risk of an injury by 13% while a 12 hour shift increased the risk by 28%. Socio-impact view of overtime was done by Jacobs (2004) who established from an American college faculty that its employees were

driven to delay marriage by their long work hours and competitive pressure to achieve tenure. Philip (2005) on the other hand considered the public safety risk that arises from long work hours of commercial vehicle drivers. The literature reviewed heretofore reveals that the impacts of overtime are far reaching than the mere cost implications to the organisation. This makes the study *investigating overtime management practices at a selected gold mine in the Witwatersrand Basin* pertinent due to the significance of the topic in organisations and society at large.

The existing body of knowledge is extant on overtime and seems to take the broad views of health, safety, socio-impact, legal, productivity and cost implications of overtime. There is however, a dearth on literature focusing on organisational overtime management practices, which is the how this study contributed to the existing body of knowledge.

## **2.9 CHAPTER CONCLUSIONS**

The above literature review reveals that the subject of overtime management remains to be researched further. There is a dearth of literature exploring the subject from a holistic approach covering human resource practice, legal and financial implications of overtime. The existence of the research problem was demonstrated through the body of knowledge considered. Anecdotal evidence presented in this chapter highlighted the significance of the overtime problem in the case organisation from a financial point of view. Based on the information of the chapter in conclusion, it can be argued that the research study was justified as it dealt with a subject of pertinence in organisations and particularly the case organisation considered.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.1 CHAPTER INTRODUCTION**

According to Leedy and Ormrod (2010) cited by Van Rensburg (2016) research is a systematic process where information on a specific topic is gathered in order to increase understanding of that phenomenon. Conducting research is about finding things out by following a systematic approach and thereby increasing knowledge (Saunders, Lewis & Thornhill (2009). The purpose of this chapter is to outline the design of the empirical research regarding the role overtime management practices in Sibanye Gold particularly the Witwatersrand region (where the research was conducted). The chapter will provide a comprehensive explanation of the choice of research design, the research methodology, face-to-face interviews, the questionnaire, the design and the construction of the questionnaire, the reliability of the data collection instrument, the validity of the data collection instrument, the population and sample, the data analysis, and the pilot study.

#### **3.2 THE RESEARCH PROCESS**

According to Watkins (2012:36-37), the research process provides insight into the process of “how” the research was conducted from formulating the research proposal to the final submission of the thesis or dissertation. Based on the work of Collis and Hussey (2003) as cited in Watkins (2012:37), eight fundamental stages of the research process are outlined. The research detailed in this report adopted the aforestated approach, as follows:

- ❖ Identified the research topic and the problem that would be investigated;
- ❖ Conducted an abbreviated literature review of previous studies about the topic;
- ❖ Defined and formulated the research problem, research question, research objective and related investigative questions to be answered in an attempt to resolve the problem at hand;

- ❖ Selected an appropriate research design and data collection methodology to add value to the investigation;
- ❖ Formulated and submitted a completed research proposal;
- ❖ Collected, analysed and interpreted the research data collected;
- ❖ Made relevant and executable recommendations, upon concluding from the data collected, on how the research problem in question could be solved; and
- ❖ Wrote, proofread and submitted the research report (dissertation).

Central to the resolution of the identified research problem was the choice of the research design.

### **3.3 THE RESEARCH DESIGN**

The researcher decided that a cross sectional qualitative research approach would be appropriate for this case study. According to Lindlof and Taylor (2002:18) *“essentially, qualitative researchers seek to preserve and analyse the situated form, content, and experience of social action rather than subject it to mathematical or other formal transformations”*. Since overtime management practices in the case organisation were the subject of this research, a phenomenological design would be appropriate, whereby the researcher would gather and analyse the perceptions and feelings of the participants on the subject. Watkins (2012:9) defined phenomenology as *“a theoretical point of view that advocates the study of direct experience taken at face value, and one which sees behaviour as determined by the phenomena of experience, rather than by external, objective and physically described reality”*. It is through such a research approach that the researcher would obtain insights into the unique experiences, feelings and perceptions, as per Jackson et al., (2007), that influence the daily lives of Sibanye management and employees as far as overtime management is concerned

The decision to use qualitative analysis for this study was upon consideration that the answers to the six qualitative analysis test questions by Marshall and Rossman (1995) would be affirmative that is:



- 1 *Is it important for the researcher to understand the in-depth process that operates within the organization or industry?*
- 2 *Do the research issues involve poorly understood organizational phenomena and systems?*
- 3 *Is the researcher interested in the differences between stated organizational policies and their actual implementation?*
- 4 *Does the researcher want to study ill-structured linkages within organizational entities?*
- 5 *Does the study involve variables that do not lend themselves to experiments for practical or ethical reasons?*
- 6 *Is the point of study to discover new or thus far unspecified variables?* (Lee, 1999:41).

Data was collected through a questionnaire based survey of organisational employees. An inductive reasoning process was followed, where the research moved between the data to identify common and recurrent themes so as to ensure that an in-depth understanding of the subject matter under investigation would be obtained. Induction emphasises the understanding of the meanings humans attach to events (Van Rensburg, 2016). Inductive approaches involve the movement from observations and findings to theory, where theory is the outcome of the research (Bryman & Bell, 2011). It also supports the fact that the researcher is part of the research process and is less concerned with the need to generalise (Saunders *et al.*, 2009).

### **3.4 THE POPULATION.**

White (2003:79) defines a population as a collection of objects, events or individuals having some characteristic that the researcher is interested in studying. The population that interests the researcher is not the same as the everyday notion of the population of people in a certain country or city. A population is the sum of all the cases that meet the study's definition of the unit of analysis. All employees in the gold operations in the Witwatersrand Basin of Sibanye constituted the population for

the study and totalled circa 45000 (Sibanye, 2016a). Due to the stratified nature of the population arising from organizational hierarchies, a purposive sample was obtained in order to ensure that all employee categories would be represented. It is in this light that a survey would be arguably, ideal since perspectives would be anticipated to vary at different organisational ranks, shaped by the different work experiences to which the population was exposed to.

### **3.5 THE SAMPLE**

A non-probability sampling approach was chosen for this research to ensure that participation was on voluntary basis. According to Leedy and Ormrod (2015), in a non-probability sampling, there is no guarantee that the sample will represent each element of the population. In consideration of Leedy and Ormrod (2015) assertion on response rate when using a non-probability sampling, the invitation to participate in the survey was extended wide in the organisation. As a result 100 questionnaires were distributed to case organisation employees and management in a bid to address response rate challenges of non-probability sampling. The emphasis was on getting participation from at least each category of employee in the organisation for diversity of views on overtime management practices in the organisation. By distributing 100 questionnaires, it was not intended to increase the breadth of the study given that it was qualitative in nature. The type of sampling for this study was purposive sampling and specific judgemental sampling enabling the researcher to use own judgement on case sections that would best answer the research questions, to achieve the research objectives (Van Rensburg, 2016). The management, line supervisors and the employees in the Gold Division were the samples chosen for this research. All the employees and supervisors, who request, capture requisitions, signed and authorised overtime on the system with the Sibanye Gold formed part of the sample. The total number of employees including supervisors who took part in this study was one hundred (100). Employees and supervisors who request, capture requisitions, signed and authorised overtime on the system within Sibanye were considered relevant for this study, as they were the ones who were directly involved in overtime management.

### 3.6 SAMPLING TECHNIQUES

Since the study intended to obtain perspectives on overtime management practices in the organisation targeted individuals within the organisation were invited to participate in the study. The inclusion-exclusion criterion was based on researcher's perceived anticipation of familiarity with overtime management practices in the organisation by the target sample group. The data collection was cross sectional as the limitation of time constrained the possible duration of the study (Bryman et al., 2011; Cooper & Schindler, 2011; Saunders, Lewis & Thornhill, 2012). A non-probability purposive sample (Figure 5) was considered appropriate for the study in line with the qualitative nature of the research.

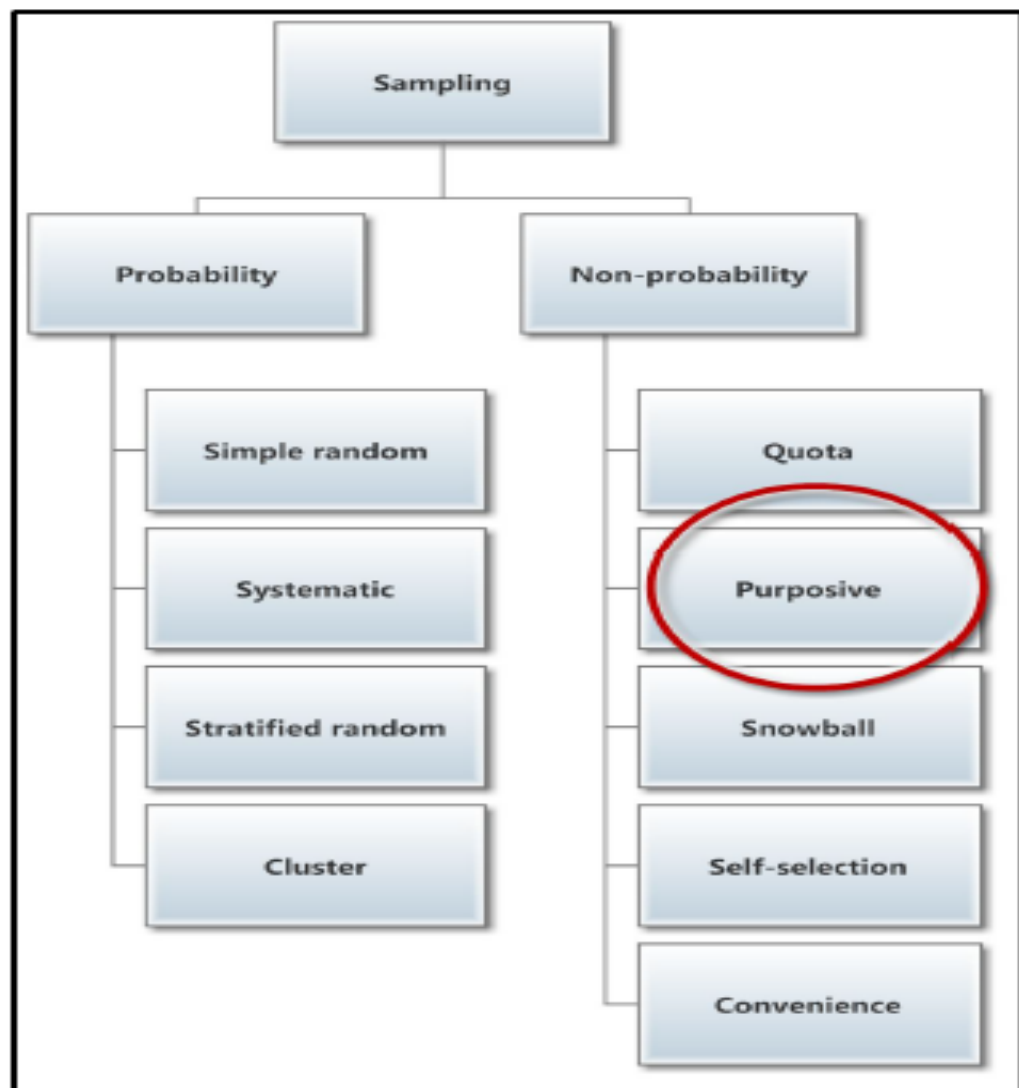


Figure 5: Sampling design (Source: Saunders et al., 2009; Van Rensburg, 2016)

### **3.7 DATA SOURCES**

The source of data was the participants in the study who provided that perspectives on the organisational overtime management practices through completing a questionnaire. The distribution and collection of the questionnaire was self-administered by the researcher. The majority of participants had access to emails, thus the questionnaire was shared with them and received back electronically. The secondary sources of data were the organisational annual reports and overtime policy documents, which were reviewed in the development of the research problem.

