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The impact of pay on productivity and motivation on general workers in South African platinum mines

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Abstract

Pay is the main concern of employers, as it affects motivation and productivity. How well the firm motivates its workers is important in achieving the firm's set goals since motivation increases productivity. Motivated workers help make the company profitable. Pay is a powerful motivator for general workers, and no other motivation or motivational techniques is better than money. General workers' performance is driven by the motivation to exert more effort in their job. South African companies are performing poorly in investigating and implementing motivational strategies that will drive productivity and very small number of studies has been carried out in labour intensive industries, such as the mining industry.

The aim of this research was to understand if pay does have an impact on general workers' motivation and productivity. The result of this study will help South African platinum mine managers to understand what motivates general workers and can also be used by other firms in the mining industry to put together pay strategy that will motivate general workers to be more productive.

In line with qualitative research methodological principles, this study followed a non-empirical exploratory and adopted phenomenological approach in order to understand the impact of pay as a motivator for general workers. A total of 29 semi-structured interviews were held with general workers. Participants were selected from general workers that were working for the three biggest platinum mines in South Africa. These general workers were doing work that was linked with production. Permission for general workers to participate in the study was requested before commencing with the interviews and the participants were guaranteed confidentiality.

The finding of this study revealed that pay was an important and main motivator for general workers in South African platinum mine and it drives workers to be more productive. General workers will work hard if they are happy with their pay and if pay is increased regularly. The study proved that there is definitely a link between motivation and productivity. When general workers are motivated, they will work hard to achieve a set target. Good supervision and good relationships between general workers and their supervisors was found to be a second motivator for general workers.

Keywords

Pay, motivation, productivity, general workers

Declaration

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

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Name

Signature

9 November 2015

Date

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1 CHAPTER 1: INTRODUCTION TO RESEARCH

1.1 Research title

The impact of pay on productivity and motivation on general workers in South African platinum mines.

1.2 Introduction

According to Nielson and Smith (2014), employees' satisfaction with their pay is the main concern of employers, and it affects motivation and productivity. Conversations that are heard and newspapers that are read every day suggest that pay is important to employees (Gupta & Shaw, 2014). This literature supports the fact that pay plays a significant role in an organisation's performance; better pay increases motivation, which drives productivity (Stringer, Didham, & Theivananthampillai, 2011). Altman (2001) stated that companies in a mineral resource based economy that absorbs and depends on low skill labour for productivity, should pay attention to what motivates those general workers to increase their productivity.

However, literature on motivational factors in the mining industry is lacking, and Masvaure, Ruggunan, and Maharaj (2014) suggested that future research on a larger scale is required in this field. Muogbo (2013) suggested that further research should be carried out on the relationship between pay and productivity, and impact of pay on general workers' performance. South Africa is one of the faster emerging economies, and very limited research has been done in this country on pay for performance. None has been done in the mining industry (Du & Choi, 2010).

South Africa's pay and productivity are ranked the lowest in the Global Competitive Report (*The global competitive report 2014 -2015*.2014). South African mines' productivity and output have decreased over the years, due to strikes and low worker motivation (*SA mines: Highlighting trends in the South African mining industry*.2013).

Workers' motivation is known to be the main factor affecting company profitability (Tomohara & Ohno, 2013). The Efficiency Wage Model suggests that a wage increase which is higher than the inflation rate often cause an growth in labour productivity, allowing the company to maximize profits (Hennig-Schmidt, Sadrieh, & Rockenbach, 2010).

Other researchers suggested that an engaged employee become more devoted to their job which increase result to high productivity (Masvaure *et al.*, 2014). Adelakun (2014) argued that even engaged workers must be motivated to obtain better performance from them.

When considering the importance of pay to motivation, and therefore productivity, the following questions arise: Whether pay does motivate general workers? If it does not motivate general workers, what else other than pay motivate general workers?

The finding of this research proved that pay has a substantial impact when it comes to motivating general workers in South African platinum mines, consequently driving their productivity. In the absence of good working condition underground, general workers are motivated by pay to exert more effort towards their in expectation of good pay. Because their working conditions underground are so bad, these workers expect their pay to make up for it.

1.3 Research problem

Problem statement: How well a firm motivates its workers is important in achieving the firm's set goals since motivation increases productivity (Muogbo, 2013). Surprisingly, no research has been done to investigate the correlation between pay, motivation and productivity of general workers in South African platinum mines. General workers' performance is a very significant factor that driving platinum mines profitability (Jayaweera, 2014). Pay has been suspected to be the main factor that has an impact on general workers' motivation, but no research has been done in labour intensive industries such as mining (Danish, 2010).

Thwala and Monese (2012) argued that general workers are companies' most valued asset and this is particularly true in high labour intensive industries such as mining. Yet, general workers are the most challenging resource to manage. Mining is an industry with challenging job characteristics, which could have negative effects on general workers motivation (Alexander, 2013). Mine managers should understand what motivates general workers in order to prevent business interruptions such as the strike that affected South African platinum mines productivity in 2012 (Global Data, 2012)

According to Manzoor (2011), workers' performance is driven by the motivation to exert more effort in their job in order to increase the firm's profitability. Any labour intensive industry is mainly dependent on people power to achieve its productivity and profitability (Arnolds & Boshoff, 2002). The majority of South African companies are performing poorly in investigating and implementing motivational strategies that will drive productivity and small number of studies has been carried in labour intensive industries, especially the mining industry. (Thwala & Monese, 2012). Arnolds and Venter (2007) suggested that a well-crafted and executed pay structure is management's most powerful tool to motivate workers to achieve an organisations' goal.

There are obviously risks associated with high pay in the mining industry. According to Morgan (2014), the labour cost of the South African platinum mining industry has increased substantially to about 70% of total mine cost while productivity has decreased. It is crucial that managers manage this labour cost increase. The increase in labour costs caused by the attempt to motivate general workers must yield a desired increase in productivity in order to avoid profit losses. According to Lazear (2000), profit increases of firms that adopt pay to motivate workers depend on increases in productivity in relation to the rise in labour costs, provided all other costs remain unchanged.

1.4 Research aim and objectives

In motivating workers, it is essential to know what is that motivates workers, and then implement a motivational programme that is aligned with the organisation's business goals (Cong & Van, 2013). Many researchers have investigated factors that influence motivation and productivity, but very few have researched the impact of pay as a motivator of general workers, and how motivation translates to workers exerting more effort in their jobs (Masvaure, Ruggunan, & Maharaj, 2014).

This research study considered three private companies to further the research that has been done in South Africa and other countries. The first objective of this research was to understand if pay does have an impact in general workers' motivation. Understanding what motivates general workers is a tool that can be used by many firms in the mining industry, and enable them to effectively use the findings to motivate general workers to be more productive.

The second objective was to discover if there is a link between motivation and productivity of general workers in platinum mines. The third object was to establish if there are any other motivational factors that motivate general workers in platinum mines. The core research objectives were to:

- understand whether pay and pay increases motivate general workers;
- determine the relationship between pay and motivation of general workers;
- understand whether motivation can increase general workers' productivity;
- understand what, other than money, will satisfy general workers;
- investigate the gap in the literature regarding pay and motivation of general workers; and
- contribute to the body of existing knowledge in this regard.

The evidence collected allowed the researcher to formulate an argument on the impact of pay to motivation and productivity of South African platinum mine general workers. Data collected also allowed the researcher to formulate arguments about other motivational factors that South African platinum mine general workers deemed to be important to their productivity.

1.5 Scope of the research

The scope of this study was restricted to South African platinum mine general workers. The study excluded office workers who are not expected to be involved with production on surface or underground even if they were classified as general workers. The study also excluded all other skilled employees even if there were directly linked with production. Only the three big platinum mine producers were included in the study. The study also focused pay as the motivator but also investigated other motivational factors that could influence general workers' productivity.

1.6 Summary

Different theories of motivation will offer a strong theoretical foundation for this study. Theories related to the use of pay to motivate workers to be productive and to achieve companies' objectives will be discussed. The motivation theories that will be discussed in the next chapter include Maslow's hierarchy of needs, Herzberg's two-factor theory, McClelland's theory of needs, and expectancy theory.

2 CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The principal aim of this study was to find out the impact of pay on productivity and motivation on general workers in South African platinum mines. This chapter covers literature concerning the relevant research questions, and indicates how the different questions relate to the research problem. It explores the different motivational theories, delving into the theory of productivity, and describes the state and history of the industry in which this research was carried out. The literature reviews provided arguments that resulted in the current research study.

The literature reviewed in this research paper focused on the field of pay, motivation, and productivity. Both literature in favour of and against the notion of a relationship between pay, motivation, and productivity was discussed.

The literature review was organised into sections. It first looked at platinum mines, general workers, motivation theories and then productivity theories. The literature presented previous research on studies on pay, motivation, productivity, relationship between pay and motivation, and relationship between pay and productivity. Finally, the literature on other factors affecting motivation such as engagement and psychological contract were reviewed but were not tested on this research study.

2.2 Platinum Mines

Nattrass (1995) argued that it is acknowledged that the mining industry is the core of the South African economy and a mainstay of general labour in the country. The South African platinum industry has grown remarkably and became one of the largest sectors of the national mining industry in employment of general workers (Capps, 2012). South African platinum mines make up the largest percentage of global primary platinum production with the supply of 75% of the primary platinum produced mainly by Anglo American Platinum, Impala Platinum and Lonmin PLC (Cowley, 2013).

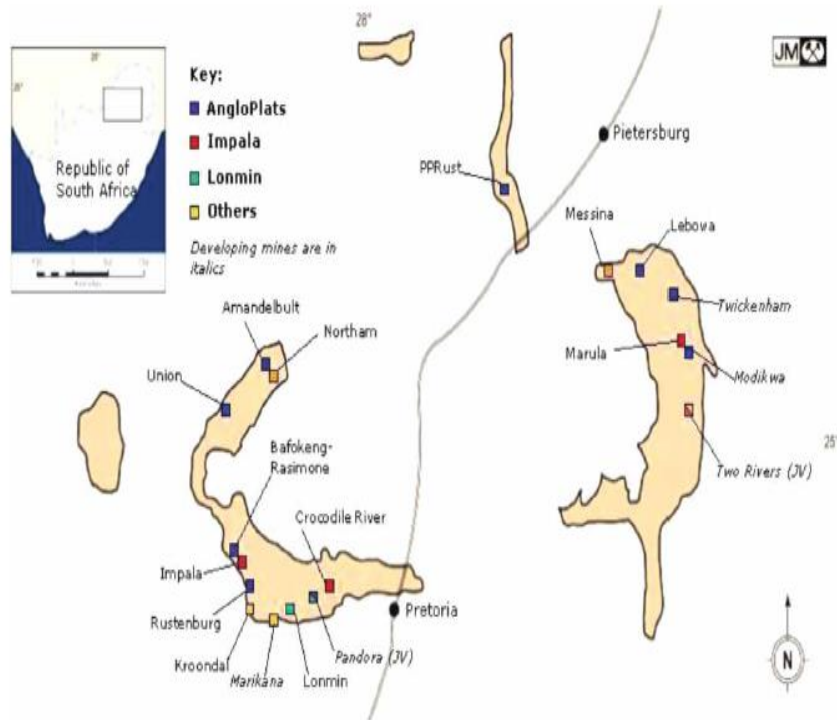


Figure 1: The Bushveld Complex and its platinum mines

Source: Johnson and Matthey Annual report, 2002

2.3 General workers

Winkler, Busch, Clasen, and Vowinkel (2014) defined general workers as personnel who lack professional education and who are not capable of working in higher-level jobs, also as low-skilled workers who are generally at a high risk for injuries and disease. Nielson and Smith (2014) defined general workers as employees who perform manual labour, and they have limited or no education.

Altman (2001) suggested that South Africa is a mineral resource based economy that absorbs low skilled labour. This was supported by Ogujiuba, Adebayo, and Stiegler (2014), who conducted research in the mining sector and concluded that general workers are the key drivers of production in a mining sector.

Mining companies should ensure that general workers are motivated to exert effort, since that is the key factor in production (Nielson & Smith, 2014). Factors that contribute negatively to performance and productivity in platinum mines are labour unrest, poor labour management relations, and failure to comply with health regulations (Ogujiuba, *et al.*, 2014).

Thwala and Monese (2012) stated that general workers are mine's most valuable asset. They also acknowledged that general workers are difficult to manage because they have personal needs that must be met, and behaviours that must be managed if workers are to be effective in production and contribute to the mine's growth.

2.4 Motivation theories

Motivation theories provided a theoretical base for this research study regarding the use of pay to motivate employees (Boachie-Mensah & Dogbe, 2011). There are many motivation theories, and the most relevant theories to this research were acknowledged and their perspectives were discussed.

Need theories related to motivation (Herzberg, 1968; Maslow, 1970; McClelland, 1976) attempted to explain what motivates workers (Lunenburg, 2011). However, expectancy theory emerged as motivation theory that suggests there is a close alignment of workers' motivation to the organisation's goals (Bassett-Jones & Lloyd, 2005; Lunenburg, 2011). Bassett-Jones and Lloyd (2005) suggested that expectancy theory emphasised that pay is a critical motivator. Although it was not clear at what level in a company pay becomes critical for motivation, the fact remained that pay is a motivator (Chang, 2011).

2.4.1 Maslow's hierarchy of needs

Maslow's categorised the different needs of humans into five basic groups, organised in a hierarchy as indicated in figure 2 below (Maslow, 1943).

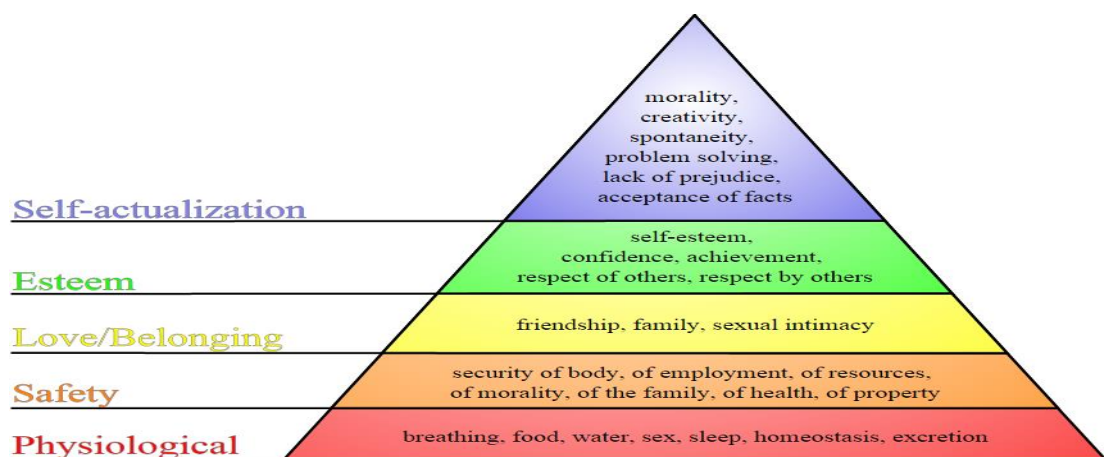


Figure 2: Maslow's hierarchy of needs

Source: Maslow, 1943.

People first consider their physiological needs (food, water, shelter, and other bodily needs); these are at the bottom of the hierarchy. The second need is safety — the need for a secure and reliable surroundings and the setting that has no pain, threat, or illness. Social needs include the need for affection, acceptance, and friendship. Esteem needs includes confidence through success and external factors such as status and recognition. The last need is self-actualisation, which is the need for self-fulfilment — a notion that one's potential has been accomplished (Robbins & Judge, 2013).

Maslow (2000) argued that, for workers, the first four needs are mainly met in their workplace. In a workplace situation, the first rudimentary level need that must be satisfied is that of pay, followed by safety in a workplace. He believed that good working conditions are subconsciously related to safety in a worker's mind. When the first two basic needs have been met then the worker will move on to the third need where the he or she will seek social belonging. In the third level, relationships with colleagues and supervisors play a crucial role, as well as personal relationships. When a worker feels socially included and accepted in a formal and informal group in a workplace, the worker will feel that the social belonging need has been met (Benson & Dundis, 2003). According to Maslow (2000), worker's self-esteem is achieved when the worker receives recognition, performance reward and positive performance appraisal.

Aworemi *et al.* (2011) argued that the needs hierarchy postulates that people are motivated by several considerations, and suggested that the strongest source of motivation is the lowest unsatisfied need on the hierarchy. Robbins and Judge (2013) argued that no need is ever fully satisfied, and considerable satisfied needs do not motivate employees. Furthermore, a limitation of Maslow's needs hierarchy is its notion that all people have similar needs in the same hierarchy (Aworemi *et al.*, 2011).

2.4.2 Herzberg's two-factor theory

Herzberg proposed that two factors impact motivation in the workplace, those being motivation factors and hygiene factors. Hygiene factors comprise good supervision, pay, company policies and procedures, physical working conditions and general environment, and guaranteed work (Herzberg, 1965). Bassett-Jones and Lloyd (2005) argued that, when hygiene factors are inadequate, employees will not be motivated.



Figure 3: Herzberg two-factor theory

Source: Herzberg, 1965

Herzberg's theory was criticised by Hulin and Smith (1965) because it assumed a association of satisfaction to productivity and used limited methodology without measurement of satisfaction (Bassett-Jones & Lloyd, 2005). Herzberg replied with the article titled, "One more time: How do you motivate employees?" (Herzberg, 1985). In this article, Herzberg presented a crucial differentiation between motivation and movement (Bassett-Jones & Lloyd, 2005).

To clarify the point, Herzberg used an example: if one wanted the dog to move, one can kick it or tempt it with a reward that the dog values; however, the motivation for movement, not for the dog but the person who want the dog to move and this can be described as the movement, not motivation, from the dog perspective (Herzberg, 1985). From this argument, Herzberg (1985) suggested that motivation should come from within the employee. Herzberg (1985) viewed pay as a tool used by employers to move employees in the direction that employers want, and employees move because of the anticipated reward. Herzberg (1985) concluded that paying employees for extra effort they must exert is a manager's motivation, not an employee's. The employee will move because of the reward. Due to the perceived problems mentioned above with Herzberg's theory, many researchers doubt the theory, and are reluctant to use it (Bassett-Jones & Lloyd, 2005).

