

**APPLIED RESEARCH PROJECT**



*Sculpting global leaders*

**THE IMPACT OF LEADERSHIP ON PRODUCTIVITY AT HARMONY  
KALGOLD OPERATION**

**BY**

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**DECLARATION**

I, RAMOSIAKO MONTSHONYANE, declare that this research article is my original work, and it has not been submitted for any previous degree or examination, the contributions have been indicated in the references and acknowledgements. This research article is submitted in partial completion of the requirements for Master of Business Administration at Witwatersrand Business School, Johannesburg.



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Signed at ..... Johannesburg .....

On the ...06<sup>th</sup> ..... day of .....September..... 2022.....

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## SUPPLEMENTARY INFORMATION

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## **ABSTRACT**

**Background:** The significance of good leadership styles in respect of productivity cannot be overemphasised in the modern world of global change. The change in leadership and their diverse styles has affected the rate of production at Harmony Kalgold Operation.

**Aim:** The aim of the study was to investigate the impact of leadership styles on productivity in the case of Harmony Kalgold Operation in Mahikeng-Kraaipan, South Africa.

**Setting:** The research study was undertaken in South Africa and particularly focused on the Northwest Province. Only a quantitative research method was employed with a sample size of 50 members selected from the organisation of study.

**Methods:** The positivist and quantitative approach through a questionnaire survey was employed to collect data for the research study. A quantitative research methodology was adopted through a random sample of 50 employees.

**Results:** Within the company, there are four main types of productivity. Democratic leadership is directly correlated with productivity. Authoritarian leadership style has a strong negative correlation with productivity. Charismatic leadership style has a positive correlation with productivity. Similarly, transformational leadership style was found to relate more with productivity and the leadership style should be developed by modern leaders. Transactional leadership style had a little negative relationship with productivity and entails a carrot and stick method to accomplish organisational goals.

**Conclusions:** There are at least five most common leadership styles which influence Harmony Kalgold operation 's productivity. These are autocratic, democratic, laissez-faire, transactional, and transformational leadership. There are at most four measures of productivity at Harmony Kalgold. These are capital, physical, labour, and total productivity. Indeed, leadership styles influence productivity in diverse ways. Each situation requires each own leadership style to improve productivity. However, the situational theory of leadership suggests that no single leadership style is best.

**Key words:** *leadership, leadership styles, leadership theories, productivity, types of productivity.*

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# CHAPTER 1

## INTRODUCTION

### 1.1. Purpose of the Research

The importance of good leadership styles in terms of productivity cannot be overstated in the modern world of global change. The study explores the impact of leadership styles on productivity in the case of Operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa. Through effective communication, development opportunities and innovation, the leader helps to create productive workers. Workers with dynamic leadership skills bring out the best in organisational efficiency and in turn improve productivity and profitability. Considering this realisation, the chapter provides the background to the study that led to this investigation. Similarly, the problem statement was drafted in conjunction with sub-problems, study objectives, research goals and questions. Accordingly, the current study is an academic research article that can help many stakeholders in relation to the topic at hand.

### 1.2. Context of the Study

According to the South Africa Mine Chamber (2020), the change in leadership and their unique styles affected the production rate at Harmony Kalgold Operation. In addition, gold production is low with various elements along with the mining price chain, such as drilling and blasting accuracy, precision of brief period of drafting input elements of plans, grade control, and quantification and minimisation of mining losses from the entrance to the final product. Labour productivity in this context refers to metric ounces (oz) in line with total employee costs (TEC) (South Africa Mine Chamber, 2020). Given this claim, the researcher takes a pilot review on the debate about the mining industry in other countries.

#### 1.2.1 Global perspective

Mining organisations globally are currently facing intense economic and monetary challenges, with leadership gaps in the emergence of the COVID-19 pandemic. South Africa's statistics (2022) confirm that mining production in South Africa fell by 5.9% year-on-year in August of 2022, after a downwardly revised 8.2% slump in the previous month and in line with market forecasts of a 5.95% contraction. In recent years,

however, a number of signs of the overall performance of the global mining quarter have proven to be an upward style (South African Statistics, 2022). It is therefore essential that mining organisations monitor maximum productivity drivers in terms of their belongings (assets) and focus on tasks that enable them to ensure sustainable productivity growth in the future. In all core geographic areas, Oceania (which includes Australia) is proud of the massive mining productivity upgrades between 2013 and 2018. This proximity is nevertheless expected to be at the forefront of the adoption of modern technology and self-sufficient solutions. Good leadership styles are therefore essential for the growth of the mining sector during the 4th Industrial Revolution, and it is important to take cognisance of functional leadership to improve productivity (Mining Global Magazine, 2018; South Africa Chamber of Mining, 2020; South African Statistics, 2022).

### **1.2.2 African perspective**

Given that the mineral industry of Africa is the largest in the world, leaders in such companies must work to improve the level of production. Africa is the second largest continent, with 11.73 million miles of land, implying substantial amounts of resources. With a population of 1.216 billion living there (South African Statistics, 2022). For many African countries, mineral exploration and production make up significant parts of their economies and remain the keys to economic growth. Hidden beneath the bottom of Africa can be a wealth of highly valued and extractive natural or plant resources, making its mining company one of the various major criticals worldwide. Africa can be a major producer of a number of key mineral products, with abundant reserves of metals and minerals such as gold, diamonds, cobalt, bauxite, iron ore, coal, and copper across the continent. A number of the main mining countries in Africa are the Democratic Republic of the Congo (DRC), South Africa, Namibia, and Zimbabwe. However, the mining sector in Africa has witnessed a decline in productivity in the last decade (South African Chamber of Mining, 2020).