### **3.8 DATA COLLECTION TECHNIQUES**

A questionnaire structured to obtain relevant information from management level and employees was designed (Appendix B). The questionnaire combined structured and unstructured questions, in order to collect both sample description data and in-depth perceptions of the respondents. The respondents were questioned on the same variables, from their perspective, to enable comparison of results. All management employees and employees in the Gold Division were invited to participate in the study to enable comparison of trends to be done.

#### **3.8.1 Choice of data collection technique**

Watkins (2012:74) as cited by Remenyi *et al.*, (2009), defined a questionnaire design as *“a survey is the collection of a large quantity of evidence, usually numeric, or evidence that will be converted to numbers, normally using a questionnaire”*. The former author further explained that questionnaires fall within the very same domain upon addressing the broader definition of research inclusive of a survey study. Researchers guard questionnaires as a list of carefully structured questions, tested and distributed amongst reciprocates through which reliable responses from the sample chosen will be obtained for evaluation and conclusions are drawn. The aim of any questionnaire is, therefore, to establish and transpire the true nature of the feelings, attitudes, perspectives and behaviours of a selected group of participants about the relevant subject matter in question. In the case of a quantitative approach

structured (closed), questions are posed to participants, while a qualitative approach always suggests unstructured (open-ended) questions to participants. In consideration of theoretical overview on the application of questionnaires in research, the design of the questionnaire consisted of semi-structured questions. The application of the structured part of the questionnaire was done to obtain specific data from the respondents that would enable description of the sample and accurate interpretation of responses in the unstructured part of the questionnaire. The body of individuals which were selected to partake in the qualitative approach for this research consists of both political and administrative leaders within the said mining department, representing the units of analysis for this research study.

The key strengths and weaknesses of questionnaires are summarised below. In general, questionnaires are an effective mechanism for the efficient collection of certain kinds of information however, they are not a comprehensive means of evaluation and should be used to support and supplement other procedures.

### **3.8.2 Advantages of Questionnaires**

According to the advantages of questionnaires are that they are:

- ❖ Practical;
- ❖ Large amounts of information can be collected from a large number of people in a short period and in a relatively cost-effective way;
- ❖ Can be carried out by the researcher or by any number of people with limited effect to its validity and reliability;
- ❖ The results of the questionnaires can usually be quickly and easily quantified by either a researcher or through the use of a software package;
- ❖ Can be analysed more 'scientifically' and objectively than other forms of research.

### 3.8.3 Disadvantages of Questionnaires

The key disadvantages of using questionnaires have been identified by as being:

- ❖ inadequate in providing and understanding of some forms of information such as changes in emotions, behaviour, and feelings;
- ❖ Limited in the amount of information that can be gathered and pose questions without explanation to the respondents.
- ❖ Lacking in validity;
  - There is no way to tell how truthful a respondent's view is portrayed;
  - There is no way of telling how much thought a respondent had put in;
  - The respondent may be forgetful or not thinking within the full context of the situation;
  - People may read differently into each question and therefore reply based on their own interpretation of the question such as what is 'good' to someone may be 'poor' to someone else. Therefore there is a level of subjectivity that is not acknowledged; and

There is a level of researcher imposition, meaning that when developing the questionnaire, the researcher is making their own decisions and assumptions as to what is and is not important; therefore they may be missing something that is of importance.

In light of the advantages and disadvantages of questionnaires considered the researcher decided that the questionnaire would be an appropriate data collection tool. Given that this research was a qualitative study, it can be argued that interviews would have been more ideal. However, given that the researcher was an employee of the case organisation interviews, arguably, would have limited the degree of some participants' comfort levels in expressing their views in the face of the researcher (a manager in the organisation). The questionnaire was considered appropriate in spite of the stated disadvantages as it enabled achievement of research objectives under the constraints of time and resources. Furthermore, it enabled the participants to still retain a considerable discretion on whether to participate or not during completion of the questionnaire. In an interview on the other hand, participants that were junior to

the researcher would have potentially participated against their will given the seniority of the researcher in spite of informed consent declarations and ethical measures employed in the study.

#### **3.8.4 Questionnaire Design**

A questionnaire must be designed so that it can serve as an appropriate and useful data-gathering device. One that is badly designed is a waste of time and effort for both the researcher and the participants. According to Babbie (2007), just as important as the nature and wording of the questions asked is the format of a questionnaire. An improperly laid out questionnaire can lead respondents to miss questions, confuse them about the nature of the data desired, and even lead them to throw the questionnaire away (Babbie, 2007). There are three types of questionnaires: the self administered; the investigator-administered and psychological tests (Maja, 2006). For this research, the self-administered questionnaire was used in the main study while an investigator-administered questionnaire was used during the pilot phase.

#### **3.8.5 Self-administered questionnaires**

The most common form of self-administered questionnaires is that respondents complete the questionnaires individually in the absence of the researcher and completed questionnaire is either collected by the researcher or be mailed back (Babbie, 2007). The major strengths of self administered questionnaires are that they are easy to distribute; allow for anonymity and are cost effective, while their disadvantages being the low return rate and the unavailability of the researcher to clarify any ambiguities (Maja, 2006). Self administered questionnaire was considered appropriate for the main study by the researcher due to practicality issues of having to sit with every individual invited to participate if the investigator-administered approach were to be used.

### 3.8.6 Investigator-Administered Questionnaires

The investigator-administered questionnaire was chosen for the pilot study where participants responded to the questions in the presence of the researcher. The researcher presented and administered the questionnaires for immediate collection afterwards as per Mitchell and Jolley (2001). Since the objective of the pilot study was to improve the quality and clarity of the questions, the presence of the researcher would enable identification of questions that were unclear and subject to misinterpretations. The pitfalls of investigator-administered questionnaire as identified Maja (2006) i.e. reduced anonymity and diminished honesty due to the investigator's presence, were arguably insignificant since the objective of the pilot study was clarified to the participants of this stage.

### 3.8.7 Types of Questions

In the self designed questionnaire used in this research, both closed and open ended questions were asked as recommended by Petersen cited in Alberts (2006), so as to overcome the disadvantages of either question type (Table 2 below) as identified by White (2003). According to White (2003), a closed-ended question permits only certain responses while an open ended one allows the respondent to express their feelings and to expand on ideas. The specific questions were constructed in view of the overarching research questions, objectives, aim and problem.

**Table 2: Advantages and Disadvantages of open-ended questions**

Open Ended Question	
Advantages	Disadvantages
a) It can be used when the researcher would like to see what the respondent views as appropriate answer categories.	a) It may lead to the collection of worthless and irrelevant information.
b) They allow the respondent to answer adequately, in all the detail he/she likes, and to qualify and clarify his/her answer.	b) Data is not standardised from person to person, making a comparison or statistical analysis difficult.
c) They are preferable for complex issues that cannot be condensed into a	c) Open-ended questions require good writing skills, better ability to express



few small categories.	one's feelings verbally, and a higher educational level than do closed-ended questions.
d) They allow more opportunity for creativity or self-expression by the respondent.	d) Open-ended questions require much more of a respondent's time.
	e) It requires more paper and therefore gives the impression that the questionnaire is longer, possibly discouraging respondents who do not wish to answer a lengthy questionnaire
<b>Closed Ended Question</b>	
<b>Advantages</b>	<b>Disadvantages</b>
a) The answers are standard, and can be compared from person to person;	a) It is easy for a respondent who does not know the answer to choose the "Don't Know" category or even to answer randomly.
b) The answers are much easier to code and to analyse;	b) The respondent may feel frustrated because the appropriate category for his answer is not provided.
c) The respondent is often clearer about the meaning of the question;	c) There are greater chances for errors as the respondent may circle 3 when he meant to circle 2.
d) The chances for irrelevant answers are limited to the minimum because appropriate answer categories are provided, and	
e) It is easier for a responder to answer, because he only has to choose a category.	

Source: Own Compilation-Adapted after White (2003)

### **3.9 PILOT STUDY**

Maja (2006:109) indicates that a pilot study is a small-scale trial before the main research or investigation, intended to assess the adequacy of the research design and the instruments to be used for data collection; piloting the data-collection instruments is essential, whether interview schedules or questionnaires are used. Jolley in Maja (2006:110) caution that a study should be tried out on a few participants before the actual study is conducted. They posit that, if this is not done, discrepancies in actual and expected responses might be detected too late. It is for this reason that the questionnaires used for this research were piloted.

A sample of 15 employees (10 lower level employees and 5-line supervisors) of Sibanye (Kloof Upper Mining Unit) was used during the pilot phase of the study. The researcher distributed 15 questionnaires to the identified employees and administered the completion process with which participant. Participants were asked to give their honest opinion about the questionnaire regarding the length of the questionnaire, the clarity of questions and relevance of questions. The researcher also noted instances where the participants' interpretations of the questions were not aligned with the intention of the question posed. The questionnaires were not explained to them, and no assistance was given to them during the time they completed the questionnaires.