2.4.3 McClelland's theory of needs

McClelland's theory proposes that people's greatest motivation is a need to achieve (McClelland, 1961). Only if the need is highly valued will it motivate the person to behave in ways that will lead to satisfaction of the need (Haivas, Hofmans, & Pepermans, 2014; Rainlall, 2004). McClelland's theory emphasis is on three primary needs:

- *The need for achievement* – a need to be successful, to be prosperous or to beat a set standard (nAch);
- *The need for power* – A need to be dominant, to govern and a desire for status of power and make decision (nPow); and
- *The need for affiliation* – A need for interpersonal associations, to be liked, feel belonging and acknowledged by others. This involves co-operation rather than competition, and positive relationships with peers are more important than being promoted (nAff) (McClelland, 1961).

The need to achieve is linked with general workers as this need is associated with pay as general workers are incentivised when they achieve and exceed set targets (Rahim & Daud, 2013). The need for achievement is defined as the ambition to exceed expectations in terms of set targets (Robbins & Judge, 2013).

McClelland argued that an employee's need for achievement is subconscious, and employers may not know about it (McClelland, 1961). Furthermore, measuring this need is difficult (Robbins & Judge, 2013). The limitation of McClelland's theory is that it is not practical for employers to try to understand employees' need to achieve (Royle & Hall, 2012).

2.4.4 Expectancy theory

Expectancy theory proposed that employees will select the amount of effort to be exerted based on their expectancy of a reward (Vroom, 1964). Chiang and Jang (2008) argued that expectancy theory is reinforced by empirical evidence, and that it is one of the furthestmost regularly utilised theories of motivation by organisations. The expectancy theory of motivation was developed by Vroom (1964); it elucidates the process that workers use to make choices regarding various behavioural alternatives (Lunenburg, 2011). Boachie-Mensah and Dogbe (2011) explained that the process is driven by psychological forces that control a person's behaviour. Motivation is a

process in which employees are psychologically persuaded to perform a task in order to fulfil their needs and obtain satisfaction (Boachie-Mensah & Dogbe, 2011; Khan, Farooq, & Khan, 2010a) .

There are three psychological considerations that are deemed to prompt and control behaviour: expectancy, instrumentality, and valence (Rainlall, 2004), illustrated in the figure 2 below.



Figure 4: Vroom, 1964

Expectancy is the perceived probability that effort will yield a reward; certainty regarding the receipt of a reward is linked to the employee's motivation (Chiang & Jang, 2008; Lunenburg, 2011). Boachie-Mensah and Dogbe (2011) supported the theory, and suggested that workers will work harder if they believe that the value of monetary rewards they are expecting will be equivalent to the effort they exert. Expectancy is the link between effort and performance, instrumentality is the relationship between performance and results (Abadi, Jalilvand, Sharif, Salimi, & Khanzadeh, 2011).

The *instrumentality* component of expectancy theory is the conviction that, if an employee does meet performance expectations, will obtain a bigger incentive (Chiang & Jang, 2008; Nasri & Charfeddine, 2012). According to Ghazanfar, Chuanmin, Khan, and Bashir (2011), the link between instrumentality and effort is widely accepted, as it has been empirically established and measured.

Abadi *et al.* (2011) suggested that expectancy and instrumentality can be combined into one variable to study the relationship between effort and pay outcomes. Expectancy theory suggests several important things, such as benefits, free housing and flexible pay, can be implemented to motivate wokers, by varying the person's

effort/performance expectancy, performance/reward expectancy, and reward valence (Ghazanfar *et al.*, 2011; Lunenburg, 2011).

Valence is defined as the emotional preference that employees have for a particular reward, and a reward will have valence if it is linked to an employee's needs (Lunenburg, 2011).

Nasri and Charfeddine (2012) suggested that the more the employee values the reward that he or she will receive for the exerted effort, the more motivated the employee will be. Other authors have suggested that rewards that employees commonly have a high valence for include, amongst others, salaries and bonuses (Nasri & Charfeddine, 2012). On the other hand, other researchers have asserted that employees who are intrinsically motivated tend to exert more effort, which increases productivity and improves organisational performance (Georgellis, Iossa, & Tabvuma, 2011).

Based on expectancy theory's flexibility in using different financial rewards and the linking of effort to performance to reward, it was the most appropriate theory to underpin this research study (Bassett-Jones & Lloyd, 2005; Lunenburg, 2011). Furthermore, expectancy theory has been rigorously subjected to academic testing and experimentally confirmed to have a positive effect on motivation (Ghazanfar *et al.*, 2011).

2.4.5 Integration of motivation theories with this research

Maslow's hierarchy of needs, McClelland's theory of needs, Herzberg's two-factor, and Expectancy theory all focused on different dynamics and all four attempted to predict the conditions and factors which motivate workers to exert more effort. The significance of these theories in understanding workers needs that can be linked with pay should not be underestimated.

All the theories discussed highlighted the fact that workers can be motivated only if there is a need that must be fulfilled. Workers can only be motivated to work hard to achieve a target in order to achieve something for themselves. All theories link the need for pay, which is fundamental to meet human basic needs. These theories are relevant to this research as it is studying general workers who are the bottom of the pyramid and they want to improve their livelihood. The improvement of general

workers' lives is reliant almost purely on money.

This study focused on pay, because it is intimately linked to two critical workforce-level outcomes, viz., motivation and productivity, the prior driving the latter. The task for companies is to come up with a pay system that will motivate general workers to be more productive in order to achieve business objectives. A pay system must be built on the solid base of the motivational theories that were discussed above (Gangwani, 2012).

2.5 Pay

Bratton and Gold (2012) defined pay as monetary payment that general workers receive from an employer, including basic pay, bonuses and allowances. According to Williams, McDaniel, and Ford (2007), pay refers to all types of rewards, such as salary, bonuses, benefits, and pay increases. Kim, Mone, and Kim (2008) argued that the level of pay and pay structure affects productivity and has been the attention of managers because pay and other rewards are regarded as key elements of behavioural and affective responses of employees.

Pay is an important subject for both organisations and academia, since the debates whether pay satisfaction is a motivator has yet to be resolved (Carragher, Mulvey, Scarpello, & Ash, 2004). Currall, Towler, Judge, and Kohn (2005) argued that pay is a powerful motivator of employees, and stated that "No other incentive or motivational technique comes close to money" (p. 620). However, recent findings that workers are satisfied with intrinsic motivation contradict findings that pay is an important motivator (Pinto, 2011).

Nielson and Smith (2014) suggested that organisations should improve employees' pay because it can improve productivity and commitment to the organisations they work for. Fakhfakh and FitzRoy (2004) argued that company profit is adversely affected by increasing pay to employees, and that makes it difficult to improve pay to the satisfaction of workers while delivering returns to shareholders.

Ruiz-Palomino, Sáez-Martínez, and Martínez-Cañas (2013) argued that employees are hardly ever fully pleased with their pay and would always argue for higher levels of pay. It is essential to continuously evaluate pay levels and structures because when general workers are not happy with these, they are expected to be demotivated (De

Gieter, De Cooman, Hofmans, Pepermans, & Jegers, 2012). Evidence has indicated that pay dissatisfaction has a direct influence in reducing productivity (Currall *et al.*, 2005).

2.5.1 Pay structure

Ismail and Shariff (2008) defined pay structure as a combination of pay elements consisting of basic pay, bonuses, and allowances. Brown (2001) said that the choice of pay structure is crucial for the success of a firm's operation and it is one of important forces that can influence the behaviour of workers. Pay structure is very important to workers, Rahim and Daud (2013) suggested, and added that employers should portion pay structure in a fair manner.

Brown (2001) found that even though pay preference and structure is important to workers, management does not always give it full attention and consideration during the process of making pay policy. Ali and Ahmed (2009) stated that workers can be demotivated if they believe their pay structure is not portioned fairly. In recent times, labour protest has intensified due to dissatisfaction of workers with pay and methods used to determine pay (Brown, 2001). Expectancy theory gave guidance as to why this has happened.

2.5.2 Basic pay

Rahim and Daud (2013) defined basic pay as a salary paid to workers on either hourly, daily, weekly, or monthly basis according to their job structure. Basic pay is not directly linked to performance but it can have an effect on performance. For this reason, basic pay becomes an endowment, to be paid in future years even if a firm declines (Lowery, Beadles, Petty, Amsler, & Thompson, 2002). Devoe, Lee, and Pfeffer (2010) suggested that how workers are paid affects how they use their time because they see time as money. Time and pay are traded against each other whereby workers provide their time to firms in exchange for money (Devoe *et al.*, 2010).

2.5.3 Bonuses

Rahim and Daud (2013) defined bonuses as payments that workers gets based on their performance. A bonus is a subset of pay and is applicable for the period under review. It can be daily, weekly, monthly, or yearly (Lowery *et al.*, 2002). Bonuses are

related to individual or group performance (Fakhfakh & FitzRoy, 2004). Lowery *et al.* (2002) said that bonuses can improve performance as the payment is linked to performance. This argument was supported by Pouliakas (2010) who argued that bonuses may have a positive influence on workers effectiveness.

2.5.4 Fringe Benefits

Zhang, Farh, and Wang (2011) defined fringe benefits as the allowances that employees get in addition to their pay. Fringe benefits can be in the form of housing, company cars or transport, and food allowances in company cafeterias to name a few (Gunkel, Lusk, & Wolff, 2009).

According to Zhang *et al.* (2011), fringe benefits can influence workers motivation and drive workers productivity. However, in contrast to this view, Markovits, Davis, Fay, and van Dick (2010) argued that motivation is more likely to be driven by psychological contract and intrinsic rewards. Muehlbacher, Kodydek, and Zhang (2012) argued that benefits, especially monetary benefits, were not an important motivator for educated and skilled employees but a significant motivator for general workers who have a lower level of education and do labour intensive work.

2.6 Motivation

2.6.1 Concept of motivation

Motivation is known to be one of the most important contributors to high performance of organisation and high productivity (Gillet, Vallerand, & Rosnet, 2009). Rahim and Daud (2013) defined motivation as a course that influences the individual to exert an effort to attain goals. Manzoor (2011) described motivation as the command that reinforces behaviour, shape behaviour, and prompts the propensity to continue or stop the behaviour. Ryan and Deci (2000) argued that motivation is highly regarded by firms because its outcome results in high productivity. For this research, motivation is defined as the internal energy that pushes general workers to achieve individual and a firm's goals (Aworemi *et al.*, 2011).

Many researchers have suggested that there are two types of motivation - intrinsic and extrinsic motivation. These may be both present and possibly work together to motivate workers. (Hayenga & Corpus, 2010). Intrinsic and extrinsic motivation have

been widely researched, and the difference between the two capacities managers to make good decisions as to what motivational tools to use (Delci & Ryan, 2002).

2.6.2 Intrinsic motivation

Intrinsic motivation is defined as the motivation to execute the job in order to gain pleasure and satisfaction in the absence of monetary reward (Kuvaas & Dysvik, 2010a). Fang and Gerhart (2012) defined intrinsic motivation as the motivation to perform work because the task is interesting and satisfying to the employee. Grant (2008) explained intrinsic motivation as the aspiration of the employee to exert more effort based on interest and enjoyment from the job itself.

Intrinsic motivation includes aspects such as exciting work, success, acknowledgment, challenge and self-actualization (Aworemi, Abdul-Azeez, & Durowoju, 2011). In this regard, del Mar Salinas-Jiménez, Artés and Salinas-Jiménez (2010) argued that the role of intrinsic motivation is predominantly insignificant for general workers, while suggesting that pay may have a greater effect at lower organisational levels, especially that of general workers.

Motivation is not constant; it varies according to the needs of employees. This is an important consideration, because not everyone is necessarily motivated by money (Azizzadeh, Shirvani, & Sfestani, 2014; Khan, Farooq, & Khan, 2010b). It remains a fact that employees are different, and their motivations are influenced by different rewards, either intrinsic or extrinsic (Boachie-Mensah & Dogbe, 2011). Williams *et al.* (2007) argued that pay should be regarded as necessary, but not adequate to motivate all employees. Pinto (2011b) added to the debate by arguing that giving employees extrinsic reward for behaviour that is intrinsically rewarding decreases overall motivation.

Aworemi *et al.* (2011) argued that intrinsic rewards are generally rated as better motivators than extrinsic rewards. Afful-Broni and Nanyele (2012) suggested that there are specific non-monetary motivators that motivate employees. Regardless of which postulation is subscribed to, it seems that non-monetary motivators are an important catalyst in achieving high employee motivation (Aworemi *et al.*, 2011; Grant, 2008; Kuvaas & Dysvik, 2010b; Mundhra & Jacob, 2011).

Van Nuland, Hanneke, Dusseldorp, and Boekaerts (2010) argued that non-monetary reward is useful as a motivator of skilled employees only. Gangwani (2012) argued that the impact of intrinsic rewards is greater than extrinsic rewards on knowledgeable and skilled workers. Some employees put in more effort when their hard work is recognised by their manager and that then makes them exert more effort (Harunavamwe & Kanengoni, 2013). Different studies conducted by Awolusi (2013); Azzizadeh, Shirvani, and Sfestani (2014) all proved that intrinsic motivation only work on white collar workers.

Intrinsic motivation is difficult to sustain in general workers who are not skilled and who perform repetitive tasks (Grant, 2008). Considering Maslow's hierarchy of needs, money is expected to be the most significant motivator of general workers, as most of them are struggling with physiological and safety needs (Afful-Broni & Nanyele, 2012).

Aguinis, Joo, and Gottfredson (2013) argued that there are limitations to what pay can do in improving workers' productivity. One of the disadvantages of using monetary rewards is that these do not improve workers knowledge, skills, and capabilities (Aguinis *et al.*, 2013). Aguinis *et al.* (2013) suggested that monetary reward should be invested in upskilling activities, to improve productivity.

2.6.3 Extrinsic motivation

Sun and Jin (2009) defined extrinsic motivation as the preference of the worker to carry out work in order to get some benefit. Catania and Randall (2013) suggested that extrinsically motivated workers will exert more effort if the employer rewards the worker with tangible benefits. Tangible benefits associated to a task to be performed by workers such as pay, remunerations and job security are some of the well-recognised extrinsic motivators and are also called extrinsic rewards (Gangwani, 2012). Von Bonsdorff (2011) argued that intrinsic motivation decline as a worker aged but found that extrinsic rewards remain a continual motivator throughout the working life of an employee.

Huang and van de Vliert (2013) argued that in poorer and developing countries, intrinsic rewards do not have a significant impact on motivating general workers, but that extrinsic rewards have a significant impact. Poorer and developing countries create employment by absorbing general workers into resource-based industries, hence these countries depend on extrinsic motivational factors to increase productivity

(Altman, 2007). Ryan and Deci (2000) argued that although intrinsic motivation is essential, it cannot motivate general workers because most of the jobs done by general workers are not intrinsically motivating.

2.7 Relationship between pay and motivation

Pepe (2010) described extrinsic motivation as the positive emotional state that employees get from the reward a company offers. A company may offer a reward in the form of pay, bonuses, and promotion (Ismail & El Nakkache, 2014). The fact that motivation is utilised regularly shows its importance in achieving higher productivity among workers (Adelakun, 2014). Anyim, Chidi, and Badejo (2012) argued that it may be virtually impossible to establish a perfect solution that will optimally promote motivation and elevate work performance all the time; however, they suggested that adequate pay may be the factor that will have the most significant impact on workers' motivation. Anyim *et al.* (2012) suggestion is supported by Adelakun (2014), whose study revealed that most workers are motivated by financial incentives no matter how engaged are they.

Harunavamwe and Kanengoni (2013) argued that pay is a significant motivational factor amongst low-level workers. This postulation has been viewed as more theoretical than practical (Harunavamwe & Kanengoni, 2013). It is clear that money is indeed the major factor in workers' motivation (Gupta & Shaw, 2014; Adelakun, 2014; Anyim *et al.*, 2012). Karaskakovska (2011) argued the point and brought gender into the equation. In his study he found that women placed work environment higher than money as a motivator, while men ranked money higher than work environment. In his study of motivation, Vaskova (2006) also found that men value pay more than anything (basic salary and bonuses) as a motivator and women placed more value on respectful treatment by supervisors, interpersonal relationship at the work place and good work environment.

According to Tudor (2011), motivating the general worker has always been difficult in all industries, because their pay is low and there are no opportunities for promotion. General workers are employees who perform manual labour, and they have limited or no education (Nielson & Smith, 2014). Nielson and Smith (2014) suggested that industries such as mining, agriculture, and manufacturing should make sure that general workers are motivated to exert effort, since they are important for these industries to produce goods. Schaubroeck, Shaw, Duffy, and Mitra (2008) suggested

that a significant pay raise can motivate these workers, because their pay is generally low. Schaubroeck *et al.* (2008) also suggested that general workers respond positively to pay raises, and thus become motivated to exert more effort.

Gupta and Shaw (2014) argued that pay can shape employee behaviour and organisational effectiveness at almost all levels. No matter how effective the organisation's policies and procedures are, they will not have the desired effect unless the employees are well paid, because pay affects employee attitude and behaviour (Gupta & Shaw, 2014). A good pay for performance system provides a win-win situation for employer and employees (Chang, 2011; Gielen, Kerkhofs, & Van Ours, 2010).

2.8 Engagement

According to Tezergil, Köse and Karabay (2014) there is a link between work engagement and motivation. Thaliath and Rejoice (2012) defined work engagement as a connection between employees and their work, which is characterised by vigour and dedication. Vigour is characterized by energy and the employees' willingness to put their effort towards the task and dedication is characterized by a sense of eagerness and motivation to perform the task (Jeve, Oppenheimer, & Konje, 2015). Disengagement is a negative attitude toward the job and it affects both job satisfaction and commitment (Chat-Uthai, 2013).

Masvaure, Ruggunan, and Maharaj (2014) argued that work engagement has become a significant aspect to productivity. According to Jeve *et al.*, (2015) an engaged employee is willing to put extra effort into a task to make the firm successful. Researchers have found evidence that shows that firms with engaged employees increase their profit at a rate that is two and half times faster than those firms which do not have engaged employees (Jeve *et al.*, 2015).