### **1.2.3 South African perspective**

Mines continue to face severe leadership shortages that affect productivity. The Mining Indaba (2018) and South Africa Chamber of Mining (2020) concur that in addition to international challenging situations, the South African mining sector must have a variety of operationally challenging country-specific situations. In addition to

leadership gaps, income margins are being squeezed by increasing production costs and lowering commodity prices, while at the same time as labour productivity is significantly low due to intermittent labour unrest. South Africa ruled the world division through a specialty as a major gold producer until 2009 when China took this position (Mining Indaba, 2018; South Africa Chamber of Mining, 2020). These days, South Africa ranks 5th behind China, Australia, Russia, and therefore the US. In line with South Africa's statistics (2022), South Africa nevertheless had approximately 30 years of production in the gold sector, a forecast that varies in a slight daily increase in factors. Although South Africa has a comparative benefit in the mineral allocation stages, there are situations that require the administration facing the mining sector and that prevent the translation of the comparative benefit directly for aggressive benefit. The overarching challenge in South Africa is to strike an equitable balance of leadership interests, ensuring that mining is productive and profitable (South Africa Statistics, 2022).

#### **1.2.4 Harmony Kalgold Operation Case**

According to South Africa Mine Chamber (2020), the constant change in leadership and their unique styles affected the production rate at Harmony Kalgold operation. Operation Harmony Kalgold is an open pit mining operation located 30 miles of Mahikeng. The gold-bearing ore access mine in a winding iron formation inside the Kraaipan green belt (South Africa Mine Chamber, 2020). According to Statistics of South Africa (2022), d-zone mining first began in 1994. The golden factory began in May 1996, and the first gold bullion was melted in June 1996. 193 employees complement the total plant. Operation Harmony Kalgold achieved 3.85 million dismissals without deaths, which is from 1996. Kalgold fortunately maintained his record without deaths in FY20. The fall in ground ore and the decrease in the recovered grade resulted in a decrease in the gold produced. Due to heavy rains in the fourth quarter, the operation lost 18 mining days in the pit, which affected the level of inventories (South Africa Statistics, 2022). Although Kalgold was not forced to suspend operations during the Covid-19 lockdown, it was indirectly affected by the restrictions imposed since the end of March. The leadership team has been grappling with several productivity challenges recently (South Africa Mine Chamber, 2020). Given this background, the study considers the impact of leadership styles on

productivity in the case of Harmony Kalgold's operation in Mahikeng-Kraaipan, South Africa.

### **1.3. Research Problem**

According to South Africa Mine Chamber (2020), mining is a labour-intensive industry in South Africa. As a result, the productivity of mining companies still depends primarily on the productivity of labour. Management needs to understand the style of leadership they need to adopt to effectively improve employee engagement and performance. The change in leadership and their unique styles affected the production rate at Harmony Kalgold Operation. Changes within senior leadership affect the company's business goals, directly and indirectly, and in a positive or negative way. In addition to production rates, changes in senior leadership at the Harmony Kalgold Operation affect business goals in areas such as company growth and expansion, workforce management, and administrative support or business. When leaders do not have the ability to provide direction, coaching and motivation to staff, organisational productivity, culture, and morality often suffer, among other things. A constant change in leadership styles is the main cause of the loss of productivity in the Harmony Kalgold operation in Mahikeng-Kraaipan, South Africa (South Africa Mine Chamber, 2020).

### **1.4. Research Objectives**

The study explored the impact of leadership styles on productivity in the case of Operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa. The quantitative research methodology was adopted by a random sample of 50 employees. According to this objective, the following objectives and questions are therefore listed:

- i. Determine the leadership styles used in Operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa.
- ii. Ascertain productivity types at operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa.
- iii. Determine the impact of leadership styles on productivity in the case of Operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa.
- iv. Suggest leadership styles that can be used to improve productivity in the case of Operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa.

## **1.5 Research Questions**

- i. What leadership styles were used in Operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa?
- ii. What are the productivity measures at the Harmony Kalgold operation in Mahikeng-Kraaipan, South Africa?
- iii. How do leadership styles affect productivity in the case of Operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa?
- iv. What leadership styles can be used to improve productivity in the case of Operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa?

## **1.6 The Significance of the Study**

The essence of the study cannot be overstated in this case. From a business perspective, the study will provide a comprehensive understanding to management and employees about the effects of current leadership styles on the productivity of the Harmony Kalgold operation in Mahikeng-Kraaipan, South Africa. This study will help employees identify the challenges they face in achieving productivity and will also provide recommendations on how management and employees can work together to overcome challenges. Leadership styles can be used to improve productivity.

The mining sector is a large successful industry that has a massive impact on the economic atmosphere of the country. Therefore, in terms of policymaking, the study will assist the Department of Mineral Resources with the strategies and statutes that can be put in place to meet current challenges. The government is likely to be able to take a leaf out of the study and help enact a favourable legislative framework for the mining sector. Fair trading ground and a level playing field for all business organisations are a big plus for the industry.

The study cannot be carried out without some relevance to academic fraternity. As from an academic point of view, the findings from this study will contribute to the body of knowledge and help future researchers in the same field as the reference. This is possible by presenting empirical evidence and the scope of literature on which the topic under investigation is based. The study provides a framework that can be used to address challenges affecting the mining sector in South Africa. The conceptual

framework may be helpful to the generality of the mining sector across the global arena.

### 1.7 Study Delimitations

The research study was conducted in South Africa and focused on the northwestern province. The study explored the impact of leadership styles on productivity in the case of Operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa. The results obtained by the study can be used to inform decisions made by mining companies in the Northwest, although the findings can still be applied to South Africa's entire mining industry and to other countries. Only a quantitative research method with a sample size of 50 members selected from the organisation of the study was applied.