The research gave regard to the recommendations made by the participants of the pilot study. Certain questions were changed, and others were improved – as it was established that some of the questions were not clear, while others were ambiguous. The language used on the questionnaire was also addressed and the questionnaire, which was only in English, was made available in Afrikaans and Sesotho to accommodate the would-be participants as much as was possible. The final questionnaire used to collect data is appended (Appendix B).

### 3.10 ISSUES OF RELIABILITY AND VALIDITY

According to Golafshani (2003), the use of the terms reliability and validity is rooted in positivist research thus there is a requirement to redefine these to be applicable to interpretivism. The applicable terminology relevant to qualitative research addressing the same issues as reliability and validity is trustworthiness, Rigor and Quality (Golafshani, 2003). In a study where the researcher is part of the case organisation or business, measures to ensure validity and reliability need to be put in place to overcome biases and personal predisposition on the subject.

#### a) *Trustworthiness*

According to Seale (1999) cited in Golafshani (2003), Trustworthiness in a qualitative study is synonymous to reliability in a quantitative sense. It addresses the overall credibility of the research report. Issues of trustworthiness were addressed by appending the relevant documents as proof that the study did actually take place (Appendix C and F).

#### b) *Rigor*

Rigor relates to validity and was addressed through the pilot study in this research. The pilot study was conducted so as to enhance the rigor of the questionnaire through enhancing the clarity, meaningfulness and conciseness of the questions asked. The outcome of the pilot study was incorporated in the final questionnaire that was then used to collect the research data.

#### c) *Quality*

Where a questionnaire is used, there exists the possibility of there being non-engaged participants. Such would be identifiable typically by them providing similar responses where there is a choice of answers from those provided. In order to enhance the quality of the research and the findings, the questionnaire had repeated questions asked in alternative terms to test the consistency of the Responses provided. Furthermore, the research design was made such that, perspectives from a range of employee hierarchies in the organisation were obtained for valid findings to be made on the subject of overtime management practices in the case organisation.

### 3.11 DATA ANALYSIS AND INTERPRETATION

Induction was applied on the obtained data from the questionnaire responses to identify recurrent themes on overtime management practices in the case organisation. According to Leedy and Ormrod (2015) inductive reasoning involves drawing conclusions about a population based on observations made on its sample. Common themes were identified and patterns interpreted from the data obtained from the management level employees sampled. A data analysis spiral as described by Creswell (2013) cited in Madondo (2017), was applied to from raw data to themes and interpretations (figure 6). Application of basic descriptive statistics (Pie charts, and tables) was done to understand the sample properties in view of the population from which it had been drawn.

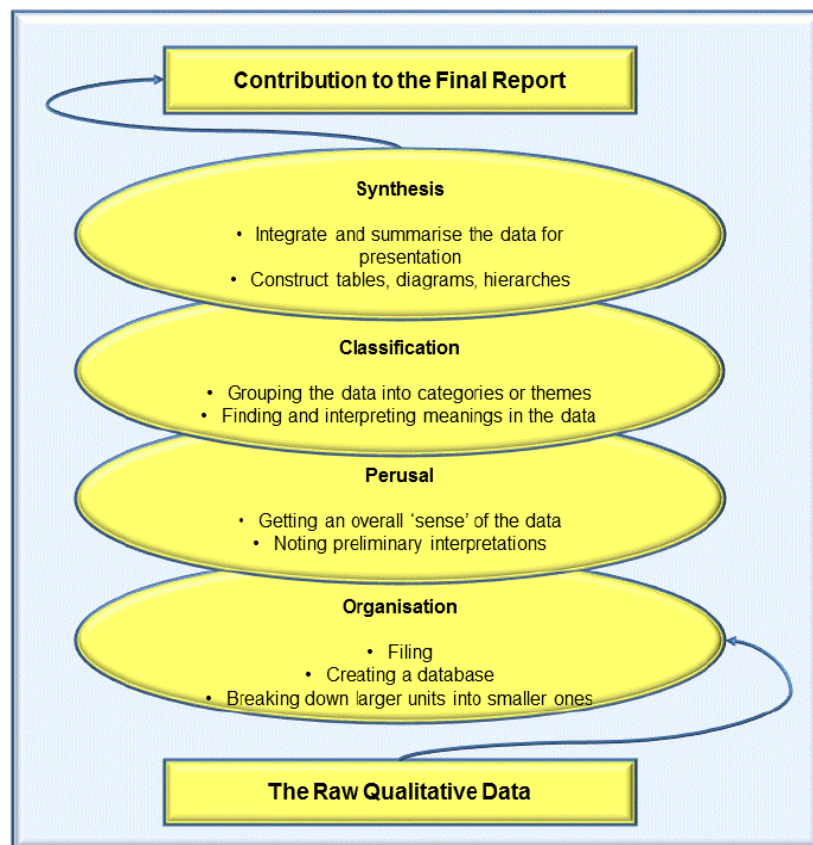


Figure 6: Data analysis spiral (Source: Creswell, 2013 cited in Madondo (2017))

## **3.12 ETHICAL CONSIDERATIONS**

### **3.12.1 Confidentiality**

The participants were not asked to disclose their in the questionnaire, instead general demographic data was obtained to enable effective sample description. The research self administered the data management thus, there were no third parties involved that would have potentially accessed the research raw data thus bringing about confidentiality issues. The necessary authorisation was obtained from the organisation prior to data collection, having clarified the research objectives and process to be followed. Upon satisfaction by the case organisation senior leadership that there were no material confidentiality issues with the research and its methodology, written consent was granted for the research to take place (Appendix C). Where ideas that were not of the researcher were used, such where referenced accordingly and a similarity report generated from Turnitin Software (Appendix E).

### **3.12.2 Informed Consent.**

A letter of request was sent to the organization's leadership requesting permission to conduct research on the organization (Appendix A and C).The letter clarified the purpose of the study and the rights of the organization and participants. Approval was granted accordingly (Appendix C). During the distribution of the questionnaire to all respondents, an informed consent form was also attached which clarified that the research would be published for academic purposes to enable them to decide based on information if they wanted to participate in the study. Authorisation was obtained from the supervisor prior to the submission of the finalised report as per academic institution policy (Appendix D).

### **3.12.3 Debriefing, Counselling And Additional Information.**

In order to enhance participation and also provide clarification on the study, the research arranged with the heads of the various business units for a debriefing session after one of the routine meetings wherein the would-be participants would

have been in attendance. A debriefing session was scheduled and conducted by the team heads of business units to ensure that the intentions of the study were not misinterpreted. This also assisted with increasing response rate, where team captain buy-in was obtained. Any additional information as was requested by the respondents or the organisation was provided to ensure that transparency was maintained.

### **3.13 CHAPTER CONCLUSION**

In this chapter the detail on the methodology that was followed in this research was provided. This was done by providing clarification on why the methodology was chosen and how it was applied. A qualitative research approach over a cross sectional time frame was chosen and applied in this study. A self -designed questionnaire was used to collect data from a purposefully chosen sample of organisational employees. This was after a pilot study had been done which enabled the researcher to enhance the rigor and quality of the research through improved questions included in the questionnaire. Inductive reasoning and interpretivism were applied in the analysis and interpretation of the obtained findings. Reliability and validity issues applicable in a qualitative sense were described including the ethical considerations and measures taken to safeguard the confidentiality and rights of the participation.

## **CHAPTER 4**

### **4. RESEARCH FINDINGS**

#### **4.1 CHAPTER INTRODUCTION**

The overarching research problem was that, organisations often lack systems and processes for management of overtime and or do not effectively apply adopted overtime management controls, resulting in financial risk to the organisation, arising from over expenditure and diminished profitability. The research study thus sought to qualitatively obtain management and employees perspectives on overtime management practices at a selected gold mine in the Witwatersrand Basin. Three research objectives were formulated i.e. to:

1. Obtain management and employees perspectives on the existence of overtime management processes and systems in the organisation;
2. Assess the levels of appreciation by management and employees, of the significance of overtime management in the realisation of financial goals within the organisation, and
3. Gather management and employees' opinions on the effectiveness of overtime management in the case organisation.

These objectives would be met by answering the associated research questions:

1. Does Sibanye have overtime management systems and processes in place to effectively manage overtime in the organisation?
2. Do management and employees of the organisation appreciate the impact overtime management has on organisation financial performance?
3. How effective are the overtime management systems and processes employed by the organisation in curbing overtime abuse and over expenditure?

The data was collected using a semi-structured questionnaire to answer the research questions. The questionnaire was divided into section A and B (further divided in Part A and B). Section A of the questionnaire dealt with the personal and

demographic profile of the respondents that participated in the study, while Section B (divided in Part A and B) dealt with the perspectives of the respondents about the overtime management practices in the case organisation. In this chapter, the research findings will be discussed beginning with a description of the sample obtained and the quality control measures taken in handling the data obtained. The research findings pertaining to each research objective will then discussed in detail.

## **4.2 DEVELOPMENT OF THE EVALUATING INSTRUMENT**

The measuring instrument used in this study assessed each question in two ways: firstly with a “Yes or No” type scale (Yes = 1 and No = 2). Secondly with a 5-point Likert type scale, ranging from strongly disagree (1) to strongly agree (5). The respondents indicated the degree to which they agreed or disagreed with each statement made. The demographic information collected included the following:

- Gender;
- Race;
- Age;
- Highest qualification;
- Employment level; and
- Years of experience.

To ensure that the research questions were answered and objectives met, a research mapping was done (Tables 5; 6 and 7) which linked the responses to each research question, objective(s) and aim of the study.

## **4.3 RESEARCH FINDINGS**

A total of 100 questionnaires had been issued or distributed to management and employees of Sibanye Gold division (i.e. Cooke, Driefontein and Kloof operations) purposefully selected to participate in the study. Of the 100 questionnaires distributed, 91 were returned giving a 91% response rate. This response rate was arguably good, given that a questionnaire had been used as a data collection tool and participation was on voluntary basis.



### 4.3.1 Sample Description

The demographic section of the questionnaire gathered information on the participants to be used to explain some phenomena for the interpretation of the results. Approximately 60% of the participants were male while 40% were female. The gender profile of the sample shows that both genders were fairly represented in the sample as shown in Fig 7. All the predominant races found in the organisation were represented in the sample as shown in Fig 8, with the majority of participants being African (Black).

The age profile of the sample spanned across all age categories (Fig 9), thus employees of diverse experience levels participated in the survey (Fig 10). The significance of these characteristics of the sample was that, diverse perspectives were obtained which provided valuable insights on the underlying organisational overtime management practices.