According to Tezergil *et al.* (2014) many scholars claim that employees with high levels of work engagement are assumed to be more productive, however, this assumption was not tested on this research as the main focus was on motivation and pay. Adelakun (2014) argued that even engaged workers must be motivated in order to get the best performance and pay is the key to motivate an engaged worker.

2.9 Labour productivity

Islam and Shazali (2011) argued that the mining sector is one of the most labour-intensive industries, where labour costs are higher than any other cost involved in running the business. Labour-intensive means use of manpower in the mining activities with no provision of technology (Islam & Shazali, 2011). Due to the high labour cost, Yi and Chan (2013) suggested that labour productivity be one of the performance indicators used to measure the success of the mining industry. Knowing the critical aspects that both positively and negatively affect productivity has been suggested to be crucial for the improvement of general works (Odesola & Idoro, 2014).

Fachin and Gavosto (2010) argued that productivity is critical not only in the long term but also in the short term, as it is one of the elements of output and employment growth. According Yi and Chan (2013) most economic academia agreed with that productivity is important for the prosperity of individual firm, an industry, or an economy.

Mojahed and Aghazadeh (2008) argued that there are many aspects that influence productivity which include motivation, skills, and training. Ng, Skitmore, Lam, and Poon (2004) suggested that motivation can have a huge impact on productivity, however, firms should not overlook issues identified by Mojahed and Aghazadeh (2008), and Dai and Goodrum (2011).

Gangai (2014) and Barclay (2012) argued that not only all the reasons mentioned above contributed to low productivity but absenteeism also contributed significantly. Interestingly, their studies also found that a higher proportion of males' absenteeism in the workplace was associated with alcohol abuse, but that females consumed less alcohol than males do. Productivity in higher labour intensive sectors such as agriculture and mining was lower due to high absenteeism resulting from alcohol consumption (Gangay, 2014). The agricultural industry is similar to the mining industry in that it employs many general workers, and the motivation and behaviour of general workers seems to be similar irrespective of the industry in which they work (Barclay, 2012).

2.10 Relationship between motivation and productivity

Kazaz, Manisali, and Ulubeyli (2008) summarised the relationship between motivation and productivity as such: productivity is closely connected to motivation, and motivation is, also, reliant on extrinsic factors such as pay. According to Attar, Gupta, and Desai (2012) motivation of general workers is of paramount importance in labour intensive industries because general workers' productivity depends mainly on motivation. This means that high motivation results to greater productivity.

Mojahed and Aghazadeh (2008) argued that the enhancement of labour productivity is not attainable without recognising dynamics that influence workers' productivity. Unmotivated general workers tend to exert less effort, and since general workers in labour-intensive industries are directly responsible for executing production work, appropriate motivation is needed for capitalize on their productivity (Ng, *et al.*, 2004).

Islam and Shazali (2011) suggested that firms should look at both extrinsic and intrinsic motivation since both have a positive impact on general workers' motivation be more productive. Mojahed and Aghazadeh (2008) argued that no matter what type of motivators are used; they cannot work unless de-motivators are eliminated. Schaubroeck *et al.* (2008) suggested that only pay will significantly motivate general workers, because their pay is generally low, despite the presence of de-motivators. Kazaz *et al.* (2008) concluded that motivation, particularly pay rather than moral, has an effect on the productivity of general workers.

Regardless of Herzberg's disagreement that monetary reward is not a significant motivator, most researchers found the opposite. They found that money is the most dominant motivators of general workers (Schaubroeck *et al.*, 2008; Kazaz *et al.*, 2008).

2.11 Relation between pay and productivity

Fachin and Gavosto (2010) argued that understanding the causes of productivity is an important fundamental of managers responsible for production of goods. Muogbo (2014) believed that there is a relationship between monetary reward and workers' performance. Tang (2012) found that pay and labour productivity are closely linked. Monetary rewards are a good predictor of employee performance, according to Muogbo, 2013.

Danish and Usmand (2010) argued that when workers are happy with their pay, they will function as a viable benefit for firm because their productivity leads the firm to success. Tang (2012) suggested that firms that pay more to workers will motivate workers to exert more effort and increase their productivity. Gneezy and Rustichini (2000) argued that paying workers higher wages does not always result to high labour productivity.

Fang and Gerhart (2012) argued that the relationship between pay and productivity is insignificant, because pay can drastically diminish intrinsic motivation' and may actually cause a decline in performance in jobs that require creativity and innovation. However, their argument does not apply to general workers who do routine jobs. Schaubroeck *et al.* (2008) suggested that a significant pay raise can stimulate productivity of general workers, because their pay is generally low. Schaubroeck *et al.* (2008) also suggested that general workers respond positively to pay raises, as they then become motivated to exert more effort.

According to Gielen *et al.* (2010), globalisation has led to increased competition amongst firms. To face the tough competition in the market place, firms are continuously searching means and methods to increase the productivity of their workers. Lazear (2004) suggested that pay for performance is a valuable tool that can be used by firms to stimulate labour productivity.

The practice of pay for performance is widely used in most emerging markets. Du and Choi (2010) concluded that pay for performance has been successful in emerging markets, and that it does motivate employees. It appears that pay for performance is widely studied in Asian countries (Sun, Zhao, & Yang, 2010). Tang (2012) suggested quite a few causes why labour productivity depends heavily on pay in emerging markets. Firstly, if workers get higher pay, the impact of losing their job becomes greater, hence, labour productivity increases as the worker values his or her job more. Secondly, the gift-exchange model of Akerlof (1984) argued that higher pay is perceived by workers as a gift from the firm, and workers will give back this gift in the form of higher effort which results to higher productivity.

Rehman and Ali (2013) argued that pay for performance is one of the most effective HR practices, and has been adopted by many organisation globally. Du and Choi (2010) found that pay for performance is effective both at the individual and organisation level. Pay for performance can enhance workers' productivity and, at the

same time, be used as an instrument to motivate workers who are poor performers to work harder (Rehman & Ali, 2013). However, Gielen *et al.* (2010) argued that pay for performance may not always increase worker productivity in a team-based task. If pay for performance is applied in a team work where it's difficult to measure the individual input, it can encourage shirking (Brown, 2001).

Wakeford (2004) suggested that South African firms should consider the context of the South African labour force when implementing instruments that may enhance productivity. Some factors that can affect firm productivity include extent of unionisation, strikes and legislated minimum wages (Wakeford, 2004). The context of South Africa is high joblessness and low pay for general workers relative to the cost of living (Altman, 2007).

2.12 Psychological contracts

Turnley, Bolino, Lester, and Bloodgood (2003) suggested that psychological contract cannot be ignored when studying an employee's performance because psychological contract significantly affects an employee's work performance. When workers perceived fulfilment with psychological contract, they increase their work performance, and likewise, when they perceived a breach of psychological contract, they decrease their work performance.

According to Turnley *et al.* (2002), psychological contract fulfilment is the responsibility of the supervisor who acts on behalf of the firm. Dabos and Rousseau (2004) argued that employment relationship, managed by the supervisor, is important in psychological contract. Psychological contract accomplishment with regard to the employment relationship is more important to employees than psychological contract accomplishment with regard to pay (Turnley *et al.*, 2003).

Supervisor's behaviour becomes critical to manage supervisor-subordinate relationship as poor supervisor-subordinate relationship leads to a breach of psychological contract which leads to demotivation and a results in workers decreasing their productivity (Harris, Harvey, & Kacmar, 2011). Although the impact of psychological contract breach was not tested on this research it is important to understand it and bear in mind that it has an impact on motivation and productivity. Antoni and Syrek (2014) argued that supervisors are key representatives of a firm and are responsible for establishing and fulfilling commitments made to workers.

2.13 Supervisors' behaviour affecting motivation and productivity

Supervisory behaviour has become the inhibiting plague to the success of companies, and supervisory behaviour is an essential aspect resulting to the success or failure of companies (Adebayo & Ogunsina, 2011). Shacklock, Brunetto, and Farr-Wharton (2012) believed that an effective supervisor–subordinate relationship is the vital factor most likely to increase employees' productivity. Therefore, the excellence of the supervisor–subordinate relationship will influence employees to be motivated to exert more effort towards their jobs.

Shacklock *et al.* (2012) suggested that in a perfect work environment, all workers would have high quality supervisor–subordinate relationships because this is of great value to both the individual and the firm. Negative communication, such as a supervisor's verbal aggressiveness, has a negative impact on subordinates' work performance and motivation (Madlock & Kennedy-Lightsey, 2010).

Duffy, Ganster, and Pagon (2002) agreed, stating that supervisory negative behaviour has significant negative effects on workers motivation productivity. Harris *et al.*, (2011) defined negative behaviour as sustained aggressive treatment toward subordinates, excluding physical violence. Supervisor behaviour that is categorised as aggressive or hostile includes sabotaging, yelling at, ignoring, angry outbursts, public ridiculing, taking credit for subordinates' successes (Tepper, 2007).

Harris *et al.* (2011) added that prolonged aggressive treatment of subordinates affects workers well-being, which results in low productivity .Once well-being is affected, motivation to work harder is reduced (Duffy *et al.*, 2002). Harris, Kacmar, and Zivnuska (2007) argued that not only will lack of well-being result in low productivity, but subordinates may repay their supervisors by decreasing their productivity. The action of subordinates to repay supervisors by decreasing productivity is derived from negative reciprocity, where bad management is paid back with negative behaviour (Cropanzano & Mitchell, 2005).

A different angle that can affect motivation and productivity is a psychological contract (Tepper, 2007). Harris *et al.* (2011) suggested that employees view hostile supervision as a breach of psychological contract because subordinates usually do not anticipate being abused by those who have the power to supervise them. Based on observed psychological contract breach, employees exert less work effort (Harris *et al.*, 2007).

2.14 Conclusion

It was evident from the literature that different studies have scrutinised whether pay can motivate workers and investigated the relationship between pay and motivation as well as the relationship between motivation and productivity. The review revealed that there are conflicting findings whether or not pay is a motivator. Most of this research was not conducted in the mining industry, and the majority of these researches were not conducted on general workers (Masvaure, Ruggunan, & Maharaj, 2014).

The researcher further confirms that insufficient study has been undertaken on general workers in the mining industry to establish whether pay does have an impact on general workers' motivation and productivity. The researcher believes that research in general workers behaviour and motivation in the South African platinum mines would be very valuable since platinum mines were engulfed with very expensive strikes in 2012 and 2014.

The current chapter looked at the literature concerning pay and supervision as the driver of motivation and productivity of workers. Based on this literature review, key research questions were identified, and these will be discussed in details in the next chapter. The next chapter presents important research questions in addressing the topic of this study.

3 CHAPTER 3: RESEARCH QUESTIONS

3.1 Introduction

The literature revealed that there is a body of knowledge on pay as a driver for motivation and productivity, however, the studies were predominately conducted in developed countries and very limited studies were conducted in the mining sector (Masvaure *et al.*, 2014). Muogbo (2013) suggested that firms should appreciate the needs and feelings of its workers and come up with a pay policy that will drive motivation and productivity in order to sustain firm's profits.

In order to mitigate the risk of low productivity, Brown (2001) made a call for firms to put in place appropriate pay and incentive plans that will encourage workers to be more productive. Firms are expected to perform in a business context where a substantial increase in performance is required. As a consequence, predictors of improvement of a firm's performance, such as happiness and motivation of their employees, are critical to the success of firms - a happy worker, they say, is a productive worker (Hosie & Sevastos, 2009).

There is still considerable debate concerning the factors that driving motivation and productivity of general workers. In particular, general workers have raised unhappiness with their pay, citing that they received very low pay (Alexander, 2013). Unhappiness raised by platinum mines' general workers resulted in a massive strike that halted production for three months in 2012 and five months in 2014 (Bussin, 2015).

3.2 Specific research questions

Based on literature reviews and research objectives discussed above, the following research questions were raised.

Research Question one

What will make a general worker work harder - is it pay or working conditions?

Research Question two

If pay will make general workers work harder, will they prefer it in cash or housing or food or non-cash?

Research Question three

Would general workers prefer if R5000 was added to their basic pay and no bonus or rather stay as where they are?

Research Question four

What else, other than money, will make general workers work harder and make them come to work every day?

Research Question five

Will general workers work hard because they love the jobs that they are doing or because they expect to get good pay (salary and bonus)?

Research Question six

Would general workers prefer to earn slightly less and have a very good supervisor or earn slightly more even if their supervisor is not good?

Research Question seven

Do general workers work at the mine by choice or because they have no other options?

Research Question eight

Is there anything else you want to say or add and do you think I have covered everything?

3.3 Research questions summary

Research question one attempted to determine which the most important hygiene factor to general workers is. It is argued by researchers that pay is a significant motivator for general workers and it drives general workers to be more productive (Schaubroeck *et al.*, 2008; Muogbo, 2014; Hosie & Sevastos, 2009). Research question two and three attempted to establish which pay structure resonates with general workers. One of the main demands during the recent strikes in platinum mines was the increase in housing allowance (Leon, 2012; Alexander, 2013). According to Alexander (2013), housing conditions are generally poor around the mines and one of the platinum mining company admitted that general workers living within 15 km radius from the mine were living in shacks.

Question four, five, and six tried to establish if there is any intrinsic motivation that drives general workers to be productive. There are different generations of general workers currently working platinum mines and motivation is not constant; it varies according to the needs of the employees, some consider intrinsic as important and some consider extrinsic motivation as important (Azizzadeh *et al.*, 2014).

Question six tried to establish if there is any link between worker motivation and their supervisors. Rad and Yarmohammadian (2006) argued that leadership is positively

correlated with workers motivation and productivity. This argument was found to be key in the mining industry, McLaggan, Bezuidenhout, and Botha (2013) found that leadership style had an impact to general workers in a mine.

The next chapter will present the study methodology that was selected to investigate the research questions that was presented in the present chapter.

4 CHAPTER 4: RESEARCH METHODOLOGY

4.1 Introduction

The study was an exploratory qualitative study that was aimed at developing an in-depth understanding of what motivates general workers and what drives their productivity, specifically in the platinum mining industry. The primary objective of this research study was to determine the effect of pay on productivity and motivation on general workers in South African platinum mines. The literature review conducted gave direction in selection of the methodology that was used in this research. Qualitative research method provided details that could have been missed should another research methodology be used (Merriam, 2002; Saunders & Lewis, 2012). An exploratory research design allowed gathering of new information on the impact of pay on motivation and productivity (Flick, 2009).

This chapter presents the research design, population, unit of analysis, sampling method and size, measurement instrument, data collection, data analysis, ethical considerations and limitation procedure that were considered to be most suitable for the purpose of this study.

4.2 Research design and method

The present research study was informed by the literature, which emphasised the importance of pay, as it affects motivation and productivity (Nielson & Smith, 2014). Other studies conducted in this field suggested that pay plays an important role in an organisation's performance; better pay increases motivation, which drives productivity (Stringer, Didham, & Theivananthampillai, 2011). Research design can also be described as a step by step strategy, on how the research unfolds, stipulating the methods and procedures for collecting and analysing the data. There are five common qualitative research designs that are normally used; these designs are case study, ethnography, phenomenological, grounded theory, and content analysis (Leedy & Ormond, 2010).

A phenomenological study endeavours to comprehend the people's perceptions about a particular situation or a group of business people's perspectives on the business environment. Phenomenological approach was adopted in this study as the aim was to understand the role of pay as a motivator from the relevant people, as well as the link between motivation and productivity in general workers in South African platinum mines.

4.2.1 Research model

Merriam (2002) argued that many qualitative research models are based on the idea that meaning is socially questioned with individuals interacting with the world. Creswell (2003) described social questions as philosophy, sociology or psychology. The model applied in this research study was aligned with Merriam's (2002) thinking and dominated by phenomenology which is rooted in the philosophical tradition.

According to Sayre (2001), phenomenology emphases are on exploring the nature of phenomenon by learning about the lived experiences of the people under study. As described, this research study focused on the impact of pay on productivity and motivation on general workers in South African platinum mines. The aim was to find out about the live experience of general workers and they provided valued insight into this research study.

4.2.2 Ontology/Epistemology

Saunders and Lewis (2012) argued that research philosophy adopted in a study comprehends important assumptions on how the researcher views the world. Merriam (2002) argued that the world or reality is not fixed. According to Khan (2014), qualitative research may be based on set of assumptions that describe how the world is observed.

These frameworks or set of assumptions are further centred on two viewpoints; these are epistemology and ontology (Khan, 2014). According to Creswell (2007), ontology is about how social reality is perceived by the researcher and respondents. Guba and Lincoln (1994) suggested that ontology is all about understanding the real world and its reality.

Epistemology is about the way knowledge is sourced and it rests on the relationship between researchers and respondents, and how the researchers observe that realism (Creswell, 2007). Handriana and Dharmmesta (2013) argued that epistemology put emphases on the process and procedure that allows the gaining of knowledge.

This research focused on the reality of pay as a motivator and how general workers perceived pay. This research study followed ontology paradigm as it was based on the social question philosophy. Ontology paradigm supported qualitative approach of the study since qualitative approach can work out the truth and reality that will help find solutions (Khan, 2014).

4.2.3 Why qualitative approach was chosen for this research study

The answer to this question is logical: the research questions of this study could not be answered by applying any other research methods. This was due for two reasons, firstly, they are mainly exploratory in design and secondly, the aim was to gain insight and understanding into a topic and explore general workers' perceptions. McLeod (2011) argued that "We can never achieve a complete 'scientific' understanding of the human world, the best we can do is to arrive at a truth that makes a difference that opens up new possibilities for understanding" (p. 4). Qualitative research was suitable for this study because it is an probing process of understanding based on analyses of workers view of different activities and it takes a snapshot of the workers observation in a phenomenon (Khan, 2014).

In fact, the character of this research study required access to the information of many employees who are illiterate, so the information could not be acquired through a standardised questionnaire. The aim was not to measure or quantify anything, but to progress understanding of the impact of pay on productivity and motivation by obtaining information from general workers from personal experience.

4.3 Population

The main rule for the population of a study is that it must answer the question, and the question must be in line with the research topic (Saunders & Lewis, 2012). The population for the proposed research was full-time general workers in South African platinum mines who were performing tasks that are directly linked to production. Approximately 60 000 general workers are employed by the three biggest platinum mines in South Africa. These mines are Anglo Platinum, Impala Platinum and Lonmin.