### 1.8 Definition of Terms

The definitions used in this research study are set out in Table 1.1.

| <b>Term</b>          | <b>Definition</b>  |
|----------------------|--|
| Capital productivity | Refers to the return in accordance with the unit of assessment of stable capital resources or output per each input capital (Ahmed, 2017).         |
| Labour productivity  | It is characterised as a true financial benchmark in accordance with working hours or output per each contribution of the workforce (Terry, 2017). |
| Leadership           | A work of art motivating a collection of people to behave towards achieving the desired goal (Yauney, 2018).                                       |
| Leadership style     | The leadership method for providing direction, implementing plans, and motivating people (Ahmed, 2017).  |
| Leadership theory    | An explanation of how and why certain people become leaders because of their traits and behaviors (Yauney, 2018).                                  |

|                       |  |
|-----------------------|--|
| Material productivity | It was coined incredibly as the amount of yield generated over a period is stable with the unit input of the material (Terry, 2017). |
| Productivity          | It can be coined as a ratio of output to a given resource entry (Yauney, 2018).  |

### 1.9 Assumptions

- i. Participants reflected normal perspectives and experiences in relation to the study.
- ii. Participants were aware of some of the challenges affecting the viability of Harmony Kalgold's operation in Mahikeng-Kraaipan, South Africa.
- iii. Participants understood the importance of leadership styles and their impact on productivity; and
- iv. Participants were able to suggest leadership styles that can help improve productivity at The Harmony Kalgold operation in Mahikeng-Kraaipan, South Africa.

### 1.10 Study Format

This Applied Research Project (ARP) is organised in five chapters as outlined below:

#### Chapter 1: Introduction

This chapter discusses the background of the study, the research problem, the objective, objectives, and issues related to the topic in question. Other variables covered here include the importance of study, delimitation, and limitations among other concepts.

## Chapter 2: Theory and Practice

Chapter 2 discusses research concepts, constructs and variables related to the topic in question. Accordingly, various sources are consulted and integrated into a theoretical discussion that helps solve research issues.

## Chapter 3: Research Methodology

This chapter is an overview and discussion on research design, techniques, measures, and concepts that help solve research issues. For the current study, a quantitative approach is used.

## Chapter 4: Research results

This chapter represents; analyses and discusses the results of the research and the main findings resulting from the study. The findings were presented and organized into groups arising from primary research.

## Chapter 5: Abstract, Conclusions and Recommendations

The last chapter presents the main findings of the study. Conclusions shall be drawn, and recommendations shall be made on such matters necessary for further investigation.

### **1.11 Conclusion**

The study looked at the impact of leadership styles on productivity in the case of Harmony Kalgold surgery in Mahikeng-Kraaipan, South Africa. Studies have shown that highly productive companies, to a high or remarkably high degree, leadership in their companies increases productivity. Therefore, this further underlines the importance of effective leadership for a successful organisation. The chapter presents the background of the study that led to this investigation. Similarly, the problem statement was made in conjunction with sub-problems, the study objective, research goals and issues, among other things. Accordingly, the current study is an academic research article that can help many stakeholders in relation to the topic at hand.

The next chapter discusses the theoretical and empirical literature on which the study is based.

## CHAPTER 2

### LITERATURE OVERVIEW

#### 2.1 Introduction

This section discusses the concepts and constructions on which the study is based. The section reviews the literature in accordance with the purpose of the study, which is the impact of leadership styles on productivity in the case of Operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa. Accordingly, the literature was placed to address of the following study questions:

- i. What leadership styles were used in Operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa?
- ii. What are the productivity measures at The Harmony Kalgold operation in Mahikeng-Kraaipan, South Africa?
- iii. How do leadership styles affect productivity in the case of Operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa?
- iv. What leadership styles can be used to improve productivity in the case of Operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa?

#### 2.2 Theme Definition: Leadership

There is no universal definition of the term leadership. However, many definitions are provided for this study as follows:

Leadership is a work of art to motivate a collection of people to behave towards achieving the not unusual goal of the place. In the environment of a commercial enterprise, this will propose directing employees and associates with an approach to meeting the needs of the company (Terry, 2017).

"Leadership is a process in which an individual influences a group of individuals to achieve a common goal (Ahmed, 2017).

"Leadership is an attempt to influence the activities of followers through the communication process and towards achieving a goal or goal (Yauney, 2018)."

The study will refer to a summarised definition of leadership as depicted from the available definitions. A summarised definition is adopted to ensure that it incorporates all the definitions above. Thus, the working definition for this study is as follows:

Leadership refers to the potential of someone or a group of human beings to manage and direct employees or different participants of the organisation. Leadership involves making healthy and occasionally tough decisions, growing, and articulating an apparent vision, setting feasible dreams, and providing employees with information and equipment important for recognising someone's dreams.

## **2.3 Theories of Leadership**

There are many theories that support leadership, and these will all be considered for the study to ensure a comprehensive understanding of the concepts at hand. They are briefly described in this section.

### **2.3.1 The theory of the Great Man**

According to the Big Man Theory, leaders are born with simple real trends and competences to lead others such as charisma, intellect, self-confidence, communication competencies and social competences. The concept or proposal indicates that the energy of influence is natural; that the most effective leaders were born, now they are no longer made. It defines leaders as bold, mythical, and ordained for an upward push into administration as things emerge. At that time, the term 'Great Man' was followed, as governance was reserved for men, in military or naval management (Ahmed, 2017); Terry, 2017; Yauney, 2018).