The sample consisted of general workers, junior management, middle managers and senior managers without inclusion of top management (Fig 11). 85% of the participants had qualifications equal to a diploma or lower. This piece of data was insightful on the imperativeness of organisational training and educational training practices on the management of overtime, given that it wouldn't be anticipated that employees would have possessed inherent knowledge about the importance of overtime management (given the Qualification profile of the sample in Fig 12).

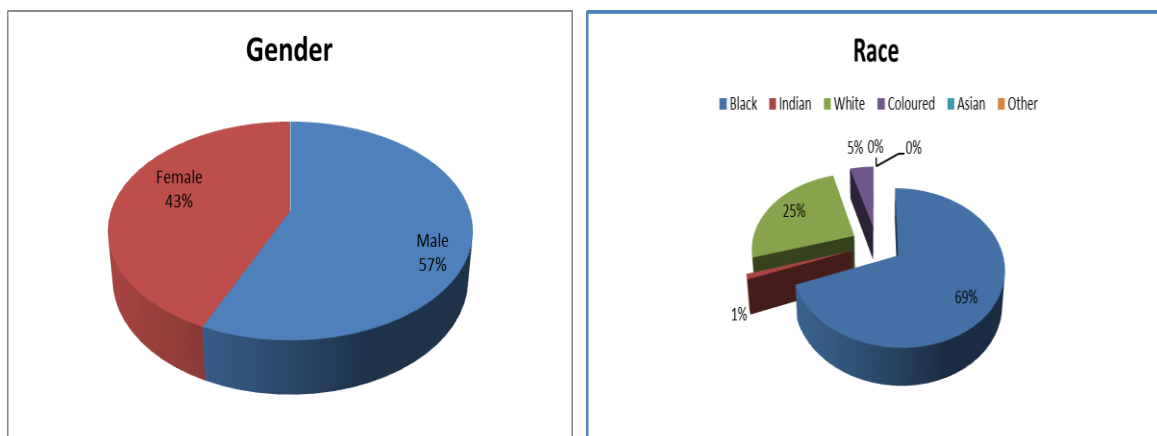


Figure 7: Sample Gender

Figure 8: Sample Race

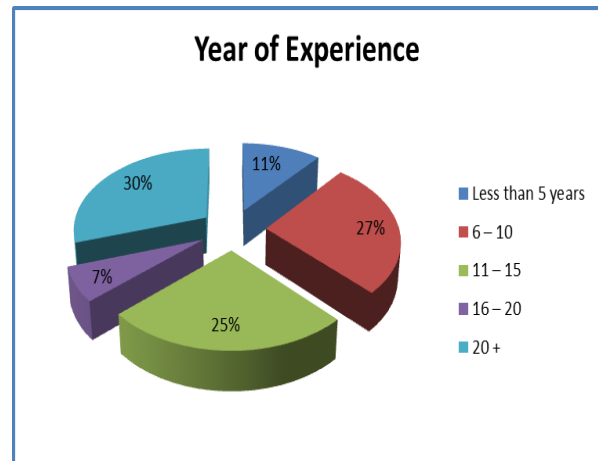
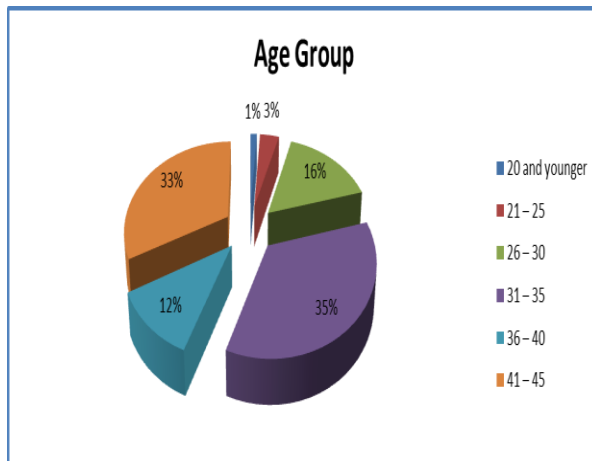


Figure 9: Sample Age groups

Figure 10: Years of Experience

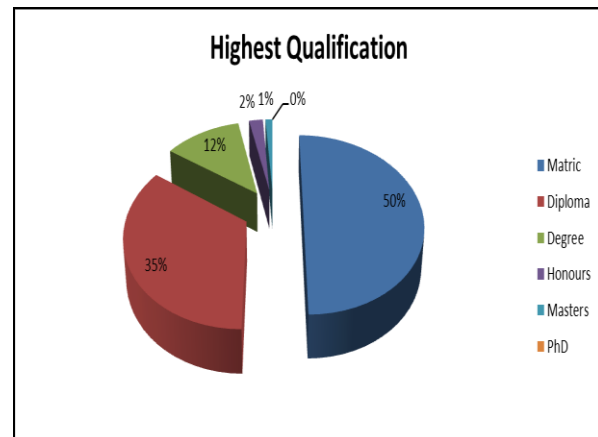
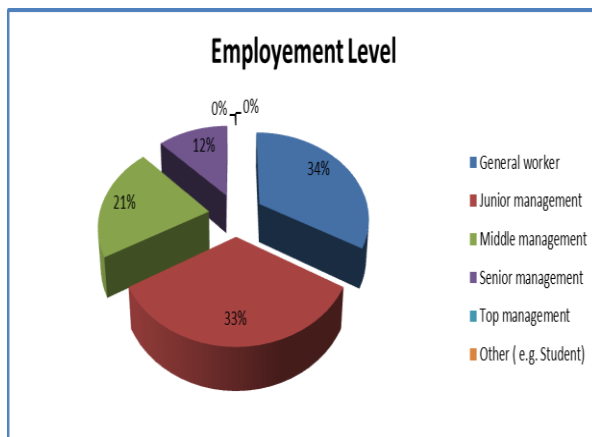


Figure 11: Employment Level

Figure 12: Highest Qualification

The basic statistical discription of the sample reveals that the sample obtained was arguably, robust enough to enable quality,vigorous and trustworthy intrepretations as well as conclusions to made on the case organisational overtime management practices.

### 4.3.2 PARTICIPANTS' RESPONSES TO THE QUESTION IN PART A

Part A of the questionnaire had six questions. Table 3 below shows the frequency with which each response against each question occurred.

Table 3: Responses gathered from Questions in Part BA

Questions	Description of question	Yes Percentages %	No Percentages %	Missing %
1	Poor overtime planning is impacting Sibanye Gold Free cash negatively	82.4	17.6	0.0
2	Overtime procedure state that compensation overtime should be granted only in essential circumstances to meet the operational needs of the company, and should not be part of normal working hours	82.4	17.6	0.0
3	Poor overtime management by line supervisors have major financial impact on the business	74.7	25.3	0.0
4	Communication regarding the impact of overtime on the company's free cash is properly communicated by my superiors or HOD	44.0	54.9	1.1
5	The perception that a majority of sections within Sibanye Gold less adhere to the budget alignment when requesting/performing overtime	68.1	29.7	2.2
6	Will you recommend or agree that the current overtime policy does work effectively in dealing with over expenditure of overtime across sections	53.8	46.2	0.0

A majority of the respondents (82%) agreed with the statement 'that poor overtime planning was impacting Sibanye Gold's free cash negatively'. A similar response pattern was obtained for the second question. These responses provided insights into the organisational overtime management practices. The first insight obtained was that the case organisation had a formal overtime management process in place with a documented policy. Secondly, the application of the overtime management process must have been ineffective for the majority of research participants to agree that poor planning of overtime was impacting the organisational free cash negatively. The respondents displayed an understanding of the impact of poor overtime management on the firm's financial performance. This induction is substantiated by the responses

gathered regarding question 3, on the overtime management practices by supervisors. Approximately 75% of participants appreciated that there was a role that supervision (leadership) had to play in the governance of overtime. Further, these responses highlighted that according to the participants' views, leadership was not providing effective management of overtime.

The problem of leadership in overtime management was further substantiated by the responses obtained on the fourth question which probed on leadership communication practices regarding overtime management and its impact on the organisation. In this regard, a majority of participants disagreed with the statement that heads of departments and supervisors communicated properly, the impact of overtime on the organisational bottomline. While a majority of respondents (68%) agreed that most cost areas (sections in the organisation) did not comply with the organisational processes, 53% felt that the organisational overtime management policy was working effectively (based on Q5 and Q6 responses).

#### **4.3.3 PARTICIPANTS' RESPONSES TO THE QUESTION IN PART B**

Part B of the questionnaire had seven questions that used a Likert scale responses framework. Table 4 below shows the frequency with which each response against each question occurred.

Table 4: Response gathered from Questions in Part BB

Questions	Description of question	Disagree strongly %	Disagree %	Neither agree nor disagree %	Agree %	Agree strongly %	Missing (%)	Mean	Standard Deviation
1	Remunerated overtime within Gold division (Witwatersrand) poses significant financial implications for the employer, especially when production is not improving	0.0	8.8	8.8	45.1	37.4	0.0	4.11	0.900
2	The income generated through remunerated overtime is viewed by supervisors and generalist as part of their salary packages	6.6	15.4	17.6	36.3	22.0	2.2	3.53	1.197
3	Consider the automation of overtime process to effectively deal with employees allowed to book their own overtime without supervision and relevant signatures	20.9	17.6	7.7	25.3	28.6	0.0	3.23	1.543
4	Using rewards and incentives to promote better work execution and the achievement of seat goals without overtime will solve the current overtime problems	3.3	12.1	13.2	39.6	31.9	0.0	3.85	1.105
5	Schedule enough staff members during each shift to ensure all necessary job functions are met with no need for overtime work is critical	3.3	7.7	11.0	41.8	36.3	0.0	4.00	1.043
6	Continuous overtime management and improvement will ultimately reduce unnecessary overtime within the system	0.0	9.9	7.7	41.8	38.5	2.2	4.11	0.935
7	Lack of resources, capacity, competence, poor leadership and failing to challenge the status- quo is a serious problem in controlling overtime	1.1	8.8	7.7	37.4	44.0	1.1	4.16	0.982

82% of respondents agreed and or strongly agreed that overtime poor management had a negative impact on the organisational financial performance. The proportion of people that felt this way was precisely similar to the responses obtained in Part A question 1. This revealed consistency in responses obtained from the participants thus their responses were trustworthy. The fact that 60% of the participants affirmed that overtime earnings were generally perceived as part of salary packages highlighted a habitual overtime practice in the organisation. Furthermore, it indicated

poor or ineffective overtime management practice in the organisation. Fairly mixed sentiments were obtained regarding the requirement for an automated overtime management system. The researcher interpreted these mixed feelings as arguably, arising from varying levels of understanding of what automation of overtime management would entail.