General workers are the workers with no skills and they generally do hard labour. Their job grading differ but they are all categorised under Paterson A and B bands (Level 4 to level 12). The majority of general workers never went to school and cannot speak English and there are very few who can speak English. The majority of general workers in platinum mines are *Xhosa's* and *Sotho's*; however, there are also other tribes which include *Tswana, Sotho, Xhosa, Mozambican, Tsonga and Shangane*.

The jobs available for general workers at the mines included belt operators, winch operators, rock drill operator (RDO), *Cheesa*, stope timber, Pipes Tracks and Salvage (*PTV*), loco operator, and artisan assistant.

All these jobs categories for general workers are directly linked to the production of platinum and all require hard labour, and all are performed by both males and females.

General workers working on the surface whose tasks are not linked directly to production were excluded. The job categories of surface workers on Paterson A and B band that were not linked directly to production include office assistance and cleaners.

4.4 Unit of analysis

According to Khan (2014), the essential part of any study is the unit of analysis because the entire research is based on it. McDougal (2013) defined the unit of analysis as who or what is being studied. This research study investigated the impact of pay on the productivity and motivation of general workers in platinum mines in South Africa.

Khan *et al.* (2010b) argued that motivation is not constant; it varies according to the needs of each worker. General workers' needs and motivation differ, which is an important consideration. Their needs and motivation also differ from those of other employees in platinum mines due to the nature of the work they perform (Grant, 2008). The unit of analysis of this research study was general workers as individuals.

4.5 Sampling method and size

A non-probability sampling technique was used, due to the absence of a sampling frame. Platinum mines do not have a list of all general workers' names, but have the total number of general workers on their payroll. Due to the location of the mines, the amount of general workers in platinum mines, and the ease of accessing participants, a purposive sampling technique was used, as suggested by (Merriam, 2002).

Advantages of purposive sampling are cost effectiveness and simplicity, while disadvantages are high vulnerability to bias, which could lead to skewed results (Patton, 2002). Purposive sampling is more economical, and gives more accurate results if the researcher is not biased (Merriam, 2002; Patton, 2002). The main disadvantage of purposive sampling is bias due to subjectivity of the researcher, and it is difficult to defend representativeness of the sample (Mills, 1987; Merriam, 2002).

A total of 31 participants were interviewed for this study and three out of 31 were not included in the analysis because they were used for the pilot study.

Different data concerning their characteristics was collected; the data such as work experience, job category, job grade, monthly basic salary, age, gender and ethnicity was collected.

These participants were general workers in the grade band A and B (Grade 4 to 12). These grades included range of roles from bell operator, loco drivers, stope timber, belt attendant, rock drill operator (RDO) and team leader among others. Participants' age was between 30 and 60 years which presented younger and old generation as well as experience.

4.6 Measurement instrument

According to Merriam (2002), in qualitative research, the researcher is the principal instrument in data collection and data analysis. Flick (2009) suggested that reliability of qualitative research relies on the quality of recording and documenting data, as well as interpretation of the data. Mills (1987) suggested that, when conducting qualitative research, researchers should be concerned about their own objectivity. The starting point for objectivity and ensuring reliability is the keeping of field notes, in which researchers document their observations. Standardisation of field notes increases the reliability of the data as it is difficult to analyse notes that are taken using different methods (Flick, 2009). The researcher was the primary instrument in collecting and analysing data. The researcher used a voice recorder while interviewing participants in order to ensure that no data was lost.

4.7 Data collection

Baumbusch (2010) suggested that interviews are the best data-collection strategy, because it enables exhaustive the collection of information of the participants' understanding of and perceptions on a phenomenon. Based on this suggestion, data was collected from full-time employees by conducting semi-structured, face-to-face interviews. Interviews were conducted at the employees' workplace in the mother tongue of the general workers and the language used at the mine, which is *Fanakalo*. Other languages such as *Xhosa*, *Tswana*, *Tsonga*, *Sotho* and English were used during the interviews. Participants were given an option to speak their mother tongue or choose the language they are comfortable with.

Semi-structured interviews enabled deeper levels of understanding and helped gain additional information on related behaviours and thoughts (Saunders & Lewis, 2012).

This form of interview was also appropriate for the examination of the beliefs of complex and topical issues, like pay, and enabled exploring for further data and clarification of answers (Louise Barriball & While, 1994). Semi-structured interviews made use of open-ended questions, which permit unstructured and in-depth responses (Baumbusch, 2010).

The interviews were audio-recorded and transcribed, were in different languages and were interpreted and transcribed in English. The interviews were guided by the questions formulated from theories, and categorised into topical areas as Flick (2009) suggested.

4.7.1 Interview protocol

An interview protocol was used in this research study. The use of an interview protocol helped to improve the reliability of this research study (Yin, 1994). The interview protocol developed was aligned with the recommendation suggested by Thompson, Locander, and Pollio (1989). The protocol consisted of the interview schedule, ethical considerations, interview questions, and the venue of the interview. The protocol included the explanation to the respondents that they were equal with the researcher during the interview. It also prescribed that the interviewer would not raise any opinion but must treat respondents as experts and experienced. The participants were treated as experts.

Due to the nature of an in-depth interview, Thompson *et al.* (1989) suggested that issues of ethical concerns should be taken into consideration. Before the interviews took place, respondents were explained to in the language they understood the purpose of this research study. Respondents were told up front that the interview would be audiotaped and they all signed the letter of consent. During all phases of the interview, the confidentiality of respondents was protected.

4.7.2 Pilot research

The interview protocol and research questions were tested in a pilot research that was included in a sample. Parkhe (1993) suggested that a pilot study should be done since it gives a researcher a chance to review and modify the research instrument.

Three people were interviewed in the pilot study. These people were asked to participate and agreed. They were not included as participants in the final results and did not form part of the final analysis.

They were asked to come to the management offices after work to conduct the interviews and agreed.

Each interview took about 15 to 30 minutes and participants were also asked if they had something to add. There were no substantial changes made to the interview protocol and questions, however, the venue was changed from management offices to union offices. Respondents were not comfortable and felt intimidated to be in management offices during the interviews. Alam (2005) argued that a pilot study is not a pre-test of interview questions but a rehearsal that could help a researcher to perfect the line of interview questions. The pilot study led to minor amendments and tweaks to some interview questions.

4.7.3 Interviews

The interviews commenced with an introduction to once again make the respondents aware of the purpose of the research study. The discussion points followed the interview protocol. The respondents were asked if there was anything they wanted to say or add and asked if they thought there were important factors that were not covered.

Although interviews followed protocol, respondents were allowed to illustrate, give examples and expand on their answers. The questions and probes used followed the structure of the discussion. Questions were asked in the order in which they were written, however, the sequence of questions was driven by the respondents' responses. The new issues that emerged from interviews were explored by probe questions.

All interviews were recorded using digital voice recorders. Interviews durations ranged from 15 to 30 minutes and each interview was completed in one session. All interviews were conducted on the mines premises.

4.8 Data analysis

The qualitative data was analysed using the proposed method of Braun and Clarke (2006). *ATLAS.ti* was also used to codify content in order to establish the themes. The analysis followed, including thorough listening to the reading of the recorded transcripts in *Xhosa, Tswana, Tsonga, Sotho and Fanakalo*. *Fanakalo* was used during the interviews because some participants preferred to speak *Fanakalo* since it is a recognised and mostly used language at the appropriate mines. These transcripts were converted from this local and mine dialect to English. The English transcripts were read and errors were corrected.

In these transcripts the codes were generated, themes identified and marked. The next stage was to review the identified themes, where the data would merge resulting in the development of new themes, the new themes were defined and named, and then they were finally presented using content analysis and, where possible, thematic tables. The approach used was the process of analysis and comparison, with data arranged according to underlying characteristics of motivation and productivity (Morton *et al.*, 2010).

Content analysis provides knowledge on and a deep understanding of the impact of pay on motivation and productivity (Hsieh & Shannon, 2005). The significant comments given and referenced support pertinent statement and clarify the relevant points. The reference used the format (Participant 1 = PT1).

4.9 Ethical considerations

Cooper and Schindler (2006) stated that the purpose of ethics in research was to guarantee that no participant was affected or had agonized consequences from the research activities. The researcher was well aware of the ethical duties in terms of this study. The following were undertaken:

- The university (GIBS) provided assurance of ethical considerations through its rigorous ethical assessment process. After GIBS considered the research approach and methodology, ethical clearance was given to the researcher;
- No-one was coerced to participate;
- Permission for employees to participate in the study was requested before commencing with the interviews. The three big mining companies, Lonmin, Anglo American Platinum and Impala Platinum, employing the majority of platinum mines workers, gave permission to conduct the study in writing;
- The participants were guaranteed confidentiality as the study was intended for the completion of the researcher's academic requirements; and
- All sources consulted are acknowledged and referenced.

To guarantee privacy, all 29 participants were given a code when they were cited in their replies. The general workers interviewed first was coded as PT1 (participant 1). The researcher guaranteed to retain all the data confidential and to make use of it only for the purposes of the research.

4.10 Limitations

This research has certain limitations. Firstly, the theory used in this research may be a limitation. The theory underpinning the proposed study is expectancy theory, which will be used to analyse the relationship between pay and motivation, and between pay and productivity. There are other motivation theories that may be important to consider in the pay–motivation process (Nielson & Smith, 2014). For example, equity theory states that employees are concerned with the pay they get for their effort in relation to other employees; when employees see an imbalance in their pay–effort ratio compared to other employees, they become demotivated (Rainlall, 2004). These factors were not tested in the proposed research.

Secondly, data collection and analysis will be done by the researcher, and the human instrument is known to have deficiencies and biases that may affect the results (Merriam, 2002).

Thirdly, Nielson, and Smith (2014) argued that status and work conditions are not directly linked to motivation, but can be the cause of dissatisfaction, and these factors and other hygiene factors will be looked at in this research.

Fourthly, the present research will use a purposive sample, which may give rise to bias. The fifth limitation concerns the type of respondents. Only general workers in South African platinum mines will be part of this research. The sixth limitation concerns the current talk of retrenchment by the top three platinum mines. This demotivates and disengages employees as it threatens job security (Aworemi *et al.*, 2011) and may impact the results of this research.

The seventh limitation concerns absenteeism due to illness and deep vs shallow mines. These factors can negatively affect productivity of general workers. General workers who work in deep mines have a lower productivity rate due to the time required to travel to the workplace. Workers in shallow mines tend to be more productive, due to the short distance to their workplace.

The eighth limitation is the sampling method chosen. Although the sampling method was preferred for qualitative research (Merriam, 2002; Saunders & Lewis, 2012), its main disadvantage is bias, due to the subjectivity of the researcher, and it is difficult to defend the representativeness of the sample.

4.11 Conclusion

This research study followed a qualitative research approach based on the phenomenology design. Interviews were conducted following interview protocol and pre-developed questions. The interviews were recoded and transcripts were developed later. The voice recordings were translated from different languages used to interview respondents to English transcripts. On the basis of translated transcripts, a content analysis was performed using systematic coding procedure and thematic tables with quotes where relevant were developed. The next chapter will present the result of the analysis performed on the research data.

5 CHAPTER 5: RESULT

5.1 Introduction

In this chapter the results of the research, which were collected through the qualitative method, are presented. The qualitative method of research employed has allowed the researcher to explore insights into the effect of pay on productivity and motivation on general workers in South African platinum mines. Semi-structured in-depth interviews with identified relevant general workers on a face-to-face basis were conducted.

Face-to-face interviews enabled the researcher to gain insight on historical information that may not have necessarily have been achieved in a different setting. The use of open ended questions was employed in accordance with the approach as suggested by Creswell (2014), as they allow the researcher to gain richer insight into the influence of pay on productivity and motivation. Participants were purposefully selected with the thought that they will best assist the researcher comprehend the challenge and the research questions (Creswell, 2014).

At the beginning of each and every interview, the interviewer introduced himself, welcomed the participants, thanked them for participating in the study and explained the topic of the research. He then outlined the objectives of the study and the structure of the questions. Ethical concerns were elucidated to the participants, as outlined in the methodology, which included that the participation in study was voluntary and participants had the right to stop the interview at any time. The right to confidentiality and privacy of information that was shared was also explained in details to all participants. In the interview process the researcher tried understand the context of the response from the participants and to establish a rapport with the participants and build trust in line with the proposed framework of Qu and Dumay (2011).

5.2 Respondent's profile in brief

A total of 31 participants were interviewed for this study and three out 31 were not included in the analysis because they were used for the pilot study. Different data pertaining to their characteristics was collected; the data such as work experience, job category, job grade, monthly basic salary, age, gender and ethnicity was collected.

These participants were general workers in the grade band A and B (Level 4 to 12). These grades included range of roles from bell operator, loco drivers, stope timber, belt attendant, rock drill operator (RDO) and team leader among others.

The participants' ages were between 30 and 60 years which presented the younger and old generations as well as experience. All the participants except for one were working underground. The participant that was working on the surface was in the scope of this study because the participant's job was directly linked with production. The profile summary of the participants is given in Table 1.

Table 1: The summary of the participant's demographics

Participants	Role	Level	Tenure	Age	Salary
PT1	Loco driver	Level 7	16 years	46	R 12 000
PT2	Belt attendant	Level 4	30 years	55	R 7000
PT3	Rock Drill Operator	Level 8	10 years	35	R 8 500
PT4	Winch Operator	Level 7	8 years	38	R 8 300
PT5	PTV	Level 9	5 years	32	R 8 400
PT6	Winch Erecting Team Supervisor	Level 10	36 years	58	R 8 400
PT7	RDO [Rock Driller Operator]	Level 8	10 years	36	R 10 500
PT8	Artisan Assistant	Level 5	7 years	29	R 9 800
PT9	Stope timber	Level 7	10 years	32	R 8 300
PT10	Rock driller operator	Level 8	10 years	36	R 7 000
PT11	Winch Operator	Level 7	15 years	42	R 9 000
PT12	PTV	Level 9	8 years	31	R 8 300
PT13	Cheesa	Level 7	4 years	33	R 9000
PT14	Winch Operator	Level 7	15 years	33	R 8 300
PT15	PTV	Level 9	7 years	35	R 8 500
PT16	Belt attendant	Level 4	4 years	40	R 10 400
PT17	Shaft Bell Operator	Level 9	29 years	52	R 12 300
PT18	Belt Attendant	Level 4	7 years	-	R 8 800
PT19	Main Tip Attendant	Level 4	7 years	42	R 9000
PT20	Tip Attendant	Level 4	9 years	47	R 8 300
PT21	Stope Timber	Level 7	2 years	35	R 9000
PT22	Belt Attendant	Level 4	8 years	32	R 8 300
PT23	Loco Operator	Level 7	7 years	34	R 9 800
PT24	Loco driver	Level 7	7 years	33	R 8098
PT25	Belt Team Supervisor	Level 8	9 years	39	R 8 600
PT26	Cheesa (Miner Assistant)	Level 7	9 years	60	R 9000
PT27	Team Leader	Level 11	42 years	57	R11000
PT28	Stope Timber	Level 7	5 years	37	R 9 345
PT29	Stope Timber	Level 7	5 years	30	R 9 300

5.3 Description of participants - demographics

Table 2 shows the combined demographic details of all general workers from South African platinum mines that participated in the study.

Table 2: Demographic details of participants

Gender	Frequency	Percentage
Male	16	55%
Female	13	45%
Total	29	100%
Race/Ethnicity	Frequency	Percentage
White	0	0%
Black	29	100%
Total	29	100%
Mother tongue	Frequency	Percentage
Xhosa	7	24%
Tsonga	2	7%
Mozambican	2	7%
Shangaan	1	3%
Setswana	15	52%
Sotho	2	7%
Total	29	100%

The table above indicates that all 29 participants included in the sample are black as there are no white employees working as general workers in the mines. Furthermore, the gender split was representative of the South African population and the drive to promote woman in mining with 13 women out of 29 participants sample interviewed. These interviewees comprised of 55% male and 45% female with an age that ranged from 30 to 60 years.

All the respondents were at a low level in the platinum mines and were mainly working underground. These general workers had a huge amount of experience in the mines, some with as high as 42 years of experience, and others had experience in more than one mine. Some of the comments given by the respondents on their experience included:

“I have been working in the mines for 36 years”^{PT9}

“ I think 42 years, including the year when I never took leave, if I exclude those

years, I have [been] working for 38 years” PT30

“Here four to five years. I came from Evander Coal Mine in the shafts” PT14

These workers were earning about R8500 on average, with one exception at R7000 on the lower end and two at higher end at about R12000 (Table 1). The profile of the respondents confirmed that these respondents were at the correct level and had experience to provide valuable information on the study, in terms of pay on productivity and motivation to perform at work. The next section sets out respondent’s answers to the research question.

5.4 Frequency table design

Frequency tables were questioned using the output from *ATLAS.ti*. Each individual table is similar to the categorised frequency counts of themes clustered under the research question. The table below illustrates a frequency table as used throughout this chapter.

Table 3: Frequency table

Themes	Responses	Frequency	Percentage
Theme 1	“Selected participants quotation in support of themes or research questions number” <i>PT</i>	Number participant who agreed with the theme	Percentage of participants who supported the them in relation to total participants
Theme 2	“Selected participants quotation in support of themes or research questions number” <i>PT</i>	7	24%
Theme 3	“Selected participants quotation in support of themes or research questions number” <i>PT</i>	6	21%
Theme 4	“Selected participants quotation in support of themes or research questions number” <i>PT</i>	1	3%
Other		3	10%
Total		29	100%

The components of the frequency table presented are fully described below:

Themes: Prominent thoughts or patterns that emerged from research question.

Responses: Pertinent quotes that are in support of themes or research questions.

Frequency: The number of participants that raised the same thoughts, resulting in a theme. Essentially, each theme is only considered once per participants. If a participant deliberated the identical theme twice or more in a research question, it was only considered once.

Percentage: Indicates the percentage of participants who discussed a particular theme. The information obtain from participants were categorised in themes and pertinent quotation were highlighted.

5.5 Results for research question 1:

What will make a general worker work harder - is it pay or working conditions?

Participants spoke freely about what motivates them to work harder at a mine. Further questions dived deep in to the research question in order gain the in depth information that covered pay as a motivation. The questions were semi-structured and it is also important to note that other interview questions emerged during the interviews and generated results that were applicable in answering the research questions therefore formed part in the data analysis.