### **2.3.2 Trait theory**

The theory of traits is as remarkable as the Great Man Theory. It has its own premises on the qualities of numerous leaders, including successful and unsuccessful. The concept or proposal is engaged to expect strong governance. Usually, diagnosed traits are compared with those of capable leaders to try their chances that they can lead effectively. Scientists who study the idea of traits try to choose management traits from characteristic perspectives. They specialise in physiological attributes such as appearance, weight, and height; demographics such as age, education, and family

origin; and intelligence, encompassing determination, judgment, and knowledge (Ahmed, 2017; Terry, 2017; Yauney, 2018).

### **2.3.3 Contingency theory**

The theory of contingencies emphasises exclusive variables in each unique environment that decide on the appearance of first-class management suitable for the specified scenario or status quo. It is based on the regulation that no management style is relevant for all given situations. Renowned management researchers Hodgson and White believe that the best type of management is the one that reveals the proper stability of behaviour, needs and context. Good leaders now no longer simply possess the right features; however, they are additionally willing to evaluate the necessities of their followers, and therefore the scenario in front of them. In short, the principle of contingencies indicates that good governance can be the aggregate of a number of key variables (Ahmed, 2017; Terry, 2017; Yauney, 2018).

### **2.3.4 Situational theory**

Situational theory has similarities with the contingency theory because it further suggests that no management style replaces others. The concept means that management relies on issues at hand. Simply put, leaders must respond to their management of the appropriate situation with the help of using and evaluating positive variables such as the form of the task, the nature of the followers and much more. As suggested by American professor Paul Hersey and management guru Ken Blanchard, the situational idea combines key elements: management style, and therefore the level of adulthood of followers. Hersey and Blanchard categorised adulthood in 4 unique levels (Ahmed, 2017; Terry, 2017; Yauney, 2018):

I. M1 – Team associates do not possess stimulating or tactical capabilities to adopt or complete vital work.

(ii) M2 - Team associates are inclined and outstanding to understand or reap something but lack the stated ability.

iii. M3 - Team associates possess the capabilities and capacities to perform tasks, but now they are no longer inclined to be responsible for their actions.

iv. M4 – Team associates possess all the right abilities and are encouraged to adopt or complete projects.

According to the situational theory, the leader adopts a certain form of management in accordance with the adult phase of his team (Tewari, Gujarathi & Jain, 2019).

### **2.3.5 Behavioral theory**

In the theory of behaviour, the main goal is on the appropriate behaviours and actions of leaders instead of their trends or characteristics. The concept indicates that the strong management of manifestations is due to many detected competencies. Individuals want three critical competencies to influence their followers: technical, human, and conceptual competencies. Technical competences relate to the commissioner's knowledge of access or technique; human competences suggest that one can communicate with different individuals; while conceptual competences allow the boss to generate or provide thought leaders for the smooth management of an enterprise or company (Ahmed, 2017; Terry, 2017; Yauney, 2018).

## **2.4 Leadership Styles**

Leadership style is the leader's method of providing direction, implementing plans, and motivating people. Various authors have suggested many different leadership styles shown by leaders in political, business, or other fields.

### **2.4.1 Authoritarian leadership**

Authoritarian governance patterns allow a leader to enforce the expectations and expose effects. A single-character display can result in a victory in the conditions in which the leader is most informed within the default group. Although this is often a good method in time-limited periods, creativity will be sacrificed because ideas from the group are limited and suffocated. An authoritarian management style is moreover used when group participants want clear and clean guidelines (Ahmed, 2017; Terry, 2017; Yauney, 2018).

Advantages:

- (i) The time spent making key decisions is often reduced.
- (ii) The chain of command is often clearly emphasised.

- (iii) Errors in the implementation of plans are often reduced.
- (iv) Using an authoritarian leadership style creates consistent results at all levels.

Drawbacks:

- (i) A strict leadership style can sometimes cause or result in employee rebellion.
  - (ii) Destroys or stifles the creativity and innovation of employees.
  - (iii) It minimises the cooperation of the group and cooperation at all levels.
- iv. Group input decreases significantly and dramatically.
- v. Autocratic leadership style increases employee turnover rate (Tewari et al., 2019).

#### **2.4.2 Participatory leadership**

Participatory patterns of governance have their roots in democratic theory. The essence is to contain group participants within the decision-making process. In this way, the participants of the group would like to be involved, engaged, and encouraged to make a better contribution. The boss or leader will have the final stage within the decision-making process. However, if there are disagreements within the group, it may be a time process for reaching consensus (Ahmed, 2017; Terry, 2017; Yauney, 2018).

Advantages:

- i. Increases or improves employee motivation and job satisfaction.
- (ii) Encourages the employment of creativity among employees.
- iii. Participatory management style helps with the introduction of an autonomous team.
- iv. Often high layers of productivity are achieved.

Drawbacks:

- (i) Activities and decision-making processes are usually lengthy.
- (ii) Most of these leaders are highly likely to apologise to team members or employees.
- (iii) Communication failures can sometimes occur due to a prolonged decision-making process.

(iv) Security concerns are a problem due to transparency issues in information management and sharing.

(v). Bad decisions are often made if workers are unskilled (Tewari et al., 2019).

### **2.4.3 Delegative management style**

It is also listed as "laissez-faire management", a delegative management style specialising in delegating tasks to group members. This could be a good approach if the members of the group are competent, undertake an obligation and prefer to do personal work. However, disagreements between most contributors could also further break up and divide the group, which would follow in negative motivation and reduced morale (Ahmed, 2017; Terry, 2017; Yauney, 2018).

Advantages:

- i. Experienced employees can cash in on their competence and knowledge.
- (ii) Innovation and creativity are highly valued.
- (iii) Delegate leadership usually creates a positive work environment for employees.

Drawbacks:

- (i) Command responsibility is usually not properly defined.
- (ii) Delegative leadership creates difficulties in adapting to changes in the global division (Tewari et al., 2019).