The majority of respondents believed that correct application of incentives and rewards could be a solution to the organisational overtime management problem. Responses on question 5 were largely affirmative that scheduling enough staff members would reduce the use of overtime in the organisation as well as continuous overtime management (question 6). Responses to question 5 and 6 respectively, highlighted that overtime was used to compensate for labour shortages in the organisation and that existent overtime management practices were not effective. Respondents cited resources constraints as an underlying issue in overtime management and practice in the organisation.

#### **4.3.4 Research Findings Pertaining To Objective 1**

Research objective 1 was to obtain management and employees' perspectives on the existence of overtime management processes and systems in the organisation. Table 4 below shows how this research objective was related to research questions and findings. This research objective was met through the responses obtained from the three research questions. Sentiments obtained (Table 5), resonated around three broad themes:

- ❖ Overtime Governance (i.e. systems, processes and practices).
- ❖ Participant knowledge on organisational overtime management.
- ❖ Leadership practice in overtime management.

Participants' highlighted the existence of overtime governance structures in the organisation. While respondents appreciated the impact of overtime on the firm's financial bottom line as well as the importance of overtime management practices,

they gave mixed sentiments regarding remarking on the effectiveness of the organisational overtime policy in reducing overtime expenditure.

Table 5: Findings pertaining to research objective 1

Research Aim	Research Objective	Research Question	Related question in the questionnaire	Sentiments form the participants	Broad Themes
To investigate, the perspectives of management and employees on the overtime management practices in Sibanye Gold Ltd	1.Obtain management and employees perspectives on the existence of overtime management processes and systems in the organisation.	1.Does Sibanye have overtime management systems and processes in place to effectively manage overtime in the organisation?	BA1;BA2;BA4;BA5;BB2;BB3;BB4;BB5;BB6;BB7	Overtime-Budgeting/Planning Habitual overtime practice Resources Planning Automated overtime management Policies and procedures Management Controls	Overtime Governance Knowledge on overtime management
				Management communication Rewards/Incentives vs. Overtime Management Controls/Reviews	Leadership in Overtime Management
		2.Do management and employees of the organisation appreciate the impact overtime management has on organisation financial performance?	BA1;BA3;BA5;BA6;BB1;BB2;BB4;BB6	Familiarity with practices Appreciation of overtime impact on the business Buy-in on overtime management practices	Knowledge on overtime management Leadership in Overtime Management
		3.How effective are the overtime management systems and processes employed by the organisation in curbing overtime abuse and over expenditure?	BA1;BA4;BA5;BA6;BB1;BB2;BB3;BB4;BB5;BB6;BB7	Familiarity with practices Appreciation of overtime impact on the business Buy-in on overtime management practices	Leadership in Overtime Management Knowledge on overtime management



#### **4.3.5 Research Findings Pertaining To Objective 2**

Research objective 2 was to assess the levels of appreciation by management and employees, of the significance of overtime management in the realisation of financial goals. This objective was achieved through the responses to questions related to research question 2, i.e. 'Do management and employees of the organisation appreciate the impact overtime management has on organisation financial performance?' as shown in table 6 below. The sentiments gathered resonated around the broad themes of:

- ❖ Participant knowledge on organisational overtime management.
- ❖ Leadership practice in overtime management.

The responses obtained showed that the participants had knowledge about the organisational overtime management practices and the impact overtime management had on the financial bottom line of case company.

It was emergent from the sentiments obtained that leadership practices in communication and educating organisational employees on overtime governance as well as its significant impact on the financial performance in the organisation were not satisfactory. Related to this finding was that organisational resources were a constraint that led to use of overtime to compensate for human resources shortages. The infrequent communication by the leadership to subordinates on the overtime problem and the controls to be applied would debatably, suggest that the leadership might have been aware of the human resources shortages. This would possibly explain why the use of overtime had been permitted to become a habitual practice in the organisation.

Table 6: Research findings pertaining to research objective 2

Research Aim	Research Objective	Research Question	Related question in the questionnaire	Sentiments form the participants	Broad Themes
To investigate, the perspectives of management and employees on the overtime management practices in Sibanye Gold Ltd	2 Assess the levels of appreciation by management and employees, of the significance of overtime management in the realisation of financial goals.	2.Do management and employees of the organisation appreciate the impact overtime management has on organisation financial performance?	BA1;BA3;BA5;BA6;BB1;BB2;BB4;BB6	Management communication Rewards/Incentives vs. Overtime Management Controls/Reviews	Leadership in Overtime Management
				Familiarity with practices Appreciation of overtime impact on the business Buy-in on overtime management practices	Knowledge on overtime management

#### **4.3.6 Research Findings Pertaining To Objective 3**

Research objective 3 was to gather management and employees' opinions on the effectiveness of overtime management in the case organisation. Like research objective 1, this research objective was met through the responses obtained from the three research questions. Sentiments obtained (Table 7), resonated around three broad themes:

- ❖ Overtime Governance (i.e. systems, processes and practices).
- ❖ Participant knowledge on organisational overtime management.
- ❖ Leadership practice in overtime management.

The participants provided insights into the existence of overtime governance practice in the organisation. However, the overtime management systems, processes and practices did not result in effective management of the overtime in the organisation. This is substantiated by the fact that 82% of the participants agreed that 'poor overtime planning was impacting Sibanye Gold free cash negatively' as well as 75% of respondents agreeing that 'poor overtime management by line supervisors had a major financial impact on the business'.

The consistence in the responses provided in similar questions asked in different parts of the questionnaire according to the researcher's evaluation, makes the participants opinions trustworthy and warranting acceptance as being valid.

Table 7: Findings pertaining to research objective 3

Research Aim	Research Objective	Research Question	Related question in the questionnaire	Sentiments form the participants	Broad Themes
To investigate, the perspectives of management and employees on the overtime management practices in Sibanye Gold Ltd	3To gather management and employees' opinions on the effectiveness of overtime management in the case organisation.	1.Does Sibanye have overtime management systems and processes in place to effectively manage overtime in the organisation?	BA1;BA2;BA4;BA5;BB2;BB3;BB4;BB5;BB6;BB7	Overtime-Budgeting/Planning Habitual overtime practice Resources Planning Automated overtime management Policies and procedures Management Controls	Overtime Governance Knowledge on overtime management
				Management communication Rewards/Incentives vs. Overtime Management Controls/Reviews	Leadership in Overtime Management
		2.Do management and employees of the organisation appreciate the impact overtime management has on organisation financial performance?	BA1;BA3;BA5;BA6;BB1;BB2;BB4;BB6	Familiarity with practices Appreciation of overtime impact on the business Buy-in on overtime management practices	Knowledge on overtime management Leadership in Overtime Management
		3.How effective are the overtime management systems and processes employed by the organisation in curbing overtime abuse and over expenditure?	BA1;BA4;BA5;BA6;BB1;BB2;BB3;BB4;BB5;BB6;BB7	Familiarity with practices Appreciation of overtime impact on the business Buy-in on overtime management practices	Leadership in Overtime Management Knowledge on overtime management

#### 4.4 QUALITY CONTROL MEASURES

The completed questionnaires were scrutinized for quality with particular focus on the level of respondent engagement during completion of the questionnaire. There were no quality issues warranting disqualification of any respondent. Some of the unstructured portions of questionnaires were returned incomplete. There was no evidence of non- engagement by the respondents when completing the questionnaire. A case of being not engaged would have been observable through provision of the same responses in a majority of questions.

Some questions in the questionnaire were deliberately similar or related designed to tests the level of consistence in the responses provided as shown in Table 8.

Table 8: Quality Control Measures

	<b>Test question</b>	<b>Related Question</b>	<b>Related Question</b>
	BA1. Poor overtime planning is impacting Sibanye Gold Free cash negatively	BB1. Remunerated overtime within Gold division (Witwatersrand) poses significant financial implications for the employer, especially when production is not improving	BA3. Poor overtime management by line supervisors have major financial impact on the business
% Affirmative Response.	82.4%	82.5%	75%
% Negative Responses	17.6%	17.6%	25%

It is apparent from response pattern obtained from related questions that there was a high level of consistency in how the questions were answered. This consistency makes a good case for arguing trustworthiness, rigor and quality of the findings of this research.

## **4.5 CHAPTER CONCLUSION**

This chapter discussed the research findings of the research. The sample characteristics were described based on the 91% responses gathered from the 100 questionnaires distributed. The demographic distribution of the sample revealed the diversity of the sample obtained, which aided research rigor through the variety of perspectives obtained. Three broad themes emerged from the sentiments i.e. Overtime Governance (i.e. systems, processes and practices), Participant knowledge on organisational overtime management and Leadership practice in overtime management. The findings were discussed relative to the research objectives. The summary of the findings is that:

- ❖ The organisation had formal overtime governance structures in place.
- ❖ The respondents were familiar with organisational overtime management practices.
- ❖ Respondents appreciated the impact of overtime on the organisational financial performance.
- ❖ Sentiments were largely that the existing overtime management governance structures were not applied effectively in the organisation to curb overtime mismanagement and over expenditure.

These findings and their implications will be considered in detail in the next chapter.

## **CHAPTER 5**

### **5 CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 CHAPTER INTRODUCTION**

The research problem in this study was defined as being that organisations often lack systems and processes for management of overtime and or do not effectively apply adopted overtime management controls, resulting in financial risk to the organisation, arising from over expenditure and diminished profitability. In this research report the methodological process followed in resolving the research problem was discussed. In this chapter, the research main findings will be discussed and conclusions drawn relative to the research aim and problem. The implications of the conclusions drawn will be provided and recommendations for the organisation and future research made.

#### **5.2 SUMMARY OF MAIN FINDINGS**

By way of recapping, the research aim was to qualitatively obtain management and employees perspectives on overtime management practices at Sibanye, the selected case gold mine in the Witwatersrand Basin. This aim was achieved through realisation of three research objectives were formulated i.e. to:

- ❖ Obtain management and employees perspectives on the existence of overtime management processes and systems in the organisation;
- ❖ Assess the levels of appreciation by management and employees, of the significance of overtime management in the realisation of financial goals within the organisation, and
- ❖ Gather management and employees' opinions on the effectiveness of overtime management in the case organisation.