At least 18 out of the 29 general workers interviewed indicated that money was their key motivator for working hard in their jobs. Eight participants specified work conditions as their motivators for working hard, while the last three were either ambiguous or gave another reason other than the work conditions or money. One such example was participant 4, who mentioned that the reason she was working hard was because there was no work out there. The comments given by the participants who said money was the main motivator included:

"The reason for me to work hard is because I want to get a good salary that will enable [me] to take care of my needs and my family needs"^{PT13}

".what makes me happy is money because I am here to make money here at the mine"^{PT29}

"It is to work whole heartedly and enthusiastically so that I can get better salary ..."^{PT9}

"Number[s] one is money, and number two, I need the management to [see] that I am a hard worker."^{PT14}

The comments provided by the participants for being motivated by mainly by work conditions included the following:

“Personally it is the working conditions. Because I believe it is not all about money. You may offer to pay me R100 000 per month, but if my working conditions are not good then I would be suffering”^{PT2}

“It is the work conditions especially if you work underground...”^{PT28}

It was noteworthy that eight out of the thirteen interviewed females, chose the work conditions as the main motivator than money. This was indicative of women placing more emphasis on working conditions than money.

It must be mentioned that the majority of the participants that specified working conditions also mentioned money as a critical driver. The following question was asked to ascertain that indeed working conditions were the key motivator:

“Can you tell me, if you will get another job somewhere in town that has same benefit (pension fund and medical aid) as the mine but they will pay R8500, which is roughly the same as your current pay and the mine is willing to pay you R11000 without the benefits, which job you will take?”

The comments provided by the participants on the choice they will make included the following:

“We are here for money, if the mine gives me more money I would stay, but I would like to get another position, not PTV”^{PT15}

“I will work here at the mine, because with the money I get here, I can pay for my kids at school, I can buy a house and food for my family.”^{PT20}

“I would choose the mine because the mine will pay me a better salary”^{PT17}

*“The mine of course. **Why the mine?** Because of the money”^{PT22}.*

5.6 Results for research question 2:

If pay will make general workers work harder, will they prefer it in cash or housing or food or non-cash?

The respondents were asked whether they would prefer to receive their full salary in cash or the company should hold back a certain amount for transport and housing.

More than half of the respondents (18) indicated that they would prefer the company to hold money for transport and housing. The reasons related to their view related to poor

budgeting from their side and future security for the family (Table 4).

Table 4: Thematic table of the salary structure including housing and transport

Themes	Responses	Frequency	Percentage
Poor Budgeting by the individuals	<p><i>"I prefer if the company... can deduct transport and housing because if it's me, my salary get finished before I can do the rest of the things I am supposed to do"</i>^{PT3}</p> <p><i>"Maybe I might not be able to pay them myself"</i> ^{PT11}</p>	6	20.6%
Future security for the family	<p><i>"I would prefer it towards housing because I cannot live in a tin house for the rest of my life because I have kids and cannot afford to build myself a house"</i>^{PT15}</p>	12	41.4%
Own budgeting	<p>No, no, no, I want it all to come to me then I can decide how I want to spend it"^{PT9}</p>	11	38%
Total		29	100%

The other 11 respondents indicated that they did want all their money after which they can make their own decision on what to do, and how to spend it. Comments related to this view included:

"No, no, no, I want it all to come to me then I can decide how I want to spend it"
^{PT10}

"Cash, because I can sort everything out because I know where to take the money to. I can sort my money out"^{PT19}

"I want to control my own money" ^{PT29}

Two out of 13 females, both under the age of 40, wanted their salaries to be paid in cash, while eleven females wanted a portion of their salaries to be paid towards housing. One of the females who wanted cash already had a house. Comments related to this view included:

"Some must go to housing, transport as well."

"Why specifically housing and transport?"

“Because I like to have my own house so that I can stay with my family”^{PT22}

“Some goes to housing, some goes to transport“

“Why would you prefer it that way?”

“So that I can be able to have my own house, and have money for transport no matter what, I’m sure I will be able to come to work.”^{PT23}

“Housing. Why some must go to housing, why specifically housing?”

“Because I have a bond”^{PT16}.

5.7 Results for research question 3:

Would general workers prefer if R5000 was added to their basic pay with no bonus or would they rather get a bonus?

The majority of the participants acknowledged the role and importance of a bonus towards productivity and motivation. However, most of them (25 out of 29) said that they would prefer to rather move away from the bonus and instead get that equivalent money on a monthly basis. The major reason for this is the uncertainty and fluctuation associated with the bonus. Some of the most pertinent comments included the following:

“Yeah, I shall still work hard, I shall still work hard. We work for bonus because the salaries are low”^{PT29}.

“All I can say is that bonus depends on how you work; it’s not in the contract. I would prefer that they add something and take away the bonus, because bonus is whatever they give you, you have to take and you can’t complain”^{PT24}.

“Bonuses mean nothing because I want my salary to the way it is supposed to be, because the bonuses are not always paid and the amounts differ every month, so I do not want to bank on it”^{PT10}

“What I mean here is that, if they add R5000.00 on top of my salary that is a good motivator for me to work hard, but they cannot stop the bonuses if they are not paying the R5000.00 extra”^{PT15},

It is clear that the majority of the participants would not mind if the bonus is taken away, and the monthly pay is increased instead. They found this as a better option for motivation. This came from comments from the workers when they were asked if there were other important factors which motivated them:

“What I can add is bonus issue. It motivates them to come to work because if you are absent, your bonus is also absent, or if you do not reach your target, you do not qualify for a bonus”^{PT11}.

The researcher probed the participants on the reason why they opted for fixed pay over the bonus payment. Three themes emerged, and are presented on the table below.

Table 5: Thematic table of the reason why participants will opt out the bonus

Themes	Responses	Frequency	Percentage
Bonus is not consistency and not guaranteed	<p>“I would prefer R5000 to add to my salary and take out the bonus because the bonus is not guaranteed”^{PT24}.</p> <p>“Hai, the bonus is not good because I don’t get it every month, it’s just maybe once or twice a year, it’s not every month”^{PT4}.</p> <p>“The bonus is unreliable, this month you get a bonus, and the following month there is no Bonus”^{PT17}.</p>	13	52%
Bonus amount varies	<p>“Get nothing or sometimes R400.0 to R800.00 in bonuses, so it’s the same”^{PT8}.</p> <p>“Where I’m working, I’m not getting bonus every month, it depends on conditions, sometimes I get R100”^{PT25}.</p>	6	24%
Bonus cause accident	<p>“Bonuses cause a lot of accidents underground because people rush bonuses”^{PT3}.</p>	2	8%
	Different reasons mentioned by the participants	4	16%
Total		25	100%

There was an explicit answer which indicated that salary increases had an influence on the participants exerting more effort and ultimately an increase in productivity.

One participant was quoted as saying “if they told us that the bonus is removed because of the R5000.00, we will work hard to reach the target every month”^{PT24}. Another participant was quoted as saying “I will work hard because I will be satisfied with my salary”^{PT3}. It is clear that when general workers are paid more, they are motivated to exert more effort in their jobs, which results in increased productivity

While bonuses were associated with higher productivity by the workers, their answers show that basic pay increases are still preferred over bonus pay. There were also two aspects that came strongly to the fore in the interviews. These were absenteeism and the presence of women as part of the workforce. Absenteeism was explored in detail in research question eight. The presence of woman in platinum mines was a new insight that emerged during this research study.

There was a view expressed that production and productivity have decreased because of the increasing number of women that are working underground. The majority of the participants were in agreement that productivity was negatively influenced by the growing number of women working underground. Some of the comments given included the following:

“Women are too weak to work underground, it’s just forcing matters because the government says so, it’s even difficult for men”^{PT9}.

Some of the respondents even gave specifics of the hard job underground. Participant 23 mentioned that job like Winch Operator was very difficult for man let alone the women.

“There are ladies that can work as hard as men, there are those who don’t have the strength ...maybe you need to see how this woman is struggling, then you need to take her out and rotate, maybe you need to give her something else”^{PT23}.

There were also some women who were in agreement with this assertion. Participant 19 was quoted as saying “because we women do not have the same strength as the men”.

There were participants who went further and offered a possible solution to this problem of a drop of productivity due to the increasing number of women underground. The suggestion included pairing women 50:50 with men and letting women do more manageable jobs like loco driver or other jobs on the surface instead of underground.

5.8 Results for research question 4:

What else, other than money, will make general workers work easier and make them come to work every day?

In addition to money, or compensation, and working conditions, there were three themes which featured strongly as the drivers for workers to work hard, if bonuses were excluded as they fall with the realm of compensation. These were good supervision; need to provide for the family and good pay.

Table 6: Other motivational factors

Themes	Responses	Frequency	Percentage
Good supervision	<p>“the way my supervisor speaks to me, he talks to me whenever he is giving me a job, it has to do with how I will perform, I’m talking in terms of motivation” <i>PT11</i></p> <p>If he shows me a bit of respect, no matter how big he is in terms of leading. Speak to me with respect. That motivates me and I will make sure that I will not disappoint him” <i>PT20</i></p>	7	24%
Need to provide for the family	<p>“My kids make me work hard at work, because there is no food at home” <i>PT2</i></p> <p>“My children, I do not want my children to suffer like me, I want them to have a better life to grow, having a better education” <i>PT22</i></p> <p>“work harder for my kids so that</p>	7	24%

	<p>they can have a better life than me; my kids are my reason why I come to work” <i>PT24</i></p> <p>“I have kids who need to go to school and colleges. I am not educated, but I do not want my kids to be like me and work underground, I want them to be educated and get better jobs” <i>PT6</i></p>		
Money	<p>“There is nothing else except the money” <i>PT13</i></p> <p>“I can’t think of anything else besides money” ” <i>PT21</i></p> <p>“It is tough here at work, other than money I will not come and work here. I want money so that is the reason I working at the mine” <i>PT5</i></p>	6	21%
Team work	<p>“If we can work as a team with our team leader, be united, share jokes, that will motivate me so that even when I think of a colleague” <i>PT8</i></p>	1	3%
Working condition	<p>“The working conditions must be conducive for me to enjoy my work” <i>PT15</i></p>	2	7%
Respect	<p>“We need management to respect us also, not to lie to us concerning work”<i>PT7</i>.</p> <p>“I like to be handled like a person” <i>PT26</i></p>	3	10%
Other		3	10%
Total		29	100%

5.9 Results for research question 5:

Will general workers work hard because they love the jobs that they are doing or because they expect to get good pay (salary and bonus)?

Twelve out of the 29 workers general workers interviewed indicated that they were motivated to work hard not because they loved their jobs but because they were motivated by money. The comments given by the participants included, but were not limited to the following:

“I do not like PTV job sir, so I work so that I get a salary at the end of the month” ^{PT15}

“I work hard because I want a very good pay, not because I like my job” ^{PT2}

“I don’t like my job as I said that is difficult so I do it because I want money” ^{PT4}

“Eh, we work hard there, it’s too hard especially when we use the shovel, *yoh*, and it’s too hard there” ^{PT24}

Nine participants specified that they were motivated to work hard because they liked their jobs. The comments given by these participants included but were not limited to the following:

“I love my job presently; I’ve been in this job for more than twenty years” ^{PT17}

“Yes I love it because it is my job and I am used to it” ^{PT9}.

“Because I like my job at the mine. Even if the conditions are bad? Yes, I need to make sure that I work safe because if I just come for money there will be a lot of injuries and fatal so I have to do the things that are up to standard” ^{PT23}

Three could not separate love of the job and pay and claimed their motivation was driven by both. The last five were either ambiguous or failed to pick what was important to them.

The researcher further investigated the influence of factors of motivation by asking the participants if they were working at the mine by choice or because they did not have any other options. Eighteen participants responded that they worked at the mine because there did not have any other options. Ten out of 12 participants said that they don’t like the job they are doing. They were amongst the 18 participants who indicated that they work at the mine because they had no other choice.

The comments given by the two participants who did not like their jobs but work at the mine by choice, included but were not limited to the following:

“I do not see myself working for Shoprite or any other firm because they are not good for me” ^{PT7}.

The researcher asked the question why other companies were not good for the participant. The comment given by the participant was “Because you see, if you work in the mine, you have dignity even if a person working for another company can earn more than you, you will still be dignified because you work for the mine” ^{PT7}

5.10 Results for research question 6:

Would general workers prefer to earn slightly less and have a very good supervisor or earn slightly more even if their supervisor is not good?

Good and bad supervision as a measure of motivating workers was further explored. There was a specific question which investigated the importance of this motivator by comparing its importance with money. The question was: Would you rather earn slightly less and have a very good supervisor or earn slightly more even if your supervisor is bad? The participants were given the following scenario:

There are two supervisors. Which one would you prefer to work with? A good supervisor, a person who will take care of you in terms of understanding your issues, will respect you, but pays you less salary, or would you prefer to work for a supervisor that will pay you a lot more money but is horrible, he swears at you, he does not listen to you, shouts at you?

Participant 2 responded that good supervision and working conditions were the main motivators to work hard to achieve production targets. There were mixed views, although the majority of the participants preferred the good supervisor even if the money is less above the one who did not respect them and shouted at them. Some of the comments included the following:

“I would choose the one who treats and works well with people though the salary is low because I will be free. It will not help me to work with the one who pays a lot of money, but does not treat people well; I will not even be able to think about safety because I will always be confused” ^{PT21}.

“I would like to work with someone who will guide me, not shout at me, not someone who will force me to do the job at the end people are injured; now he starts shouting at me” ^{PT25}.

The ones that preferred the harsh supervisor were mainly driven by the additional money they were going to get, and to a small extent the task driven approach which would assist them to do their job well. One participant was quoted as saying:

“Money is very important; I would rather work for a supervisor who pays me more money because one day, things will change. Either this supervisor will change or his time at the mine will come to an end one day”^{PT7}.

The participants' views underpin the importance of money within this mining environment, but respect, dignity and guidance are also required by general workers from supervisors and above.

5.11 Results for research question 7:

Do general workers work at the mine by choice or because they have no other options?

A staggering 19 participants (66%) of the participants said that they were working at the mine because they had no other options, while seven participants (24%) indicated they were working at the mine by choice. The other 10% of participants contradicted themselves and were not clear on the question. Three participants were quoted as saying:

“Not by choice, because there was nothing that I can get, the mine was the only place that I get work”^{PT23}

“I want to tell the truth, I work at the mine because I have no choice, there is no other job I can do. I am not educated, let me state that, so I had to come to the mine to do manual labour where I use my hands because there is a lot of manual labour at the mine”^{PT3}

“I don't like the current I do it because I have no choice I have to work”^{PT5}.

To test if the general workers were truly motivated by money the researcher asked the following question and made an example by asking them to make a choice: “Tell me, let's say if you were to get another job in town, with the same benefits like medical aid and pension fund etc. they say they will pay you R8500, and mine, with the same benefits, they say they will pay you R11000; which job would you take?”

Most participants opted to continue to work at the mine and they were quoted saying “As I said, money is important; I will stay work at the mine”^{PT11}; another one said this “We are here for money, if the mine gives me more money I would stay, but I would like to get another position, not PVT”^{PT15}.

There were cases where the researcher probed further. The following interview was with participant 17:

Researcher: “Why?”

Participant: “Because with the money I get here, I can pay for my kids at school, I can buy a house and food for my family”.

Researcher: “Now tell me if the job in town pays you more than the one in the mine, which one would you go for?”

Participant: “I would take the one in town”

Researcher: “The one in town, why?”

Participant: “Because I want higher salary”

This was a clear indication that the main driver of working at the mine even if it's not their option was pay. The main driver of intention to stay or leave was the money paid to the general workers.

In addition to the intention to stay or leave, there were seven participants that indicated that they chose to work at the mine and would stay at the mine irrespective of the salary because of the uncertainty and discomfort of change (Table 7). This uncertainty culminated from the fact that these participants mentioned that they do not have other experience, and they know what is safe and what is not safe in their current working environment, and also they trust the mine.

Table 7: Influence on increased salary to intention to stay

Theme	Responses	Frequency
Stay or go due to money	<p>“Because with money I get here, I can pay for my kids at school, I can buy a house and food for my family” PT23</p> <p>“The mine of course, Why the mine? Because of the money” PT22</p>	16
Uncertainty of change	<p>“I will stay in the mine because I have never worked anywhere else except at the mine” PT16</p> <p>“I would prefer to work in the mine because I have worked in the mines for as long time as I have, and I am used that are safe or not safe” PT3</p> <p>“Ever since I started working, I have be working for the mine, I have never worker for another company in my life, I trust the mine” PT13</p>	6

There was however, a group of nine participants who wanted to leave the mine, irrespective of the increase of money.

Some individuals were even prepared to take a salary cut, the main drivers being the unpleasant working environment at the mines, work-balance and racism (Table 8). Participant 28 indicated that there are many things that affect them and make them sick, an example of that is dust underground, while Participant 15 indicated that she would take another job because she was scared of the lift down into the mine underground and the distance travelled going down. There was one participant who indicated that money is not an issue, and he would take a pay cut to be closer to home [PT24]. Participant 17 said that he would leave the employment irrespective of salary if he had an alternative due to his experience of racism.

Table 8: Lack of influence of increase in pay

Theme	Responses	Frequency
Unpleasant Working environment	<p><i>"I would take another job because I am scared on the lift down into the mine underground and the distance travelled going down"</i> ^{PT15}</p> <p><i>"Because the mine is a hard-working, the condition is not safe you are [not] 100% sure that you going to make it safe underground"</i> ^{PT26}</p> <p><i>"We are talking about underground here, there are many things that affect us and make us sick, thing like dust"</i> ^{PT29}</p>	7
Work-life balance	<p><i>"Depending on distance, I am far away from home, money is not an issue, and even if I can take a pay cut because I want to be closer to home"</i> ^{PT24}</p>	1
Racism	<p><i>"Because there is too much racism here at the mine"</i> ^{PT17}</p>	1

5.12 Results for research question 8:

What is the main reason that could make general workers not to come to work and what is the main reason that could make others come to work?

Three major themes emerged under this research question. Themes are presented in the table (9).