### **2.4.4 Transactional style**

Transaction management patterns use exchanges/ transactions among the leader and his followers - rewards, penalties, and various exchanges - to make sure the deal is completed at hand (Nguyen, Mia, Winata & Chong, 2017). The leader sets clear goals. The abilities of the members of the group will be rewarded for compliance with the norm (Busari, Khan, Abdullah & Mughal, 2019). This 'provide and take' management style is linked to good monitoring of adopted statutes and techniques, as opposed to any transformational adjustments to a particular organisation (Ahmed, 2017; Terry, 2017; Saeed & Mughal, 2019).

Advantages:

(i) Transaction leaders usually create clear, specific, measurable, and time-limited objectives that are achievable for workers.

(ii) Employee morale, motivation and productivity are improving at all levels.

(iii) Transactional leadership eliminates or reduces confusion within the chain of command.

iv. Creates a system that is easy to implement for leaders and easy to track by employees.

v. Employees can choose reward systems that are favourable to them.

Drawbacks:

(i) The virtues of innovation and creativity have been undermined.

(ii) Empathy is not valued among team members.

iii. Transactional leadership usually results in more followers than leaders among employees (Bashkarad, Watson & Cromarty, 2017; Alqatawenh, 2019; Tewari et al., 2019).

#### **2.4.5 Transformational leadership**

In transformational management styles, the leader evokes his employees with an imaginative and sign with a vision/motif, then encourages and empowers them to recognize it. The leader is also an entrepreneurial version for the imaginative and signs (Ahmed, 2017; Terry, 2017; Yauney, 2018; Busari et al., 2019).

Advantages:

(i) This results in a lower turnover rate among employees.

(ii) Transformational management is based and emphasises the vision of the company, among different issues.

iii. It is usually experienced high morale and motivation of employees.

iv. He uses motivation and thinks he will gain and retain the help of employees.

- v. It is now no longer a coercive method for leadership, it is an open style.
- vi. Places a high value on the importance of good and healthy relationships.

Drawbacks:

- i. Some of the leaders may deceive their employees.
- ii. It may take consistent motivation and constant feedback to see the success of this style.
- (iii) Tasks cannot be performed or managed without consensus and employee settlement.
- (iv) Transformational leadership can sometimes end up deviating from the set protocols and regulations (Bashkarad et al., 2017; Alqatawenh, 2019; Busari et al., 2019).

The study will be guided by situational leadership. In business, democratic, and transformational leadership are often the best leadership style to use. However, no one style of leadership fits all situations, so it is useful to understand different leadership frameworks and styles. Situational leaders change their management style to meet the needs of the situation or team. This leadership style is initiative-taking and recognises that change is the only constant. This approach to leadership can motivate employees. It helps them to be more initiative-taking; anticipating business issues before they happen. It is also useful in startups or other businesses that make frequent changes and need flexible talent and support. This type of leader is a great communicator and uses constant team feedback to make decisions. They quickly evaluate and update processes to enable success. It also creates strong relationships and helps employees see and feel their value to the business (Bashkarad et al., 2017; Alqatawenh, 2019; Busari et al., 2019).

## **2.5 Productivity**

According to Deep (2017), productivity is one of several important not unusual expressions of places or phrases of individuals ever used. There are many definitions of productivity (Deep, 2017). But in general, it is considered as the ratio of output to the given input. The main and known definitions are as follows.

Productivity can be coined as a ratio of production to given resource input (Marcel, 2016).

Productivity is usually and usually interpreted as performance in business processes and production measured with the help of output by input resources (Kimberlee, 2018).

Productivity usually refers to the link between the amount of services or products produced and one or additional resource required to make that product (Ohemeng, Amoako-Asiedu & Obuobisa-Darko, 2018). Productivity will also be coined as the size or performance with which input elements are regularly converted to output over several set time frames (Yauney, 2018).

Accordingly, the working definition of productivity is as follows:

Productivity is usually conceived as the ratio between the volume of output and the volume of input elements. In other words, it measures how efficiently production inputs, such as labour and capital, are used in the economy to produce a certain level of production.

### **2.5.1 Factors affecting productivity**

There are a range of factors that determine productivity in the organisation. They are described as follows (Marcel, 2016; Alqatawenh, 2019):

- (i) Choosing the right workforce has a major impact on productivity. The choice of the right workforce affects efficiency. The selection of the correct representatives for the correct work occurs in the steps taken or advanced efficiency. Currently, providing adequate training to specialists in the arrangement of abilities increases efficiency.
- (ii) Selecting, purchasing, and maintaining the appropriate types of equipment and machinery in the organisation increases the level of productivity. The availability of ideal equipment that works well and up-to-date equipment within the regulatory center ensures the easy functioning of the work and thus improves the range of efficiency.
- (iii) A covered area or space on the ground floor can be a detrimental issue affecting productivity. The entire zone of different offices, counting the division of quality, the administrative or authoritative part, affects efficiency within the working environment.

In addition to the floor or zone of the ground floor, the location or area of the territory of these divisions, in addition, plays a true role.

(iv) The use of financial, simple, and renewable sources of vitality has, inter alia, demonstrated genuine efficiency improvements.

v. The intra-organisational movement further has a major impact on productivity. The movement of labour and substances within the enterprise has a greater impact on the level of efficiency within the working environment.

### **2.5.2 Types of productivity**

The study will refer to a summarised definition of productivity as depicted from the available definitions. A summarised definition is adopted to ensure that it incorporates all the definitions on board. Marcel (2016) confirms that productivity and its diverse types are extremely relevant in any large or small work environment. It allows for an accurate asset test to be maintained and acts as a warning for fundamental adjustments to be made to help the simplest and most affordable use of all types of availability (Marcel, 2016). Productivity in general can be a solidified term. It is often separated on the assumption of several components to be specific, labour, capital, and materials (Kimberlee, 2018). Below are reasons relating to 3 productivity measures (Tewari *et al.*, 2019).