Management sentiments described in the preceding chapter revealed the following broad themes regarding overtime practices in the case organisation:

- ❖ Overtime Governance (i.e. systems, processes and practices).
- ❖ Participant knowledge on organisational overtime management.
- ❖ Leadership practice in overtime management.

These themes are considered in detail in the following sections of this chapter.

### **5.2.1 Overtime Governance(Systems, Processes And Practices)**

The participants essentially overwhelmingly agreed that the organisation had overtime management systems, processes and practices in place. The use of organisational overtime was habitual, rationalised around offsetting human resources capacity constraints. This habitual overtime practice affirmed the findings made by Hart (2004) that, for some employees, overtime is an inherent requirement of their jobs. ). The findings of this study further gave support to what Olivia and Sterman (1999) had identified that, the combination of hiring policies that are cautious, recruitment delays, and prolonged training requirements impact on service capacity to react to changes in demand. In the case organisation, the constraint of human resources was highlighted as underpinning the overtime practice in the organisation. While this may be the case in the case organisation, the requirement to appraise every overtime work is critical if the cost is to be minimised.

In spite of the existent overtime management structures in the organisation, there was an acknowledgement that the overtime cost remained a major threat in the organisation thus suggesting that the employed overtime governance structures were not effectively applied to ensure that the overtime financial risk was mitigated. This finding and conclusion affirmed the existence of the research problem in the case organisation from the perspectives of respondents. Based on the findings of this study, it is apparent that an organisation could have overtime governance structures in place, however, the risk of overtime would remain unless the governance structures are applied effectively and consistently throughout the organisation.

### **5.2.2 Knowledge on Organisational Overtime Management**

The participants demonstrated an understanding of the organisational overtime management practices and processes in place. They also appreciated the impact overtime had on the financial bottom line of the organisation. However, this knowledge did not translate into an effective overtime management practice in the organisation as the responses acknowledged that overtime had become perceivable as part of standard salary by employees. The participants gave balanced views on the requirement for automation of overtime management in the organisation despite



acknowledging that line supervisors were not managing the use of overtime effectively. These mixed sentiments on the need to automate overtime management could have possibly been shaped by the widespread sentiment that the unavailability of resources was what led to excessive overtime work in the organisation. It is also possible that the participants did not fully understand what overtime would entail for them to see it as the solution. However, this study did not gather the facts that could explain any causality with certainty.

Though participants expressed that their leaders did not communicate the overtime information regularly, the knowledge of the financial impact of overtime on the organisational bottom-line was clearly understood. This was also despite the fact that the 50% of the participants had a Matric certificate as their highest qualification. Given that 89% of the participants had six years or more experience, it would seem that the knowledge on overtime could have been acquired experientially than through formal education or training within the organisation given that working overtime was a habitual practice in the organisation.

### **5.2.3 Leadership in Overtime Management**

It emerged from the responses obtained that leadership did not play a visible role in the management of overtime. This is backed by the fact that 75% of respondents agreed with the statement that supervisors were not planning overtime effectively. On the other hand the leadership of the organisation had formalised the governance of overtime in the organisation. This would suggest that there was an appreciation by leadership that overtime management was imperative for financial performance. With the management practice in place in the organisation yet over expenditure on overtime continued, the question that arises is: were the leaders of the organisation comfortable with overtime expenditure from a point of view that the benefit was in the saving from recruitment? It would have been expected that stricter measures would be taken to curb the habitual overtime practice in the organisation given the high levels of understanding by employees and managers of its impact on the organisational finances. Leadership of the organisation had allowed the overtime practice to become habitual to an extent that earnings from overtime were now viewed as part of standard remuneration.

## **5.3 CONCLUSIONS, AND RECOMMENDATIONS**

### **5.3.1 Conclusions.**

The aim of the study which was to obtain participants perspective on organisational overtime management practice was realised through the three research objectives of the study. I was concluded based on the findings that the organisation had overtime governance structures in place which included an overtime policy and approval framework. However, the organisational practices was defined by a culture of habitual overtime that line supervisors allowed to proliferate with a rationale of offsetting human resources shortages in the organisation. The study led to the conclusion that the research problem that stated that organisations make use of overtime, however without controls for ensuring that the benefit from the practice are realised indeed exists. Though any organisation may have formal overtime governance structures in place it emerged that the management controls for ensuring that processes and practices were applied effectively emerged as an overtime management imperative.

### **5.3.2 Recommendations.**

Based on the findings and conclusions of this study the researcher recommends the following:

- ❖ The organisational leadership needs to play a much more active role in championing overtime management in the organisation in order to mitigate not only the financial risk of overtime but also the legal compliance aspect.
- ❖ All key role players need to be trained and or refreshed on the organisational overtime management protocols.
- ❖ The existing overtime practices need to be audited for any possible legal non-compliance as far as the limit of permissible overtime hours and the compensation thereof are concerned.
- ❖ Overtime vs. recruitment of permanent labour trade off study needs to be conducted in the case organisation, taking into account the risks associated with overtime, for a proper decision to be taken on whether the current habitual practice was beneficial to the organisation.

## **5.4 LIMITATIONS**

The subject of overtime management has been studied from a human resources management point of view with a view of legal compliance. There was thus a dearth of existing literature on overtime management taking holistic human resources, legal and financial approach to base this study on. The sampling strategy yielded a 91% response rate making the sample size considerably large for a qualitative study. As a result, deeper insights on the subject may have been missed due to data collection technique employed. The constraint of resources caused the researcher to use a questionnaire to collect data as opposed to interviews which would have been ideal for a qualitative study. Use of interviews would have required an interviewer from outside the organisation for subjectivity to be eliminated given that the researcher was an employee of the case organisation. The design of the questionnaire was limited in its capacity to collect valuable and detailed qualitative data, though a pilot study was conducted in an attempt to enhance the robustness of the questionnaire.

## **5.5 IMPERATIVES FOR FUTURE RESEARCH**

Future studies on overtime management need to dwell deeper into the cost benefit trade off of overtime usage in organisation. A quantitative study is recommended that will model the limit point of the overtime benefits to define that level of overtime usage point where it would become cost effective to actually hire a person. Improvements on this study could be done by overcoming the limitations identified, that is, through an interview approach as opposed to use of a questionnaire. While the scope of this research was limited to overtime, future studies could broaden the scope to investigation of cost management practices in organisations in general.

## **5.6 CHAPTER SUMMARY**

In this chapter, a detailed analysis and interpretation of the main findings was done in the context of the research aim and objectives. Three emergent themes from the findings resonated around overtime governance, knowledge of overtime management practices in the organisation and leadership role in overtime management.

The conclusions drawn based on the findings were that participants were essentially familiar with organisational overtime management practices and appreciated the impact of overtime on the financial bottom line. The case organisation had formal overtime governance structures however the practices in management of overtime were not effective in dealing with the risks that arise from excessive use and or abuse of overtime. Recommendations were made based on the emergent issues from the findings. The research limitations were identified and discussed and the extent to which they impacted on the validity of the findings presented. The chapter was concluded by identifying the imperatives for future research. This chapter also marks the conclusion of this research report with addenda to follow in the subsequent sections to aid understanding of the report.

## REFERENCE LIST

### LIST OF SOURCES

American Payroll Association. 'Time and Attendance'. Accessed from:

<http://thepayrollcenter.com/payroll-solutions/time-and-attendance/>

Date Accessed: 24 August 2018.

Arnold, J.T., 2009. Reining in overtime costs. *Retrieved August, 6, p.2011.*

Bailey A. 'How to manage overtime more effectively'. Accessed from:

<https://www.thebalancesmb.com/four-ways-to-manage-overtime-more-effectively-13978> Accessed on: 29 August 2018

Basic Conditions Of Employment Act No 75 of 1997, Accessed from:

<http://www.labour.gov.za/DOL/legislation/acts/basic-conditions-of-employment/basic-conditions-of-employment-act-and-amendments>

Date Accessed: 3 September 2018

Beckers, D.G., van der Linden, D., Smulders, P.G., Kompier, M.A., Taris, T.W. and Van Yperen, N.W., 2007. Distinguishing between overtime work and long work hours among full-time and part-time workers. *Scandinavian journal of work, environment & health*, pp.37-44.

Bryman, A., Bell, E., Mills, A.J. & Yue, A.R. 2011. Business research methods. Canadian ed. Toronto: Oxford University.

Cagwin, D. and M. Bouwman (2002) "The Association between Activity-Based Costing and Improvement in Financial Performance", *Management Accounting Research*, Vol. 13, No. 1, pp. 1–40.

Camden, M.C. and Ludwig, T.D., 2013. Absenteeism in health care: Using interlocking behavioral contingency feedback to increase attendance with certified nursing assistants. *Journal of Organizational Behavior Management*, 33(3), pp.165-184.

Clayton, M.C., Mawhinney, T.C., Luke, D.E. and Cook, H.G., 1997. Improving the management of overtime costs through decentralized controls: Managing an organizational metacontingency. *Journal of Organizational Behavior Management*, 17(2), pp.77-98.

Collis, J., Hussey, R., Crowther, D., Lancaster, G., Saunders, M., Lewis, P., Thornhill, A., Bryman, A., Bell, E., Gill, J. and Johnson, P., 2003. Business research methods. *Chongqing, China: University Press*. Cosier, RA and Harvey, M.(1998), *The hidden strengths in family business: functional conflict*, *Family Business Review*, 11(1), pp.75-79.

Cooper, D.R. & Schindler, P.S. 2011. Business Research Methods. 11th ed. New York, NY: McGraw-Hill.

Dick, W and Naidoo, P., 2015. 'UPDATE: World top 10 gold producers – countries and miners'. 3 February 2015. <http://www.mineweb.com/regions/europe-and-middle-east/update-world-top-10-gold-producers-countries-miners> . (Accessed 16 August 2018)

Garg, A. and A. Rafiq (2002) "Using Activity-Based Costing to Improve Performance Banking", *Accounting & Finance*, Vol. 15, No. 6, pp. 5–8.

Golafshani, N., 2003. Understanding reliability and validity in qualitative research. *The qualitative report*, 8(4), pp.597-606.

Golden, L., 2009. A brief history of long work time and the contemporary sources of overwork. *Journal of Business Ethics*, 84(2), pp.217-227.

Gregg, P., Grout, P.A., Ratcliffe, A., Smith, S. and Windmeijer, F., 2011. How important is pro-social behaviour in the delivery of public services?. *Journal of public economics*, 95(7-8), pp.758-766.