Table 9: Reason that cause high absenteeism

Themes	Responses	Frequency	Percentage
Excessive Drinking	<p>“Alcohol is one of things that makes people not to come to work, especially on pay days. Most people drink a lot because they have money on pay days” <i>PT3</i>.</p> <p>“When they get money they drink and they forget that they must go to work, you see, that is the main problem” <i>PT4</i>.</p> <p>“The reasons would be; maybe one worker has a wife that has visited him unexpectedly and he needs to go and organize a place for her to stay because we stay in the mine” <i>PT7</i>.</p>	8	28%
Family issues	<p>“The only time I will be absent from work is when I am feeling sick or my child is sick” <i>PT13</i>.</p>	6	21%
Bad relationship with a supervisor	<p>“Maybe when I’m sick, or where I’m working if the supervisor is horrible, when I just think I am not going to work, I’m going to the doctor” <i>PT24</i>.</p> <p>“Sometimes maybe where you are working, your supervisor is abusive to people, don’t know how to talk to people, so when you think of</p>	6	21%

	<p>coming to work, you say no man let me sit down, why must I go to that person” ^{PT25} .</p> <p>“Others do not have good working relationships with their supervisors, so they are not happy at work” ^{PT12} .</p>		
Fatigue	<p>“Another reason is the pressure in this mining industry. There is this thing that we must blast no matter what. Sometimes I am told that I must start at five o’clock and finish at six when I should knocked off at two o’clock maybe that goes for a week” ^{PT11} .</p> <p>“The conditions underground are very difficult, you sometimes need to take time off and rest. It is very tiring to work six months underground without resting” ^{PT8} .</p>	5	17%
Workers don’t like their jobs	<p>“Laziness and not being placed in the position you comfortable with, you just working because of the salary” ^{PT30} .</p> <p>“Others do not come to work because they do not love their job” ^{PT28} .</p>	3	10%
Other		1	3%
Total		29	100%

Family issues. Financial stress and others related to fatigue were mentioned as the main causes of absenteeism. Participant 29 made an example of this situation:

“Let me make you an example; you find that someone has two to three wives at home and he earns R8000.00, he has kids at school and has other debts also. Now when he looks at his salary with all these expenses, he gets sick from stress, you go to the doctor and he books you two days off” ^{PT29}

Fatigue was mentioned as culminating from excess hours and activities like blasting which cannot be rescheduled. The consequence of fatigue is stress resulting in an increase in overall absenteeism.

“The conditions underground are very difficult, you sometimes need to take time off and rest. It is very tiring to work six months underground without resting. That is why it is important to have regular check-ups for stress and have money in the bank”^{PT8}.

Workers don’t like their jobs: Some employees don’t really care about their jobs. They work at the mine just because they have to and they are motivated by pay. Research question five and seven confirmed this point. Disengagement with their jobs is another factor that contributes to high absenteeism.

Bad relationship with a supervisor: The bad relationship between general workers and their supervisors was highlighted as a major contributor to high absenteeism. Aggressiveness of supervisors towards general workers results in occupational stress. Sometimes when general workers think of their supervisors, they decide that they will not go to work but instead see a doctor to get a sick note, even if they are not sick. Stress caused by supervisors was also highlighted on research question six.

Excessive drinking: Excessive drinking and sometimes even alcoholism was also mentioned as a reason for absenteeism. This was a serious problem, where people go out to drink with a friend then go to sleep very late even though they have to go to work in the morning, and cannot wake up on time to go to work and end up being absent.

5.13 Summary and Conclusion

This chapter has presented the results of the research questions. The results thus far indicate that pay, as identified in chapter two, is a motivator to general workers in platinum mines. In addition, new insights emerged from the findings that allowed for better understanding of other factors that affect productivity in platinum mines. This insight includes the effect of the increasing number of female employees in mining, as well as the causes of absenteeism.

The next chapter will discuss the results of this study. The discussion will be based on the research questions and emerging insights and will provide a more detailed discussion of the research findings.

6 CHAPTER 6: DISCUSSION OF RESULTS

6.1 Introduction

This chapter will discuss the results presented in Chapter five in relation to the objectives and research hypotheses of the study. The interpretation of the results is supported by the insights gained from the literature reviewed that has been discussed in Chapter two. The aim of this chapter was to discuss the result and answer the research questions that were discussed in chapter three. Furthermore, this chapter intended to integrate the link between the current chapter and previous chapters. The results that are in agreement or that are in conflict with the literature discussed in chapter two will be highlighted. This will be used to validate whether or not the research aims have been met. Furthermore, the researcher will discuss other significant findings that emerged from the results of this study.

To retain a level of uniformity the structure of this chapter reflects that of chapter five. The chapter will begin with a discussion of the result of research question one discovered in chapter five along with the literature that was reviewed in chapter two and other question will follow in the sequence as per chapter five. The research questions from chapter three will then be used as main headings, which will form the foundation for the concluding research discussion and analysis.

6.2 Interviews for the study

There were two factors that were regarded as important to give credence to the study. These included the relevance of the interviewees and the sufficiency of the sample (i.e. sufficient number of participants interviewed).

6.2.1 Relevance of interviewee

The general workers interviewed included both males and females, with higher numbers for males as they were in a majority at the mine. In addition, the workers interviewed were all at a low level working on the underground. Those who were supervisors or team leaders also work on the face and do hard labour. The Supervisors which are mainly at Paterson band C level and Management at Paterson Band D and E were not included in the interviews.

6.2.2 Sufficiency of sample size

A total of 29 interviews were conducted, excluding three for a pilot study. This sample was sufficient as compared to interviews for qualitative studies using phenomenological design. Mason (2010) conducted a study on sample size and saturation in PhD Studies using qualitative interviews. The author found that the average number of interviews from phenomenological study was 20. This was in the same range as the proposal from Guest, Bunce, and Johnson (2006) who indicated that fifteen interviews should be the smallest acceptable sample for qualitative research. Creswell (2014) indicated that five to twenty five interviews were required for phenomenological research.

6.3 Discussion of research question 1:

What will make general workers work harder; pay or working conditions?

In this first research question the researcher investigated whether money i.e. pay, motivates general workers in platinum mines. The research question was formulated as follows:

18 out of the 29 general workers interviewed agreed that they were motivated by pay. The findings of the study revealed that pay was more important than working conditions in the mine. The results of the study on pay are in agreement with the literature, as eighteen of the participants indicated that pay is an important motivator. The quotes in section 5.5. illustrate that general workers are motivated to work harder when they expect to get good pay. This outcome was in agreement with the findings of del Mar Salinas-Jiménez *et al.* (2010) who suggested that pay may have a greater effect at lower organisational levels, especially that of general workers, than the effect of other intrinsic factors.

When the majority of the 11 general workers whose motivator was working conditions, they later deferred to money as the motivator, when they were asked about underground working conditions. If they were probably working in a different environment they were going to be motivated by working conditions. However, they are currently working at the mine and the conditions at the mine are not good, as a result they are motivated by pay. It is key to note that participants were unambiguous in confirming that pay will make them work harder. The majority of workers who initially claimed working conditions to be their motivator later deferred to say pay was their motivation.

They said the working conditions in the mine were not good so pay made them work harder, but if they were working in a different environment, working conditions would be a motivator to make them work harder.

When participants were asked research question one, one of the participants stated: "It is pay because underground conditions are not good for us as woman" ^{PT4}. Participants were asked if they would still work harder if bonus pay were taken away, a question which was explored in research question two. Some of the participants agreed that they will still work hard because their basic pay would have been increased. The outcome was in agreement with Grant (2008) who argued that intrinsic motivation is difficult to sustain in general workers' motivation because they are not skilled and they perform repetitive tasks under difficult conditions. These findings support Schaubroeck *et al.* (2008) who suggested that a significant pay increase can motivate general workers.

Considering Maslow's hierarchy of needs, money was expected to be a significant motivator of general workers, as most of them are struggling with physiological and safety needs (Afful-Broni & Nanyeke, 2012). The findings concurred with this literature as most participants cited that they were motivated by pay because they had to fulfil some of their needs. One participant was quoted as saying "The reason for me to work hard is because I want to get a good salary that will enable me to take care of my needs and my family needs" ^{PT4}. The general finding of this research is that pay is the motivator for general workers and this finding is in agreement with Van Nuland *et al.* (2010) who argued that non-monetary reward is only useful as a motivator of skilled employee's not low skilled workers.

This finding is also supported by the expectancy theory, as most participants indicated that they will work harder because they expect to get good pay. One participant was quoted as saying "I work hard because I'm expecting to get a good salary" ^{PT9}. Expectancy theory states that employees will work harder if they believe that the value of monetary rewards they are expecting will be equivalent to the effort they exert.

The study revealed that most women are generally motivated by working conditions. The majority (62%) of general workers that were motivated by working conditions were female. Although this study was not looking at gender, this finding is key as it provides useful information. This finding is supported by Azizzadeh *et al.* (2014) and Khan *et al.* (2010b) who stated that not everyone is necessarily motivated by money.

However, it was clear that in the absence of good working conditions underground, pay was a motivator. This finding is supported by Currall *et al.* (2005) who argued that pay is a powerful motivator of employees, and stated that “No other incentive or motivational technique comes close to money” (p. 620).

This finding is contradicting with Aworemi *et al.* (2011) who argued that intrinsic rewards are generally rated as better motivators than extrinsic rewards. It must however be stated that Aworemi *et al.* (2011) study did not include general workers in the mines.

6.4 Discussion of research question 2:

Will pay make general workers work harder, will they prefer it in cash or housing or food or non-cash?

Three themes emerged under the research question of pay structure (Table 2). These themes will be deliberated and referred to the literature review.

Firstly, eighteen participants indicated that they would prefer the company to hold their money for transport and housing. The reasons related to their view related to the safety of their money, poor budgeting from their side, and future security (Table 2). Table 2 shows that general workers have different preferences as to how their pay should be structured. This is in agreement with the study of Brown (2001) who found that pay preferences and structure are important to workers’ motivation. Ali and Ahmed (2009) argued that workers can be demotivated if they believe their pay structure is not portioned fairly, Platinum mines give general workers individual choices on how they would prefer their pay to be structured.

Secondly, twelve of the 18 participants who preferred the company to hold money for transport and housing cited the reason of providing the shelter for the family. This finding is supported by Maslow’s hierarchy of need theory that states that people first consider their physiological needs (food, water, shelter, and other bodily needs); these are at the bottom of the hierarchy. Most general workers are concerned about the shelter that they need to provide to their family.

Six out the 18 participants cited that this preference was based on the fact that they needed budgetary assistance. This finding is supported by expectancy theory that suggests several important things, such as benefits, housing and flexible pay, can be implemented to motivate employees, by varying a worker’s effort–performance

expectation, performance–reward expectation, and reward valence (Ghazanfar *et al.*, 2011; Lunenburg, 2011).

It is evident that being able to decide on how to structure their own pay definitely played a role in motivating general workers. Most employees said that they preferred the company to hold some of their pay and also contribute to their housing and transport, while other preferred a cash payment only. This finding is in agreement with Kasper, Muehlbacher, Kodydek, and Zhang (2012) whose study concluded that benefits and pay structure was not an important motivator for educated employees but a significant motivator for general workers who have a low level of education and do labour intensive work.

The finding for this research question is that general workers prefer their pay to be structured according to their needs.

6.5 Discussion of research question 3:

Would general workers prefer an increase of R5000 without a bonus, or for their salary to stay as it is with a bonus?

The majority of the literature so far suggested that there is, to some degree, a component of motivation associated with a bonus. The majority of participants acknowledged the role and importance of a bonus when it comes to productivity and motivation. The quote seen in section 5.7 illustrates that general workers' bonuses do motivate them.. From the results it can be deduced that the respondents were aware that bonuses are aimed at motivating workers to be productive, which is in line with the work of Lowery *et al.* (2002) who argued that bonuses can improve performance as bonus payments are linked to performance.

The study findings indicated that there is a clear correlation between bonus payments and motivation, causing workers to exert more effort, ultimately leading to higher productivity. Whilst this is the case, the workers explained the importance of meeting the production target in order to receive the bonuses. This finding is supported by Lowery *et al.*, 2002 who argued that bonuses can improve performance as the payment is linked to performance. The finding is also supported by Pouliakas (2010) who argued that bonuses may have a positive influence on workers effectiveness.

While the relationship between performance and bonuses is strong, circumstances that are beyond workers' control in terms of achieving production targets have a

significant impact. As a result, most general workers preferred to have a higher basic pay and opted for bonuses to be completely taken away.

Table 5 shows that some general workers criticised bonuses and argued that they caused accidents. It was thought that they caused employees to push for production and ignore the safety aspect of their jobs, as they wanted more pay. The inconsistency of bonus payments and the variance of the amount payed was the main reason given by workers why they preferred their basic pay to be increased. They felt they could budget properly as they will know the exact amount they will get at the end of the month. This finding clearly shows that pay in either the form of basic pay or bonus has an impact on motivation and productivity of general workers. This finding is in agreement with Lowery *et al.* (2002) who stated that basic pay is not directly linked to performance but it can have effect on motivation and performance.

The finding of this research question is that bonus payment does motivate general workers to work harder to improve productivity. However, due to poor performance of general workers, they don't consistently get a bonus payment. As a result they prefer high fixed pay with no bonus payment.

6.6 Discussion of research question 4:

What else, other than money, will make general workers work harder and make them come to work every day?

Four major themes developed under the question "Other motivational factors" (Table 5). Firstly, seven participants (24% of total participants) discussed the view of how important good supervision was to them. Table 6 shows that there are other factors, besides good supervision, that motivates workers, the need to provide for family being at the top of the list. Good supervision refers to how a supervisor treats and communicates with the workers below him, and workers' performance and motivation is linked to how a supervisor directs tasks and communicates with workers. General workers tend to repay their supervisors' bad behaviour by decreasing their productivity.

The action of subordinates to repay the supervisor by decreasing productivity is derived from negative exchange, where negative conduct is settled up with negative behaviour (Cropanzano & Mitchell, 2005). Quotes from general workers on table 9 explicitly articulate the importance of supervision.

This finding is in agreement with Shacklock *et al.* (2012) who suggested that quality supervisor/subordinate relationships will be of significant value to both the individual and the firm. The findings is also in agreement with Madlock and Kennedy-Lightsey (2010) who argued that negative communication, such as supervisors' verbal aggressiveness, has a negative impact on subordinates' work performance and motivation.

Secondly, an important major theme discussed by 24% of participants, was the need to provide for their family, especially kids. Several of these participants stated that they want their kids to have a better life than them. They all wanted their kids to get a better education so that they will not have to work underground in a mine. This is in agreement with Maslow's hierarchy of needs theory which states that people first consider the needs at the bottom of hierarchy. The need to provide for the family is the safety need to provide security of the family.

A third major theme was discussed by six participants who believed that money was the only motivator. These participants stated that pay was the motivator that drives their work performance. This finding is in agreement with Herzberg's theory which classifies pay as a hygiene factor that is critical in motivating workers. Herzberg's theory of hygiene factors is also supported by Bassett-Jones and Lloyd (2005) who argued that when a hygiene factor, which, in the case of this study, is pay, is inadequate, employees will not be motivated.

The fourth major theme was discussed by three (just under ten percent) participants who believed that respect by supervisors and management was a motivator. General workers expect management and supervisors to respect them. This expectation is in the form of psychological contract and usual human respect. This finding is in agreement with Dabos and Rousseau (2004) who argued that employment relationships, which include respect, are managed by the supervisor and are important in psychological contract and the motivation of employees.

The finding of this research question is that there are other motivators that general workers would value if pay were taken out of the equation. Although pay is the main motivator, general workers do not totally exclude the need to provide for their families and the need to have a good relationship with supervisors. The need to provide for the family is linked to pay while good supervision is not directly linked to pay but is still valued by general workers as a motivator.

This finding revealed that there is a gap in the literature. The existing literature did not clearly link good supervision with general workers motivation. It emphasised pay as the only motivator, and none of it hinted at supervision as the second motivator for general workers.

6.7 Discussion of research question 5:

Will general workers work hard because they love the jobs that they are doing or because they expect to get good pay (salary and bonus)?

The researcher aimed to determine the influence of job factors on motivation compared to pay. The researcher also intended to investigate if general workers had a positive attitude toward their jobs. He was able to identify from the analysis of the semi-structured interviews whether or not the job factors were motivators to general workers, and if general workers had a positive or negative attitude towards their jobs.

Twelve out of the 29 workers interviewed said that they were not engaged with their jobs. The quote in section 5.9 illustrates that general workers are motivated to work hard not because they love their jobs, but that their key motivator is money. Participants indicated that they were doing physical underground work and that made them dislike their job.. It is clear from the quotes in section 5.9 that there is a universal trend regarding the motivation of general workers. The trends point towards pay; general workers place emphasis on pay as a major motivator.

The findings are in line with Nielson and Smith (2014) who defined general workers as employees who perform manual labour, and they have limited or no education and are motivated by pay. These research findings were to a great degree comparable to those identified by Ryan and Deci (2000) who stated that intrinsic motivation is an essential motivation for educated workers, but that it cannot motivate general workers because most of the jobs done by general workers are not intrinsically motivating and nothing seems to be a better motivator than money.

This finding is also in line with Altman (2007) who argued that in a resource based industry general workers are motivated by extrinsic motivational factors such as pay and these industries depend on general workers' motivation to increase productivity. The findings also support Ryan and Deci (2000) who argued that although intrinsic motivation is an essential motivation, it cannot motivate general workers because most of the jobs done by general workers are not intrinsically motivating and nothing seems to be a better motivator than money.

The finding of this research was that general workers do not enjoy their jobs, as the jobs involve hard manual labour. The only motivation to do the job is pay. The few who mentioned that they enjoyed their job said that they had been doing the same job for a long time, but the majority were motivated by pay.

6.8 Discussion of research question 6:

Would general workers prefer to earn slightly less and have a very good supervisor or earn slightly more even if the supervisor is not good?

The researcher intended to investigate the impact of supervision on general workers' motivation and productivity and to determine if it was more important than pay. The participants stated that supervision had an impact on their motivation and productivity.

The quotes in section 5.10 illustrate that supervision preference was driven by motivation factor and personal wellbeing. A slight majority of general workers (52%) preferred to work with good supervisors even if they earned slightly less than what they were currently earning.