#### **i. Labour productivity**

Labour productivity, also called work efficiency, is characterised as a true financial benchmark in line with working hours (Nguyen *et al.*, 2017). Progress in labour productivity is conceived with the help of monetary yield exchanges in accordance with working hours over a period (Deep, 2017). The effectiveness of the work and the effectiveness of specialists are not several equal perspectives. Worker productivity is outlined as the yield of workers per hour worked. The work benefit is clearly related to advanced approaches to presence as superior use. As a result of this increase in yield, it is possible to use an additional quantity of items and enterprises at an inflexibly sustainable price (Marcel, 2016; Kimberlee, 2018).

Improving labour productivity is authentically permanent and can be deciphered from changes in characteristic capital, modern progress, and human capital. When an

upward thrust in labour productivity is visible, in most cases the enrollment components are over the three mentioned (Bashkarad et al., 2017; Alqatawenh, 2019). Physical capital refers to techniques, equipment, and places of work that workers must use to enable and encourage the regulation of production and services. New characteristics are unused methodologies for taking steps forward to create a more pronounced return, for example, the structure of successive creation or robotisation. Human capital refers either as a substitute conversation with the development of teaching and specialisation of the workforce. Furthermore, measuring performance gives a mammoth and pure recognition of the preferences of these pronounced components (Ohemeng et al., 2018; Tewari et al., 2019).

#### (ii) Capital productivity

Capital efficiency refers to the return in accordance with the stable capital resource valuation unit (Depth, 2017). In any environment of communism, capital productivity shows the adequacy with which a permanent capital fund is used (Nguyen et al., 2017). Extensively used in the interior budgetary testing and internal listing of plans and plans for the use of capital, each for the financial framework usually for impartial companies or companies, main affiliations, joint ventures, or ventures (Marcel, 2016; Kimberlee, 2018).

In most cases, data on GDP and costs are used in the execution of computer capital for the financial framework; to disclose the benefits of unbiased underlying information online, moreover due to the reality that the net return is placed on legitimate exploitation (Bashkarad et al., 2017; Alqatawenh, 2019). Capital productivity is a reliable valuation of the equality of funds for permanent creation (including fees), using both routine motivation at several points of the year or an impact on the conclusion of the year. In this regard, the capital benefit is contrary to the share of capital and returns (Ohemeng et al., 2018; Tewari et al., 2019).

#### iii. Material productivity

The effectiveness of the material was coined incredibly because the amount of yield generated over a period is stable with the unit intake of substances or materials (Nguyen et al., 2017). Materials, especially in this case, are presented as a characteristic asset. They are habitually and widely separated from the usual forms of

efficiency (Deep, 2017). The ability to ensure additional yield using much less material property is considered material productivity. The inconsistency of the method is responsible for the excessive consumption of substances. It begins with the preparation of inefficient components that result in an imperfect generation, procurement errors, faulty charging systems, etc. In completely different words, it can be a complete waste of resources (Marcel, 2016; Kimberlee, 2018).

This consists of the ratio between total output and total material input. The material under input includes both direct and indirect raw material which is used to produce the final product. The technique of material productivity is utilized in measuring the productivity in form of material cost. In other words, material productivity refers to the output produced (in numbers or amount) based on the per-unit cost of materials used as input (Bashkarad et al., 2017; Alqatawenh, 2019).

Material Productivity= Total output/ Material input

OR

Material Productivity= Total units produced/ Total Material cost

Material productivity has a key role to play in the cost of production. It depends on the effective and efficient use of raw materials to convert them into finished goods. (Ohemeng et al., 2018; Tewari et al., 2019).

## **2.6 Impact of Leadership Styles on Productivity**

Given that South African mining sector is labour intensive, the productivity of mining companies still depends primarily on the productivity of labour. Management needs to understand the style of leadership they need to adopt to effectively improve employee engagement and performance (Marcel, 2016). According to Marcel (2016), the management leader's technique affects the organisation's ability to fulfill its obligations. A good leader motivates, conjures, and directs his subordinates to understand set dreams and goals (Marcel, 2016). By counting on how they invent judgements, delegate responsibility, clear up conflicts and communicate with employees, they can affect worker morale, retention, absenteeism and ordinary or general productivity (Ahmed, 2017; Terry, 2017; Yauney, 2018).

Deep (2017) hypothesised that leadership styles and organisational productivity are highly interrelated, as leaders who practise effective leadership in planning and administering organisational functions will strongly motivate their employees to improve productivity. Terry (2017) also maintained that there is a positive association between transformational leadership and organisational productivity. Yauney (2018) found that a leader's behaviour impacts positively on employee attitudes towards their jobs; these positive attitudes in turn result in employees' desire to maintain their relationship with the company concerned and subsequently impacting on productivity.

The purpose of this study was thus to empirically determine if leadership styles correlate positively with productivity. Association between leadership styles and employee productivity is yet to be determined in the mining environment. This article will add to existing research on leadership styles and employee productivity within the mining environment in South Africa. This information will be valuable to human resource practitioners, as well as line managers within the mining sector in South Africa, as it might contribute to finding a solution to the ongoing labour unrest within this complex context.