Haar, J. 2018. 'Working four-day weeks for five days' pay? Research shows it pays off'. Accessed from:

<http://theconversation.com/working-four-day-weeks-for-five-days-pay-research-shows-it-pays-off-100375>

Date Accessed: 29 August 2018

Hart, R A. 'The Economics of Overtime Working'. 2004. Cambridge: Cambridge University Press

Hanna, A.S., Taylor, C.S. and Sullivan, K.T., 2005. Impact of extended overtime on construction labor productivity. *Journal of construction engineering and management*, 131(6), pp.734-739.

Hetrick, R.L., 2000. Analyzing the recent upward surge in overtime hours. *Monthly Lab. Rev.*, 123, p.30.

Jackson, I.I., Drummond, R.E., Darlene K. & Camara, S. 2007. What is qualitative research? *Qualitative Research Reports in Communication*, 8(1):21-28.

Jacobs, J.A. and Gerson, K., 2004. *The time divide: Work, family, and gender inequality*. Harvard University Press.

James, W. and Elmezughi, A., 2010. The combined effect of costing and performance management systems on performance, moderated by strategy: Australian context. *Accounting, Accountability & Performance*, 16(1/2), p.51.

Kennedy, T. and J. Affleck-Graves (2001) "The Impact of Activity-Based Costing Techniques on Firm Performance", *Journal of Management Accounting Research*, Vol. 13, fall 2001, pp. 19–45.

Lazear, E.P., 2018. Compensation and Incentives in the Workplace. *Journal of Economic Perspectives*, 32(3), pp.195-214.

Lee, T.W., 1999. 'Using qualitative methods in organizational research'. Sage.

Leedy, P.D. & Jeanne Ellis Ormrod, J.E. 2015. Practical research: planning and design. New York, NY: Enhanced Pearson eText

Lindlof, T.R. & Taylor, B.C. 2002. Qualitative communication research methods. 2<sup>nd</sup> ed. Thousand Oaks: Sage.

Liu, Y. and Tanaka, H., 2002. Overtime work, insufficient sleep, and risk of non-fatal acute myocardial infarction in Japanese men. *Occupational and Environmental Medicine*, 59(7), pp.447-451.

Madondo, L. N. (2017) *Strategy Implementation Processes and Practises in Sibanye Gold Ltd: A Case Study*. University of South Africa.

Maiga, A. S. and F. A. Jacobs (2008) "Balanced Scorecard, Activity-Based Costing and Company Performance: An Empirical Analysis", *Journal of Managerial Issues*, Vol. 15, No. 3, pp. 283–301.

Maiga, A.S. and Jacobs, F.A., 2008. Extent of ABC use and its consequences. *Contemporary Accounting Research*, 25(2), pp.533-566.

Maja, R. 2006. A teaching and learning programme to address learning style diversity in the Natural Sciences at secondary school level. PhD-thesis. Vanderbijlpark: NorthWest University.

Marshall, C. & Rossman, G. B. 1995. Designing qualitative research. Thousand Oaks, CA: Sage.

Mine Health And Safety Act 29 of 1996. Accessed from:

[www.kznhealth.gov.za/occhealth/17242.pdf](http://www.kznhealth.gov.za/occhealth/17242.pdf) Accessed on 25 August 2018

Mitchell, M.L. & Jolley, J.M. 2001: Research design explained. 4<sup>th</sup> ed. Pacific Grove, CA: Wadsworth.

Oliva, R. and Sterman, J.D., 2001. Cutting corners and working overtime: Quality erosion in the service industry. *Management Science*, 47(7), pp.894-914.



Pazarceviren, S.Y. and Celayir, D., 2014. Target costing based on the activity-based costing method and a model proposal. *European Scientific Journal, ESJ*, 9(10).

Philip, P., 2005. Sleepiness of occupational drivers. *Industrial health*, 43(1), pp.30-33.

Quinn, M., 2002. 'The true cost of overtime'. Healthcare financial management, December 2002.

Ray, M.R. and Gupta, P.P., 1992. Activity-based costing. *Internal Auditor*, 49(6), pp.45-52.

Remenyi, D., Williams, B., Money, A. & Swartz, E. 2009. Doing research in business and management. London: Sage.

Rosa, R.R., Bonnet, M.H. and Cole, L.L., 1998. Work schedule and task factors in upper-extremity fatigue. *Human factors*, 40(1), pp.150-158.

Ryan F, 2006. 'Corporate cost cutting'. CARIBBEAN BUSINESS THURSDAY, FEBRUARY 23, 2006.

SA. 1999. Public Service Commission Report. Pretoria: Government Printers.

Saunders, M.N.K., Lewis, P. & Thornhill, A. 2012. Research methods for business students. 6<sup>th</sup> ed. Cape Town: Pearson.

Saunders, M.L., Lewis, P. & Thornhill, A., 2009. 'Research methods for business students'. , 4.

Seale, C. (1999). Quality in qualitative research. *Qualitative Inquiry*, 5(4), 465-478.

Shim, E. and A. Stagliano (1997) "Survey on Activity-Based Costing: A Survey of U.S. Manufacturing on Implementation of ABC", *Journal of Cost Management*, Vol. 11, No. 2, pp. 39–41.

Sibanye. 2004. Staffing B4 Overtime Policy. Westonaria: Sibanye.

Sibanye. 2016a. Gold Operations Labour Stats and Efficiency Reports, 2015/2016. Westonaria: Sibanye.

Sibanye. 2016b. Gold Integrated Annual Financial Statement, 2015/2016.  
[www.sibanyestillwater.co.m/financial](http://www.sibanyestillwater.co.m/financial) Accessed: 2 September 2017.

Sibanye. 2016c. Gold Technical Statement and Review Pack, 2015/2016. Westonaria: Sibanye.

Sibanye. 2017. Gold Business Warehouse Report, 2015-2017 SAP. Westonaria: Sibanye.

Sibanye. 2018. [www.sibanyestillwater.com](http://www.sibanyestillwater.com) Accessed: 10 February 2018.

Spohrer, J. and Maglio, P.P., 2008. The emergence of service science: Toward systematic service innovations to accelerate co-creation of value. *Production and operations management*, 17(3), pp.238-246.

Taljaard, M., 2016. 'Working Overtime, Understanding the Legalities'. Accessed from: <https://www.fin24.com/Finweek/Opinion/working-overtime-understand-the-legalities-20160420>

Accessed on: 29<sup>th</sup> of August 2018.

Van Rensburg, H.L.J., 2016. 'Strategy implementation practices and processes in defence evaluation and research institutes in South Africa'. University of South Africa. 2016.

Virtanen, M., Stansfeld, S.A., Fuhrer, R., Ferrie, J.E. and Kivimäki, M., 2012. Overtime work as a predictor of major depressive episode: a 5-year follow-up of the Whitehall II study. *PloS one*, 7(1), p.e30719.

Visser, A., 2017. 'How to manage overtime'. Accessed from:

<https://www.fin24.com/Finweek/Featured/how-to-manage-overtime-20171102>

Accessed on: 29<sup>th</sup> of August 2018.

Vyas, M.V., Garg, A.X., Iansavichus, A.V., Costella, J., Donner, A., Laugsand, L.E., Janszky, I., Mrkobrada, M., Parraga, G. and Hackam, D.G., 2012. Shift work and vascular events: systematic review and meta-analysis. *Bmj*, 345, p.e4800.

Watkins, D.C. 2012. Depression over the adult life course for African American men: Toward a framework for research and practice. *American Journal of Men's Health*, 6, 194-210.

White, C.J. 2003. *Research: An introduction for educators*. Pretoria: Van Schaik.

Williamson, A., Lombard, D.A., Folkard, S., Stutts, J., Courtney, T.K. and Connor, J.L., 2011. The link between safety and fatigue. *Accid Anal Prev*, 43, pp.498-515.

.

## **APPENDICES**

### **APPENDIX A: Cover letter to questionnaire**

#### **Informed consent for participation in an academic research project**

##### **Investigating overtime management practices at a selected gold mine in the Witwatersrand Basin**

Dear Respondent

You are herewith invited to participate in an academic research study conducted by Mr FS Mokheseng, a student in the Master of Business Administration at NWU's School of Business and Governance (SBG).

This study is conducted under the auspices of North West School of business and Governance as part of a Master of Business Administration. It is intended to obtain line management and employees perspectives on Sibanye Gold Ltd.'s view of overtime management process and its financial impact on the business in general. These perspectives will assist in the development of academic knowledge on strategy implementation processes and practices as well as providing management with useful information on management views on the subject.

All your answers will be treated as confidential, and you will not be identified in any of the research reports emanating from this research.

Your participation in this study is very important to us. You may however choose not to participate and you may also withdraw from the study at any time without any negative consequences.

You are requested to complete the attached questionnaire on your perceptions and perspectives on Sibanye overtime management, its implementation processes and business impact. Your responses to the questionnaire will be kept confidential. There is no requirement to provide your name in this research.

Kindly provide your honest opinions on the subject to enable the study to make useful findings on the subject of overtime management. The questionnaire will not require more than 30 minutes of your time to complete.

The results of the study will be used for academic purposes only and may be published in an academic journal. We will provide you with a summary of our findings on request.

Please contact my supervisor, Dr G Alberts at [gino.alberts@metsimaholo.gov.za](mailto:gino.alberts@metsimaholo.gov.za) if you have any questions or comments regarding the study. Please sign below to indicate your willingness to participate in the study.

Yours sincerely

Frances Mokheseng

## **APPENDIX B: Questionnaire**

### **NORTH WEST UNIVERSITY**

#### **QUESTIONNAIRE**

##### **TITLE OF STUDY**

**Investigating overtime management practices at a selected gold mine in the Witwatersrand Basin**

##### **PRINCIPAL INVESTIGATOR**

FS Mokheseng  
School of Business and Governance  
North West University  
Institutional Office  
Private Bag X1290  
Potchefstroom  
2520

[Francis.mokheseng@gmail.com](mailto:Francis.mokheseng@gmail.com) or [Francis.mokheseng@Sibanye Gold.co.za](mailto:Francis.mokheseng@Sibanye Gold.co.za)

##### **PURPOSE OF STUDY**

You are requested to take part in a research study. Before you decide to participate in this study, it is important that you understand why the research is being done and what it will involve. Please read the following information carefully and ask the researcher if there is anything that is not clear or if you need more information.