The fact that general workers work underground six days a week, means they prefer stability and peace in the workplace. The participants' view on supervision was that a good supervisor is associated with well-being and workers felt that they can work safely under good supervision. Furthermore, general workers also indicated that bad supervision affects their well-being as it causes unhappiness and stress. Participants said that they are not able to safely and effectively perform their duties if they are stressed and unhappy.

The finding was that, when pay as the main motivator is put aside, the majority of general workers would be motivated by good supervision. This finding is in agreement with Harris *et al.* (2011) who argued that the prolonged bad treatment of subordinates affects workers' well-being which result in low productivity. One participant confirmed Harris *et al.* (2011) argument and was quoted as saying "you can't work when you not focus at work, you broken at heart. When you're at work you must always be happy and get things out of your mind, so I would rather work for less money" ^{PT22}. This finding is in agreement with Azizzadeh *et al.* (2014) who stated that not everyone is necessarily motivated by money.

Other participants were willing to get a pay cut in order to work with a supervisor who would treat them well. However, the same finding was contradicted by Currall *et al.* (2005) who stated that nothing came close to money or pay as a motivator. The other

14% could not decide which type of supervision was better for them. The other 34% of participants said that they preferred to work with bad supervisors as long as they got more money. One participant was quoted as saying "Money is very important to me; I would rather work for a supervisor who pays me more money" ^{PT7}. Another participant was quoted as saying "Money is a very important commodity in our lives. I will work for the bad supervisor" ^{PT10}.

The finding of this research question is in agreement with the finding of research question four. Although pay is primary motivator for the general workers but good supervision is still important in motivating general workers. Good pay must be supported by good supervision in order for the general workers to be fully motivated and for the companies to get value of pay as a motivator. Bad supervision can overcrowd pay as motivator and destroy the value of pay as motivator which may lead to low productivity.

6.9 Discussion of research question 7:

Do general workers work at the mine by choice or because they have no other options?

The researcher intended to investigate if workers were working at the mine out of choice or because they had no other employment opportunities. The quotation in section 5.11 shows that most participants (66%) were working at the mine because they did not have any other options. Most participants agreed that working conditions underground were tough, but because there was limited job opportunity elsewhere, they had to work in a mine in order to provide for their families.

Most participants understood that underground work was more labour intensive and also tough. One participant was quoted as saying:

"I want to tell the truth, I work at the mine because I have no choice; there is no other job I can do. I am not educated; let me state that, so I had to come to the mine to do manual labour where I use my hands because there is a lot of manual labour at the mine" ^{PT3}. Another participant said: *"You know that it is dangerous to work underground; I'm sure many ladies will agree with me that working underground is dangerous. The people there will tell you that it is dangerous to work underground"* ^{PT24}.

These findings were in agreement with Jevé *et al.* (2015) who stated that an engaged employee is willing to put extra effort towards a task to make the firm successful even if the task is not intrinsically motivating for the employee, but the reward must supersede all other negative perception of the task. For the employee to be willing to

exert extra effort on the job that it's not the employee preference, the employee must be fully engaged on the task. The authors affirmed that engaged employees will be more productive. To get workers motivated and productive in the absence of work engagement, pay plays a significant role. All uninteresting jobs are done by general workers who have no other option of employment.

These research findings are in agreement with Schaubroeck *et al.* (2008) who stated that a significant pay increase can stimulate productivity of general workers, because their pay is generally low and the job they do is not stimulating. Schaubroeck *et al.* (2008) also stated that general workers respond positively to pay raises, and then become motivated to exert more effort no matter what type of job they do.

The strong link between general workers' motivation and pay suggests that pay will always be a significant motivator for general workers. This sentiment is supported by Currall *et al.* (2005) who argued that pay is a powerful motivator, and stated that "No other incentive or motivational technique comes close to money no matter what type of job it is".(p. 620).

6.10 Discussion of research question 8:

What is the main reason that could make general workers not to come to work and what is the main reason that could make others come to work?

The research intended to investigate if motivational factor will result in absenteeism if general workers feel they are not fully met. Three major themes emerged under the research question in discussion. Table 9 shows that the main themes were stress, fatigue, and excessive drinking. These themes seemed to have a significant influence when it comes to worker absenteeism. Worker absenteeism was a major issue raised by participants. Worker absenteeism is defined as a healthy worker who will report himself or herself as absent (Sanders, 2003).

Firstly, six of the participants (21%) indicated that bad relationships with their supervisors caused them to be absent from work. Bad relationship with supervisors tended to cause stress on general workers. All six participants mentioned supervisors as causing stress and made them decide to be absent at work. One participant was quoted saying "Where I am working, if the supervisor is horrible, when I just think, I am not going to work, I will go to the doctor" ^{PT24}.

Although attendance at work is a necessity for general workers in terms of pay, when the stress of a bad supervisor is present they sometimes do not go to work. One

stressor that was repeatedly mentioned by the participants was mistreatment by the supervisors. The mistreatment was not inherent in general workers job and was perceived as unfair and a major contributor to high absenteeism. This finding is in agreement Harris *et al.* (2011) who stated that prolonged aggressive treatment of subordinates affects workers well-being, which results in low productivity and possibly absenteeism.

This finding is also supported by the finding of research question six where supervision played a role in general workers' motivation. When a supervisor mistreats workers they become demotivated and as a long term result they are absent from work which leads to a decrease in productivity.

Secondly, eight participants (28%) indicated that alcoholism is the main reason that cause workers to be absent from work. One participant was quoted as saying:

"When people see the money, they go to the tavern and drink a lot. On Monday they wake up and realize that they didn't go to work. Sometimes they drink a lot especially male, at least woman are better than man"^{PT25}.

According to participants, there is high absenteeism during pay weekends and general workers immerse themselves in alcohol. This is because they work for the love of money and money motivates them. Once general workers get paid they use some of their pay on alcohol. One participant was quoted as saying:

"Alcohol is one of things that make people not to come to work especially on pay days. Most people drink a lot because they have money on pay days"^{PT3}.

Employers should educate general workers on health issues and financial stress associated with alcohol. Through education, employers can overcome absenteeism as a result of alcohol, thus improving productivity.

This finding is supported by Gangai (2014) and Barclay (2012) whose studies found that a higher proportion of males' absenteeism in the workplace was associated with alcohol abuse and found that females consume less alcohol than males. They also found that productivity in agricultural firms' was lower due to high absenteeism resulting from alcohol consumption. The agricultural industry employs a lot of general workers which is similar to the platinum mine. The behaviour of general workers seems to be the same irrespective of the industry.

Thirdly, according to five participants (17%) absenteeism was caused by fatigue. These participants mentioned long working hours that are more than ten hours per

day. When general workers are working under pressure and work long hours they become mentally and physically fatigued. According to the participant this was one of reasons why platinum miners experience high absenteeism. One participant was quoted as saying:

“Sometimes I am told that I must start at five o’clock and finish at six when I should knock off at two o’clock. Maybe that goes for a week”^{PT11}.

Working conditions have an effect on employees’ well-being and willingness to go to work. If working conditions are unpleasant, they may result in a high rate of absenteeism of general workers. Some participants mentioned that difficult working conditions cause fatigue. One participant was quoted as saying “The conditions underground are very difficult, you sometimes need to take time off and rest. It is very tiring to work six months underground without resting” ^{PT8}. Some are absent because they get tired which makes them not to be able to wake up and come to work the following day” ^{PT28}.

Fourthly, according to three participants (10%) absenteeism is high because general workers don’t care about their jobs or don’t like the type of job they are doing. According to these participants, some general workers are working only because they want money. Money is their motivator and when are paid they will be absent from work. These workers take sick leave even if they are not sick, they just don’t have a positive attitude toward their jobs.

Some participants were quoted as saying:

“Others do not come to work because they do not love their job”^{PT28} and “Laziness and not being placed in the position you comfortable with, you just working because of the salary”^{PT218}.

These findings support Chat-Uthai (2013), who argued that disengaged employees generate a negative attitude towards their jobs. Throughout this study it was evident that money was a motivator and most general workers in platinum mines were working underground because they had no other choice and they didn’t like their jobs. This was an indication that they are not engaged with their job but they do their job because they are motivated by pay.

This finding supports the literature in chapter two where general workers indicated that they were more likely to come to work when they were motivated and happy.

The findings were that alcoholism and poor relationships between supervisors and workers were the main reasons for general workers' absenteeism. Poor supervision was discussed in length in section 6.8 and the findings were similar to the findings above. Above all, alcoholism was the major factor that causes absenteeism of general workers, according to these findings.

6.11 Emerging insights from the study

6.11.1 Impact of woman in mining on motivation and productivity.

The study had revealed that the gender within the underground mining setting has become a modifier of the motivator of general workers. In these settings, although money is important, the majority of females placed the importance of money behind the importance of working conditions. This emerging insight was in line with the findings of Karaskakovska (2011) from the study titled "Analysis of Employee Motivation Factors: Focus on Age and Gender Specific Factors". In this study the author found that women placed work environment higher than money as a motivator, while men ranked money higher than work environment.

This outcome was further supported by an earlier study on motivational research carried out by Vaskova (2006), who found that men placed a higher value on money (basic salary and bonuses) as a motivational factor while women placed more value on respectful treatment by their employer, interpersonal relationships at the work place and a good work environment.

There was a discussion about a view that production and productivity have decreased because of the increasing number of women that are working underground. The majority of participants were in agreement that productivity was negatively influenced by the growing number of women working underground. Both females and males participants mentioned that underground work requires physical strength and woman, by nature, do not have the physical strength required to do underground work.

When the effects of having females in mines on productivity were explored further, males mentioned that because the pay is the same, they adjusted the work pace to that of women because they were paid the same salary. Because of equal pay, men felt that they had to exert the effort as women. Male participants felt that their effort leads to achieving work targets; once targets were achieved they were rewarded for their effort. The big issue for the male participants was that the reward was equally shared with female colleagues who exerted less effort than they did. When asked this question, participant 28 said:

“Some people are saying the production here at the mine has decreased because the mine has employed a lot of women underground and they do not have the physical strength to work there, what is your take on that?”^{PT28}.

The participant responded by saying:

“I agree with them because the government has agreed that women must be employed to work underground, but they do not have the same strength as us men; for example, the system says there has to be two stope timber workers, a male and a female. A woman is not able to do that, and that is the reason why work gets stuck and the production cannot come out”^{PT28}.

The researcher probed the participant and gave him the following example: *“Someone said to me, as you have rightfully mentioned that there is a male and a female as stope timber, if a woman takes one stick, he will also take one stick because at the end of the day, their salary is the same, it’s 50/50; why must he move fifty sticks and a woman moves only ten, yet their salary is the same. He says he sits and watches the woman, if she takes ten, he will also take ten; do you think that is right or wrong, to watch how a woman performs?”*

The participant responded by saying:

“I know that a woman’s strength is not the same as a man’s, the problem is that we earn the same salary, and I cannot allow that in the situation where I work, as she sits and does nothing, but we are earning the same salary yet we have been tasked to do this work together”^{PT28}. Another insight that emerged from this study was the perception that woman contribute to accidents and injuries in the mines.

6.11.2 Impact of bonus system to safety

Most general workers prefer to have a higher basic pay and opt for bonuses to be completely taken away. The two main reasons for this were often circumstances beyond their control, such as a shortage of materials, and also that bonuses were a major contributor to accidents in a mine as workers who were trying to get bonuses often took shortcuts that contributed to accidents.

When participants were asked why they chose fixed pay increases over bonuses, some gave the following answers:

“Bonuses cause a lot of accidents underground because people rush bonuses and they don’t even check if the conditions are safe because they are rushing for their bonuses”^{PT3}.

Another participant stated this:

“What happens sometimes is that you find one of us who has a lot of debts to pay; he will try to force us to work extra hard for him to get a bonus to pay for his debts, which leads to injuries at work”^{PT10}.

“This bonus system is a problem because it causes a lot of injuries here in the mines because we always have to rush our jobs because we want to get bonuses”^{PT7}.

This emerging insight, once again, emphasised the point that money is the dominant motivator for general workers. This finding is supported by Adelakun (2014) whose study revealed that most workers are motivated by financial incentives whether it is basic pay increase or bonus. Bonuses should drive productivity but in the case of the mining industry it seems that it drives productivity at the expense of workers' safety.

6.12 Conclusion

Overall the results from the participants indicated that pay has an effect on productivity and motivation on general workers in South African platinum mines.

The first research question was whether or not money (pay) motivated general workers in platinum mines. The study revealed that 62% of participants were of the view that money was the main motivator for them to work hard with passion and dedication, while 28% indicated that good work conditions were the main motivator.

When the eight participants out of 11 who said they were motivated by working condition (28%) - were later asked if they were motivated to work harder because they liked their jobs or because of they want higher pay, 38% of the eight changed their minds and indicated that they were motivated by high pay while 62% remained consistent. The majority of general workers who mentioned working conditions as motivators were female. This underpins the challenges associated with work environments at the mines.

The second research question asked whether or not general workers who are paid more become more productive, and the study found a definite correlation in increased effort and productivity when workers' salaries were increased. Despite this, workers explained the importance of meeting production targets when it came to bonus payments. The two recurrent factors mentioned that influenced productivity were the increasing number of female employees underground and the amount of absenteeism, both of which have a negative effect on productivity.

The last research question investigated which factors, other than money, motivate general workers in South African platinum mines. There were three other factors that featured strongly as the motivators of general workers. These were working conditions, good supervision and the need to provide for family. The next chapter will discuss the principal findings, implications for management, limitations of this research and suggestions for future research.

7 CHAPTER 7: CONCLUSION

7.1 Introduction

This chapter covers the main points of the studies' objectives, the principal findings of the research, implications to management, the contributions of the research to the current body of knowledge, limitations of the research and suggestions for future research.

The objective of the research was to understand the role of pay as a motivator of general workers and to discover the link between motivation and productivity of these workers. This is intended to be valuable to managers who wish to cultivate and implement motivational tools to be used by many firms in the mining industry. Having this knowledge is one thing, but knowing how to use it to motivate workers is a lot more difficult.

Research and subsequent analysis has shown that pay motivates workers who are at a lower level of company hierarchies, and has also shown a close relationship between pay and motivation and productivity. .

7.2 Principal findings

To answer the research objectives, the researcher conducted content analysis to discover common themes that were appropriate to the research question. The following outcomes were obtained. General workers in platinum mines had different views but the majority were clear that pay was a motivator. Although the sample consisted of only 29 employees, the research results indicated that there are consistent responses that pay is an important motivating factors for general workers in platinum mine and it drives workers to be more productive. In addition, it was been confirmed that working conditions in platinum mines are not conducive yet those that they said they were motivated by working conditions later agreed that they were in mines because of money. Pay is the main motivator for general workers in South African platinum mines land the theory confirmed that general workers are motivated by pay (Harunavamwe & Kanengoni, 2013). All participants who were motivated by pay were explicit in affirming that pay was their main motivator.

The research was able to confirm that general workers work harder if their pay is increased regularly. Most participants opted out of bonus payments because of the inconsistency.

This study was able to confirm that there is a link between motivation and productivity. When general workers are motivated, they work harder to achieve a goal.. It was obvious that even if general workers didn't like the jobs they were doing, they were motivated to work hard as long as they were being paid (Currall *et al.*, 2005). It was clear that substantial pay and pay increases will motivate general workers to work hard and exert more effort towards their task (del Mar Salinas-Jiménez *et al.*, 2010). No matter which theory is followed, pay appeared to be the important link to higher motivation of general workers according to the findings of this study (Aworemi *et al.*, 2011; Grant, 2008; Kuvaas & Dysvik, 2010b; Mundhra & Jacob, 2011).

Not everyone is motivated by pay; women are generally motivated by good working conditions and good treatment by their supervisors (Azizzadeh *et al.*, 2014); Khan *et al.*, 2010b). In the absence of preferred motivation enablers, women are motivated by pay and they will exert more effort, even under conditions they don't dislike, if they expect to get good pay. This is interesting because men believe women don't have the physical strength to do underground work while women feel they can put the extra effort.

Pay must be structured appropriately in order to maximize its value as a motivator. If pay is not structured according to general workers' expectation, they can become demotivated (Ali & Ahmed, 2009). General workers differ on how they prefer their pay to be structured. If the worker decides on the structuring of his or her pay, and the company implements that decision, then the worker is very likely to become more motivated.

The research also found that workers who were motivated by good working conditions tended to react positively to pay increases as a compromise when their working conditions were bad (Nielson & Smith, 2014). This can be done by structuring pay to include some allowances such as an underground allowance, danger allowance etc. If the working conditions are not good, pay must be increased in order to motivate general workers so that they can be more productive (Muogbo, 2014; Tang, 2012).

Another principal finding was that whilst pay was a key motivator, it was indicated by participants that if pay were to be put aside, good supervision was a key motivator. The relationship between general workers and their supervisors was mentioned as critical in motivating general workers (Shacklock *et al.*, 2012). The respect and treatment by supervisors was valued more than working conditions.

Bad relationships between workers and supervisors cause extreme stress and demotivation, resulting in absenteeism, low productivity and work place accidents (Duffy *et al.*, 2002).

The research also found that the presence of woman underground had an affect on productivity. Males mentioned that because the pay is the same, they adjust the work pace to that of the women because they are paid the same salary. Because of equal pay, men felt that they were only required to exert the same amount of effort. Because of this, men become demotivated, because they are required to exert more effort for the same amount of pay. Once targets are achieved, they will all be rewarded similarly, and men do not see this as fair as their contribution is larger (Vroom, 1964).

7.3 Implication for management

This study has several important implications for management. It showed that pay has a significant impact on the motivation and productivity of platinum mine general worker. The practical implication for managers is to pay their general workers well and their motivation and productivity will increase. This implies that platinum mine managers need to ensure that pay for general workers is adequate and can trigger motivation and will result in higher productivity. The pay must be structured appropriately in order to motivate workers to be productive.

This study also found that good supervision is something that general workers take seriously as a motivator or de-motivator. The implication is that management should understand the implications of the relationships between their supervisors and their subordinates. Management should ensure that supervisors are aware of the role they play in motivating general workers and that they are equipped with the tools and knowledge that will assist them in building good relationships with their relationships.