### **2.6.1 Goals**

Marcel (2016) asserted that in a rapidly changing world, in which the ongoing development of the potential of the workforce is considered a prerequisite for remaining competitive, it is possible that leadership styles may fail to meet the leadership challenges confronting most organisations today. Setting up clear and clean road tickets for the company ensures that staff recognise what is predicted of them (Marcel, 2016). In line with Ibrahim and Daniel (2019), the management style used affects productivity, as it affects workers' morale. Autocratic leaders set dreams without staff input (Ibrahim and Daniel, 2019). If their goals/dreams are not specific, measurable, attainable, reasonable, or limited in time, staff may also have trouble achieving them. This in turn means low morale and absenteeism, ending in reduced productivity, expanded waste, additional errors, and reduced customer satisfaction (Ahmed, 2017; Terry, 2017; Yauney, 2018; Tewari et al., 2019).

## **2.6.2 Change**

During disruptive times, such as when a company undergoes a management control change or a strategic path modification to respond to the intended requirements, the management style can help ensure or ensure that staff make certain changes to take care of and improve the business. It is prudent to apply a proper management style to meet the needs of a group of workers, and therefore modern situations (Marcel, 2016; Ibrahim and Daniel, 2019). For example, participatory management will be used to acquire ideas from staff in line with improvements in methods. People who do the work at hand usually have a specific perception in approaches to improving and embellishing the business. Leaders can use a consensus style of decision-making in which everyone's confirmation of the amendment allows for better productivity (Ahmed, 2017; Terry, 2017; Yaune, 2018; Tewari et al., 2019).

## **2.6.3 Communication**

Effective leaders speak safely and often to ensure that staff catch a strategic direction and could act. Management style affects the ability of employees to interpret the message (Marcel, 2016; Ibrahim and Daniel, 2019). For example, you will be able to utilize a charismatic style or management style to emphasize the vision, endeavour, and values of the corporation. Inspire staff to understand by hardly giving a convincing overview of the long term. During tough economic and monetary times, clean and frank leaders' conversations allow people to specialise in their work and are now no longer hampered by rumours and assumptions related to layoffs and various changes in the team of workers (Ahmed, 2017; Terry, 2017; Yaune, 2018; Tewari et al., 2019).

## **2.6.4 Structure**

The way leaders shape their work duties and deliver management to their business enterprises affects productivity. This is because staff react differently to the form, relying on questions and scenarios (Marcel, 2016). Leaders can use the style of transaction management, while work duties are exceptionally clean and routine. Providing a clear course allows staff to finish the job well (Ibrahim and Daniel, 2019). When approaches are not truly documented or tactics require development to achieve the desired results, searching for ideas from staff usually results in the progress of operations. If leaders have qualified staff, using a laissez-faire management style

offers all staff the freedom to manipulate their own work without interference. Morale is usually better when staff are empowered to line up their own break-up dates and call for help and help without difficulty when they wish (Ahmed, 2017; Terry, 2017; Yauney, 2018; Tewari et al., 2019).

## **2.7 Conclusion**

This section discussed the concepts and constructs on which the study is based. The section reviewed the literature in accordance with the purpose of the study, which is the impact of leadership styles on productivity in the case of Operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa. Empirical studies have shown that highly productive companies, to a high or extremely high degree, of leadership in their companies increase productivity. Therefore, this further underlines the importance of effective leadership for a successful organisation. Leadership undoubtedly affects organisational performance, especially employee outcomes and productivity. Job satisfaction, productivity and organisational commitment are also influenced by leadership behavior. In addition to their actions and personal influence, leaders should be empowered to take key decisions and conduct operations smoothly and efficiently.

The next chapter discusses the research methodology used to solve the research problem of the study.

## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.1 Introduction

The previous chapter reviewed the literature in accordance with the purpose of the study, which is the impact of leadership styles on productivity in the case of Operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa. This chapter discusses the different techniques, methods and approaches that were used in the current research study. The section explains the research philosophy that were used. The population and sampling framework are also discussed. The section also discusses data integrity measures, such as credibility. The ethical considerations of the study are also explained accordingly together with other related concepts.

#### 3.2 Research Philosophy

According to *Ethics et al.* (2016), research philosophy is a belief about how to collect, analyze and present a particular type of data related to the problem. There are several research philosophies that include positivism, interpreter, realism, and pragmatism (*Ethikan et al.*, 2016).

##### 3.2.1 Interpretivism

Interpretivism involves researchers interpreting elements of the study, so that interpretivism integrates human interest into the study (Kumar, 2014). Interpretive researchers hypothesize that the approach to reality is only through social constructions such as language, consciousness, common meanings, and instruments. The development of interpretive philosophy is based on the criticism of positivism in the social sciences (Maree, 2016).

##### 3.2.2 Realism

Realism relies on the idea of the independence of reality from the human mind. This philosophy presupposes a scientific approach to the development of knowledge. Realism can be divided into two groups: direct and critical (Coolican, 2014). Direct realism depicts the world through personal human senses. Critical realism claims that people experience sensations and real-world images (Maree, 2016).

### **3.2.3 Pragmatism**

The philosophy of pragmatism studies accepts ideas that will be applicable if they lead the action. Pragmatists believe and understand that there are several methods of deciphering world studies of divisions and challenges, that no point of view factor can ever provide a whole scenario about which there are probably several realities (Kumar, 2014). The inquiry of the studies refers to the maximum critical determinant of the research philosophy. Pragmatics can integrate both positivist and interpretive positions within the scope of a single study in accordance with the nature of the research question (Maree, 2016).

### **3.2.4 Justification for choosing positivism**

For the purposes of this work, the philosophy of researching positivism was used because it uses a quantitative research approach. This is because positivist researchers use quantitative approaches that have been chosen to collect data for analysis for this study. The positivist paradigm allowed the researcher to obtain a detailed understanding of the values and beliefs of the subjects in responding to a research problem that allowed for an in-depth understanding of strategic leadership.