This study is conducted under the auspices of North West School of business and Governance as part of a Master of Business Administration qualification (MBA). It is intended to obtain line management and employees perspectives on Sibanye Gold Ltd.'s view of overtime management processes and its financial impact on the business in general. These perspectives will assist in the development of academic knowledge on overtime management within gold sector and practices as well as providing management with useful information on management and employees views on the subject.

## **STUDY PROCEDURES**

You are requested to complete the attached questionnaire on your perceptions and perspectives on Sibanye's overtime management practices, its impact of Sibanye's financials, production and employee's lifestyle in general. Your responses to the questionnaire will be kept confidential. There is no requirement to provide your name in this research.

Kindly provide your honest opinions on the subject to enable the study to make useful findings on the subject of overtime management and its financial impact on the business. The questionnaire will not require more than 20 minutes of your time to complete.

## **RISKS**

The foreseeable risks of one's perceptions and thoughts on the company's processes and practices being known by senior managers, which could have perceivable negative ramifications, has been mitigated by keeping the responses anonymous. It is envisaged that by not obtaining the participant's name nor employment number, it will not be possible to track the responses to the questions to any specific individual

You may decline to answer any or all questions, and you may terminate your involvement at any time if you choose.

## **BENEFITS**

The benefits of the study will be that contribution to the academic body of knowledge on the challenging subject of overtime management practices within Sibanye Gold will be achieved. Furthermore, the organisation would learn what issues is a potential threat to overtime management and thus, enable improvement on the existing processes and practices to realise implementation success. The study will also provide a platform for various levels of line management and employees to anonymously voice their thoughts and opinions on the organisational issues affecting overtime management. There will be no direct benefit to you in the form of gifts or remuneration for your participation in this study. However, we hope that the information obtained from this study may enhance the understanding of the subject of overtime management within your organisation and probably the mining industry as a whole.

## **CONFIDENTIALITY**

Your responses to this research will be anonymous. Please do not write any identifying information on your questionnaire response.

## **COMPENSATION**

There will be no remuneration or gifts offered for your participation in this study. However, your involvement in the study will be acknowledged in the final research report, which may be published by the academic institution.

## **CONTACT INFORMATION**

If you have questions at any time about this study, or you experience adverse effects as the result of participating in this study, you may contact the researcher whose contact information is provided on the first page. If you have questions regarding your rights as a research participant, or if problems arise which you do not feel you can discuss with the Primary Investigator, please contact the research supervisor, Dr Gino Alberts: [gino.alberts@metsimaholo.gov.za](mailto:gino.alberts@metsimaholo.gov.za)

## **VOLUNTARY PARTICIPATION**

Your participation in this study is voluntary. It is up to you to decide whether or not to take part in this study. If you decide to take part in this study, you will be asked to sign a consent form. After you sign the consent form, you are still free to withdraw at any time and without giving a reason. Withdrawing from this study will not affect the relationship you have, if any, with the researcher. If you withdraw from the study before data collection is completed, your data will be returned to you or destroyed.

## **Overtime management practices Questionnaire.**

### **Research Background and overview**

This study is conducted under the auspices of NWU's School of Business and Governance (SBG) as part of a Master of Business Administration programme.

It is intended to obtain line management and employees perspectives on Sibanye Gold Ltd.'s overtime management processes and its financial impact on the business in general. These perspectives will assist in the development of academic knowledge on overtime management as well as providing management with useful information on Line management and employees views on the subject.

While participation is on a voluntary basis, it is encouraged that you participate for diverse views to be obtained that are representative of the organization.

Please complete the following questionnaire honestly.



## Section A: Demographic information

Please answer the following questions by marking the relevant selection.

**NB: Mark the applicable block with a cross (X). Complete all the questions.**

### 1.1 Gender

Male	Female
------	--------

### 1.2 Race

Black	1
Indian	2
White	3
Coloured	4
Asian	5
Other	6

### 1.3 Age

20 and younger	1
21 – 25	2
26 – 30	3
31 – 35	4
36 – 40	5
41 – 45	6

### 1.4 Highest Qualification

Matric	1
Diploma	2
Degree	3
Honours	4
Masters	5
PhD	6

### 1.5 Employment Level

General worker	1
Junior management	2
Middle management	3
Senior management	4
Top management	5
Other (e.g. Student)	6

1.6 Years of experience

Less than 5 years	1
6 – 10	2
11 – 15	3
16 – 20	4
20 +	5

**MBA general information**

**Part A**

Please read each question and indicate (X) to what extent you do agree or not.

Yes	No		
1	2		
<b>Part A</b>		<b>1</b>	<b>2</b>
I believe the poor overtime planning is impacting Sibanye Gold's Free cash negatively			
Sibanye Gold overtime procedure state that compensation overtime should be granted only in essential circumstances to meet the operational needs of the company, and should not be part of normal working hours.			
Will you agree that the organisation should consider and accept that poor overtime management by line supervisors have major financial impact on the business			
Do you believe proper communication regarding the impact of overtime on the company's free cash is properly communicated by my superiors or HOD			
Is the perception that majority of sections within Sibanye Gold less adhere to the budget alignment when requesting/performing overtime			
Will you recommend or agree that the current overtime policy does work effectively in dealing with over expenditure of overtime across sections			

**Part B**

Please provide an answer (X) to each of the following questions according to the scale below:

1	2	3	4	5
Disagree strongly	Disagree	Neither agree nor disagree	Agree	Agree strongly

<b>Part B</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
The performance of remunerated overtime within Gold division (Witwatersrand) poses significant financial implications for the employer, especially when production is not improving					
The income generated through remunerated overtime is viewed by supervisors and generalist as part of their salary packages					
The company should without any delay consider the automation of overtime process to effectively deal with employees allowed to book their own overtime without supervision and relevant signatures					
Using rewards and incentives to promote better work execution and the achievement of seat goals without overtime will solve the current overtime problems					
So, schedule enough staff members during each shift to ensure all necessary job functions are met with no need for overtime work is critical					
Continuous overtime management and improvement will ultimately reduce unnecessary overtime within the system					
Lack of resources, capacity, competence, poor leadership and failing to challenge the status- quo is a serious problem in controlling overtime					

I declare that I have answered the above questions honestly and as representative of my views on the issues.

Respondent's Signature

Date

.....

.....

## APPENDIX C: Request to conduct research



KLOOF DIVISION  
SIBANYE GOLD LIMITED  
Registration No. 2002/031431/06

Business Address:  
Farm Rieffonlein  
Glenharvie • Westonaria  
1779

Postal Address:  
PO Box 190 • Westonaria • 1780

Tel +27 11 411 8000  
Direct +27 11 411 8582  
Fax +27 86 627 4496

Attention: Mr. FS Mokheseng

MBA Research Student  
North West School of Business and Governance  
North West University

Subject: Request to conduct research.

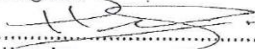
Your email dated 25 April 2017

SibanyeStillwater Senior Vice President (SVP) & Head of Finance (South African region) hereby grants you an opportunity to conduct your research within the company per your dissertation for your MBA 2017 studies.

The topic: **Investigating overtime management practices at a selected gold mine in the Witwatersrand Basin**

It will be highly appreciated if you can supply Sibanyestillwater gold section with the outcome of the research for its self-assessment.

Kinds Regards

  
.....  
Mr. P Henning  
SVP & Head of Finance (South African region)

[www.sibanyestillwater.com](http://www.sibanyestillwater.com)

Directors: Sello Moloko\* (Chairman) Neal Froneman (CEO) Chad Keyler (CFO) Timothy Cumming\* Savannah Danson\*  
Barry Davison\* Rick Menell\* Nkosemntu Nika\* Keith Rayner\* Sue van der Merwe\* Jerry Vilakazi\*  
Cain Farrel (Corporate Secretary) (\*Non-Executive)

Vat No. 473 020 9410

## APPENDIX D: Solemn declaration and permission to submit



Higher Degrees Administration

### SOLEMN DECLARATION AND PERMISSION TO SUBMIT

#### 1. Solemn declaration by student

I, Francis Seiso Mokheseng

declare herewith that the thesis/dissertation/mini-dissertation/article entitled (exactly as registered/approved title),

Investigating overtime management practices at a selected gold mine in the Witwatersrand Basin

which I herewith submit to the North-West University is in compliance/partial compliance with the requirements set for the degree:

Master of Business Administration (MBA)

is my own work, has been text-edited in accordance with the requirements and has not already been submitted to any other university.

**LATE SUBMISSION:** If a thesis/dissertation/mini-dissertation/article of a student is submitted after the deadline for submission, the period available for examination is limited. No guarantee can therefore be given that (should the examiner reports be positive) the degree will be conferred at the next applicable graduation ceremony. It may also imply that the student would have to re-register for the following academic year.

Signature of Student

University Number 23730870

Signed on this 29 day of October of 2018

#### 2. Permission to submit and solemn declaration by supervisor/promoter

The undersigned declares that the thesis/dissertation/mini-dissertation complies with the specifications set out by the NWU and that:

- the student is hereby granted permission to submit his/her mini-dissertation/ dissertation/thesis:  
☒ Yes ☐ No
- that the student's work has been checked by me for plagiarism (by making use of TurnItIn software for example) and a satisfactory report has been obtained:  
☒ Yes ☐ No

Signature of Supervisor/Promoter

Date

29/10/2018

Original details: Marietjie Ackermann\10512187\RSSupport doc\SOLEMN DECLARATION AND PERMISSION TO SUBMIT.docm 28 July 2017

File reference: 7.1.11.3.2/3

## APPENDIX E: Certificate of Veracity (Statistician)



Privaat sak X6001, Potchefstroom  
Suid-Afrika 2520

Tel: 018 299-1111/2222  
Web: <http://www.nwu.ac.za>

Statistical Consultation Services  
Tel: +27 18 299 2651  
Fax: +27 0 87 231 5294  
E-mail: [erika.fourie@nwu.ac.za](mailto:erika.fourie@nwu.ac.za)

8 March 2018

Re: Thesis, Mr. FS Mokheseng, student number: 23730870

We hereby confirm that the Statistical Consultation Services of the North-West University analysed the data involved in the study of the above-mentioned student and assisted with the interpretation of the results. However, any opinion, findings or recommendations contained in this document are those of the author, and the Statistical Consultation Services of the NWU (Potchefstroom Campus) do not accept responsibility for the statistical correctness of the data reported.

Kind regards

A handwritten signature in black ink, appearing to read 'E. Fourie'.

Dr Erika Fourie

Statistical Consultation Services