7.4 Recommendation to stakeholders

7.4.1 Recommendation to management

Management should be aware of the different motivators for workers as this tends to differ depending on job categories. Workers should be motivated by what they perceive to be important to them rather than what management perceive to be important. Managers can improve motivation through various pay systems such as bonuses and basic pay increase.

Managers should manage pay increases since salaries are 70% of the total cost of running the platinum mines (Morgan, 2014). If pay increases do not lead to motivation and improved productivity, the end result is profit loss for mines. Management should be able to line their remuneration policy with pay increases

Managers should have a remuneration policy that links pay increases with productivity and these should be shared with trade unions. At the end of the financial year or the start of new increases, management should evaluate whether or not the previous year's increase had an impact on productivity. Secondly, bonus payments must be meaningful to general workers; mine managers must have a minimum that will be paid to general workers. If productivity achieved by general workers warrants pay that is below the value that is deemed meaningful, managers must not pay the bonus. The bonus payment that is below the meaningful value demotivates general workers and erodes the value of the bonus payment as a motivator.

Thirdly, In addition to basic pay, allowances and fringe benefits should both be provided to employees to keep them motivated. Managers should explain that these allowances and fringe benefits are in addition to basic pay. It is important to ensure that when the platinum mine's profitability decreases, these allowance and fringe benefits may be taken away in order to keep the mine profitable. Mine managers should share profit with employees when the mines are profitable.

Fourthly, managers must find a good balance between bonus pay and safety. They should ensure that there are systems in place to ensure that workers do not work unsafely in order to get a good bonus payment. They should put systems in place that ensure that general workers don't work unsafely in pursuit of good bonus payment.

In fifth place, while managers implement effective pay and reward systems to keep general workers motivated, they must not ignore supervision. Mine managers should ensure that supervisors have people skills. Supervisors should be given training about to motivate and handle general workers. Managers should also explain to supervisors that they act on behalf of the mine and the mine relies on them to motivate and fulfil psychological contract with general workers.

Finally, mine managers should identify jobs that are likely to suit women underground. Women cannot do the same jobs as men because they are not as strong. It is as simple as that. Men feel that they are entitled to more pay because they exert more effort. Male workers end up being demotivated and end up working more slowly because they feel that it is not fair.

It is a requirement that government has forced on mines, an unfortunate result of “enforced equality” and a challenge that management will have to deal with in order to restore normality and economic viability.

7.4.2 Recommendation to trade unions

The findings of this study can be used by trade unions when they negotiate general workers’ pay. Trade unions will have to first understand how general workers want their pay to be structured. Currently, the focus of trade unions is mainly on pay increases and not on how pay should be structured. Trade unions should conduct a survey amongst general workers to determine what their preference of pay structure is. Both workers and management will benefit from this information during negotiations, particularly with regard to productivity.

Trade unions should consider workers’ productivity when they negotiate pay increases. If trade unions encourage workers to be more productive after getting pay raises, management will probably be more willing to raise their pay. Trade unions should be aware that productivity of general workers has declined while their pay has increased. When unions demand higher pay raises, they should also guarantee productivity that is in line with their pay demands, in order to keep South African platinum profitable.

7.4.3 Recommendation to academia

This study revealed that there is a gap in the literature regarding pay and motivation of general workers in the mining industry. Academia has spent a lot time investigating the motivation of skilled and white collar workers in other industries and very little research has been done on general workers in the mining industry (Masvaure *et al.*, 2014). This study revealed that motivation of general workers in labour intensive industries is critical for the firm to be profitable. In a labour intensive industry, general workers are the main asset, and they can make the business succeed or fail. Academia should be applying more energy finding out what makes general workers more productive, as this information can be used by the mining and agricultural sectors which are crucial to South Africa’s economy.

This research has added to the body of knowledge and academia and can build on it to cover other areas since it was only looking at platinum mining. On a larger scale, the study provides an in-depth understanding of motivational factors in the mining industry as a whole.

7.5 Limitations of the research

Notwithstanding this contribution, this study has certain limitations. Firstly, the current study was carried out on general workers in South African platinum mines based in Rustenburg. Other commodity mines such as gold, coal etc. were excluded from this study. Repeating this study in other commodity mines in different regions will offer support that the results of this study are adaptable to other regions, and not limited to a single geographic area and single commodity.

Secondly, general workers from other small platinum mines were not included; the study focused only on general workers that were working for the big three platinum in South Africa.

Thirdly, the researcher used a purposive sample, which may have given rise to bias. Other methods could be used that might have less bias.

Fourthly, the interviews were conducted using the mother tongue of participants and were later interpreted and transcribed to English. It is possible that the researcher may have inferred participants' responses with bias, which could have an effect on the results. As the researcher is both a manager in one of the platinum mines and the interviewer, this could have caused a fundamental bias.

Finally, this study did not take into account gender in determining the impact of pay on motivation and productivity. The government forces the platinum mines to employ more women to do underground work. A study focusing on gender at the mines would provide valuable contextual insights into the impact woman have in mining and what motivates them.

7.6 Suggestions for future research

These limitations, however, provide opportunities for the future. The following future researches are recommended:

Firstly, this study was limited to South African platinum mines only. Future research should cover the South African mining industry as a whole and also cover mining industry, globally. Covering the entire mining industry will allow the findings to be generalised to the industry as a whole. Secondly, future research is required to study the impact supervisors have on motivation and absenteeism of general workers in the mining industry and other industries that rely heavily on general workers. This

suggested future research is important because supervisors are crucial in managing such relationships.

Thirdly, future research should focus on gender to determine if females working underground are motivated by similar motivational factors as men. This future research will allow the researcher to explore the insight about females in mining that emerged during this study.

Fourthly, future research should investigate the impact of bonus payments on safety at the mines. There was an emerging insight around safety where it was thought that some workers took risks in order to meet deadlines so that they could get bonuses, thus causing accidents. This future research will provide meaningful information to managers on how to find a balance between bonus and pay.

7.7 Conclusion

The main aim of this study was to understand the role of pay as a motivator of general workers in platinum mines. The second aim of this study was to discover if there was a link between motivation and productivity of general workers in platinum mines and lastly to establish if there are any other motivational factors that motivate general workers in platinum mines.

This study has confirmed that pay is the most valuable motivational factor for general workers in South African platinum mines. Even general workers that would be generally motivated by working conditions are motivated by pay in the absence of good working conditions underground.

This study also revealed that there is a strong link between motivation and productivity. When general workers in South African platinum mines are happy with their pay, they exert more effort in their job which results in increased productivity. General workers in South African platinum mines will even sacrifice their safety instead of pay. If they know that they will be paid a bonus for achieving and exceeding a production target, they will work hard to achieve the target. This outcome emphasises the application of expectancy theory which states that workers will exert more effort if they expect good pay.

This study also revealed that even though pay is the most important motivator for South African platinum mine general workers, there are other factors that motivate these workers. South African platinum mine general workers are motivated by good treatment and respect from their supervisor. Bad supervision causes absenteeism,

which results in low productivity. It has been shown that if general workers are not well treated by their supervisors they will be demotivated and will to go to work, and this calls for management to look into ways in which the situation can be improved.

This study recommends that platinum mine management should attempt to learn what motivates their employees at all levels and incorporate those factors into the reward system. The findings of this study can be useful to mine managers as it provides useful information that can be incorporated into the remuneration policy of general workers.

This research contributes to the body of existing knowledge by adding to the field of study, which requires continuous advancement in order to keep South African platinum mining profitable. It also provides the future researchers with a source of knowledge, and inspires forthcoming research based on the highlighted limitations. The results of this study, though conducted in a single commodity mine, can be applied across mining industry - thanks to similarities to all the other mines.

The findings of this research can assist managers in maximising platinum mine general workers' productivity by utilising remuneration and supervision as a motivational factors. The findings of this research study have proved that pay is the primary motivator, and has a major impact on South African platinum mines general workers' motivation. The study has also revealed that although the remuneration is not the only motivator, it is the major motivator. Although good supervision is also an important motivator for general workers, it does not supersede pay.

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Appendix A: Consistency matrix

Title: Impact of Pay on Productivity and Motivation to General Workers in Platinum Mines in South Africa

Research Questions	Literature Review	DataCollection Tool	Analysis
Research Question 1 What will make a general worker work harder, is it pay or working condition?	Harunavamwe & Kanengoni, 2013. Adelakun, 2014 Anyim, (2012)	Interviews	Content analysis
Research Question 2 If pay will make general workers work harder, will they prefer it in cash or housing or food or non-cash?	Aguinis, Joo & Gottfredson, 2013. Azizzadeh, Hirvani, & Sfestani, 2014 Khan, Farooq, & Khan, 2010. Ibrahim & Saheem, 2013 Lunenburg, 2011	Interviews	Content and thematic analysis
Research Question 3 Would general workers prefer if R5000 was added to their basic pay and no bonus or rather stay as where they are?	Muogo, 2014 Rehman & Ali, 2013. Harunavamwe & Kanengoni, 2013	Interviews	Content- and thematic analysis
Research Question 4 What else, other than money, will make general workers work harder and make	Aworemi <i>et al.</i> , 2011; Azizzadeh <i>et al.</i> , 2014; Khan <i>et al.</i> , 2010b	Interviews	Content- and thematic analysis

them come to work every day?	Aworemi, Abdul-Azeez, & Durowoju, 2012		
Research Question 5 Will general workers work hard because they love their jobs that they are doing or because they expect to get good pay (salary and bonus)?	Tezergil, Köse and Karabay (2014) Jeve, Oppenheimer, & Konje, 2015 Masvaure, Ruggunan, and Maharaj (2014)	Interviews	Content Analysis
Research Question 6 Would general workers prefer to earn slightly less and have a very good supervisor or earn slightly more even if their supervisor is not good?	Shacklock, Brunetto, and Farr-Wharton (2012) Adebayo & Ogunsina, 2011 Harris <i>et al.</i> , (2011) Duffy, Ganster, and Pagon (2002)	Interviews	Content analysis and thematic analysis
Research Question 7 Do general workers work at the mine by choice or because you have no other options?	Wakeford (2004) Danish and Usmand (2010)	Interviews	Content analysis and thematic analysis
Research Question 8 Is there anything else you want to say or add and do you think I have covered everything?		Interviews	Content analysis and thematic analysis

Appendix B: Consent letter

**Gordon Institute
of Business Science**
University of Pretoria

I am conducting research on the **impact of pay on productivity and motivation on general workers in South African platinum mines**, and am trying to find out more about what motivates general workers and what will make them increase productivity in the platinum mines. Our interview is expected to last between 30 min to an hour. **Your participation is voluntary and you can withdraw at any time without penalty. Please note that this is a university research project and I am not representing management neither I was sent by management to get information.** Of course, all data will be kept confidential. If you have any concerns, please contact my supervisor or I. Our details are provided below.

Researcher name: Mthokozisi Jali
Email: mthokozisi.jali@angloamerican.com
Phone: 073 381 8808

Research Supervisor Signature:
Email: drbussin@mweb.co.za
Phone: 082 901 0055

Signature of participant: _____

Date: _____

Signature of researcher: _____

Date: _____

Appendix C – Permission letters



SECURITY CLASSIFICATION

PLATINUM

Rustenburg Platinum Mines Limited

ANGLO PLATINUM DEVELOPMENT
CENTRE
Hexriver Complex
Old Mine Road
Rustenburg
0299
South Africa

Mr Mthokozisi Jali
c/o Thembelani Mine
Anglo American Platinum
Rustenburg

08 July 2015

Dear Mthokozisi

PERMISSION TO CONDUCT RESEARCH FOR ACADEMIC PURPOSES

In reference to your request to get permission to conduct an Integrative Business Research Project as a component of your studies for a Masters of Business Management degree through the Gordon Institute of Business Science (GIBS) for the following topic, "The impact of pay on productivity and motivation on general workers in South African platinum mines" (as confirmed by Adele Bekker – MBA Senior Programme Manager), your application has been favourably considered. This consideration is based on the following conditions that:

1. You distribute your questionnaires to employees via a manner that means minimal possible disruption of work flow.
2. The information gathered during your research will be treated with absolute confidentiality and would be used only for academic research purposes.
3. Participation of employees in your research is done on a voluntary basis
4. A copy of your research project will be made available to the company.
5. A copy of the attached confidentiality agreement is signed by yourself.

To make a meaningful contribution to the performance of your organization during your research, please feel free to contact Gavin Brink, HRD Manager: Personal Development, to assist you with further information.

We wish you all the best in your studies.

Yours sincerely


Gavin Brink
HRD Manager – Personal Development
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Gavin M Brink
HRD Manager

A member of the Anglo American plc group

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Incorporated in South Africa. Registration Number: 1931/003380/06

Directors: Cl Griffith (Chairman) | Botha A Hinkly PJ Louw S Macheli-Mkhabela L Mogaki J Mokoka J Ndlovu DW Peltser, I Pillay, VP Pillay M Poggioini
GL Smith
Company Secretary: Anglo Operations Proprietary Limited



MEMORANDUM

Department: Human Resources
Name: Muhammad Patel
Title: HR Executive – Mining Operations

Tel: +27 14 569 6798
Fax: +27 14 569 9879
E-mail: Muhammad.patel@implats.co.za

Gordon Institute of Business Science
University of Pretoria
26 Melville
Illovo, Johannesburg
2146

To:

From: Mr Muhammad Patel

Date: 22 July 2015

Subject: PERMISSION TO CONDUCT ACADEMIC RESEARCH AT IMPALA PLATINUM

Dear Members of Ethics Committee

On behalf of the Impala Platinum Holding Limited, I am writing to formally indicate our awareness of the research proposed by Mr Mthokozisi Jali, a student at GIBS. We are aware that Mr Jali intends to conduct his academic research by administering a written survey to our employees.

I am responsible for Human Resources Department and am Human Resources Executive. I give Mr Jali permission to conduct his academic research in our company.

If you have any questions or concerns, please feel free to contact my office at 014 569 6798

Your Sincerely,

Muhammad Patel
HR Executive – Mining Operations

Impala Platinum Limited

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Directors: GS Potgieter (Chairman) • O Phelwe (Deputy Chairman)
JC Andrews • PD Finney* • CS Mogotsi • SZ Majola • MN Ndlala† • M Sithole • S Vivier
Secretary: TT Liale
*British
†MHPA 2A.(1)



PLATINUM

MEMO

TO : HR Executive
FROM : Mthokozisi Jali
DATE : 17 June 2015
RE : Request to conduct an interview with employees

I am currently completing my MBA at the Gordon Institute of Business Science South Africa. The research field I have elected to focus on is 'The impact of pay on productivity and motivation on general workers in South African platinum mines. . To that end, I hereby request permission to conduct an interview with your employees. The interview is expected to last between 30 min to an hour.

I have attached confirmation and ethical clearance from GIBS and attached consent letter that each employee must sign during the interview. The main questions that will be asked form part of the consent letter.

Should you have any questions pertaining to this letter, do not hesitate to contact me.

Yours faithfully

Mthokozisi Jali
073 381 8808

APPROVED/ DECLINE

Lonmin Management

Appendix D – GIBS ethical Clearance

**Gordon Institute
of Business Science**
University of Pretoria

Dear Mr Mthokozisi Jali

Protocol Number: Temp2015-00976

Title: **The impact of pay on productivity and motivation on general workers in South African platinum mines**

Please be advised that your application for Ethical Clearance has been APPROVED.

You are therefore allowed to continue collecting your data.

We wish you everything of the best for the rest of the project.

Kind Regards,

GIBS Ethics Administrator

Appendix E – Interview questions

1. How long have you been working at a mine?
2. Do you work underground or surface?
3. What is your job at the mine?
4. What is your grade?
5. How much do you earn?
6. How old are you?
7. What is your mother tongue?
8. Are you male or female?
9. What will make a you work harder, is it pay or working condition?
10. If pay will make you work harder, will you prefer it in cash or housing or food or non-cash?
11. Would you prefer if R5000 was added to their basic pay and no bonus or rather stay as where they are?
12. What else, other than money, will make you work harder and make you come to work every day?
13. Will you work hard because you love your jobs that you are doing or because you expect to get good pay (salary and bonus)?
14. Would you prefer to earn slightly less and have a very good supervisor or earn slightly more even if your supervisor is not good?
15. Do you work at the mine by choice or because you have no other options?
16. Is there anything else you want to say or add and do you think I have covered everything?

Appendix F – List of codes

#Q1 - Motivation Factor
#Q1 - Motivation Factor - Pay
#Q1 - Motivation Factor -Working Condition
#Q2 - Salary Structure
#Q2 - Salary Structure - Cash
#Q2 - Salary Structure - Housing
#Q3-Bonus
#Q3 - Bonus - Not decided
#Q3 - Bonus - Add to Cash Salary.
#Q3 - Bonus - Keep separate
#Q3 - Bonus - Motivate - Cause Accident
#Q3 - Bonus - Motivate - Unsafe Practice -
#Q3 - Bonus -Motivate
#Q3 - Bonus - Reason to be taken away - Amount Varies
#Q3 - Bonus - Reason to be taken away - Bonus causes accident
#Q3 - Bonus - Reason to be taken away - Inconsistency
#Q3 - Bonus - Reason to be taken away - Not Guarantee
#Q4 - Other Motivation Factor
#Q4 - Other Motivation Factor - Respect
#Q4 - Other Motivation Factor - Working Condition
#Q4 -Other Motivation Factor - Family
#Q4 -Other Motivation Factor - Money
#Q4 -Other Motivation Factor - Supervision
#Q4 -Other Motivation Factor - Team Work
#Q5 - Work Hard
#Q5 - Work Hard - Both Love the job and Expect Good Pay
#Q5 - Work Hard - Good Pay
#Q5 - Work hard - Love the Job
#Q5 - Work Hard - Other
#Q6 - Supervision
#Q6 - Supervision - Bad Supervisor
#Q6 - Supervision - Good Supervisor
#Q7 - Absenteeism
#Q7 - Absenteeism - Drinking
#Q7 - Absenteeism - Family Issues
#Q7 - Absenteeism - Fatigue
#Q7 - Absenteeism - Not engaged
#Q7 - Absenteeism - Shortage of money
#Q7 - Absenteeism - Stress
#Q8 - Working at the mine - No choice
#Q8 - Working at the mine - Own Choice