### **3.3 Research Methods**

There are two approaches to research, i.e., qualitative, and quantitative. In this case, a quantitative approach is used. The choice of methodology is motivated below. The current study is driven by the need to draw a relationship between leadership styles and productivity in Operation Harmony Kalgold. In this case, the researcher will apply a quantitative method because it allows to measure the correlation between the variables under consideration. This is the best method that can be used to measure facts that manifest themselves in the way of figures, numbers, percentages, and other objective forms. Kumar (2014) suggests that a positivist approach is vital because it calls for objectivity at all stages of the research process. In this case, quantitative methods will be used to determine the relationship between the culture of Harmony Kalgold's operation and its productivity. A slightly large sample of 50 was used through a random sampling strategy in the departments of Operation Harmony Kalgold.

Therefore, the quantitative method is best in this regard because it focuses on exploring the relationship between default variables (Leedy & Ormrod, 2015).

Quantitative studies usually and extensively use deductive logic, for the duration of which researchers begin hypotheses, and then accumulate facts that can be used to decide whether there is empirical evidence to help that speculation exists. Quantitative chemical assessment requires numerical data within the types and limits of the specified variables. A variable can be a way to measure any function that varies or has higher sustainable values. Many qualities are certainly numerical given their nature and shape. Many quantitative studies have been conducted at all levels in the health sector, community outreach programmes and other business endeavours. For example, Lock and Seele (2015) undertook quantitative content analysis as a method for business ethics research. The aim of this article was to discuss quantitative analysis of content established in communication sciences as a method of research in business ethics.

In this case, quantitative information is often collected with the help of using a characteristic feature in many ways. In experimental environments, researchers can immediately collect quantitative information, or such information is often self-proclaimed with the help of the use of study members on the predominant or posttest. Questionnaires are generally and usually used to collect quantitative information by asking respondents to record attitudes, experiences, demographics, etc. It is usually popular to comment directly or observe quantitative information collected for an additional reason (Kumar, 2014). The general quantitative method is known as a secondary information assessment, in which the researcher analyzes information that was initially collected by other studies. Often these are large-scale information units with national consultants who want to raise significant resources. Many agencies use such information units to give many researchers access to unbiased studies through detailed highly satisfactory information.

Hypotheses for quantitative information assessment are usually particularly specific, describing clear and clean relationships between unbiased and structured variables. For hypotheses about numerical variables, the expected relationship path will have to be described (Leedy & Ormrod, 2017). The quantitative study has been used in several studies and can therefore be applied accordingly in the current case. Given the extensive use of this method at all levels due to its objectivity, the current research will be guided accordingly by the same research approach. In addition to being objective, the method is easy to apply through a survey of questionnaires. In this case,

the subjects will answer only closed questions and thus the researchers' expectations are met accordingly. Therefore, the quantitative method is best in this regard because it focuses on exploring the relationship between default variables (Leedy & Ormrod, 2015).

### **3.4 Research Strategy**

The research strategy is a game plan that conducts research. The research strategy used by the researcher for the study was analytical research that used questionnaires that used questionnaires to collect data they used themselves. The design perfectly provides a wide capability, which guarantees the exact pattern that helped gather the expected results from which the researcher could draw conclusions and important decisions (Coolican, 2014).

#### **3.4.1 Positivist**

The positivist research strategy involves the use of surveys that are related to a quantitative research project. Surveys are usually conducted by including large samples to increase the likelihood of achieving the best results (Flick, 2015).

#### **3.4.2 Phenomenological**

Saunders et.al. (2016) states that phenomenological research strategies are different, and many relate to the qualitative research paradigm as in the current research study. Examples include interviews, focus groups, case study, action research, grounded theory, and ethnography (Saunders, Lewis, and Thornhill, 2016). Interviews are usually done one-on-one and provide space for the researcher to further explore the issues that are key. Focus groups include gathering experts or several recognizable members who make up the environment. Action research involves the actual process and action of exit to collect research data. The grounded theory is based on assumptions, while ethnography is associated with the collection of cultural data. Case studies focus on a specific area of research to limit the efforts of a research project, although the results may be universal in nature (Maree, 2016).

#### **3.4.3 Reasons for selecting surveys**

The study used a deductive approach through a questionnaire survey that influenced the design of the study and the required sample data. Surveys are usually conducted

by including large samples to increase the likelihood of achieving the best results. As a result, the questionnaire survey was suitable for the study. Positivism depends on measurable observations leading to statistical analysis (Kumar, 2014).

### **3.5 Data Collection**

The quantitative approach uses questionnaires to collect data for the research study. Therefore, the questionnaire survey was conducted within the limits of the current study. Each of the research questions were divided into smaller questions for examination and access to detailed information. The questionnaire was divided into two sections. Section A dealt with the demographic details of respondents such as age, race, gender, occupation among other variables. Demographic data was collected to check for the randomness of the selected sample. Credibility is required when selecting samples to ensure that all ethical requirements are met.

Section B deals with the main research factors that are guided and contained in the objectives of the research. Both closed and open questions were adjusted to increase the quantity and quality of data. The questionnaire will be uploaded to SurveyMonkey® ([www.surveymonkey.com](http://www.surveymonkey.com)) for easy access and convenience for respondents. The second same copy of the questionnaire was emailed to other respondents who may have difficulty accessing the online version of the questionnaire.

### **3.6 Framework for Population and Sample**

The term population refers to units of analysis or entities to be considered to participate in a research study (Creswell & Creswell, 2017). In this, the analysis unit refers to employees in operation Harmony Kalgold in the northwestern province of South Africa. The sample size is 50 consisting of employees and other stakeholders in the study. The quantitative method described above goes hand in hand with probability sampling. This is whereby all members of the population have an equal chance of participating in a research study (Leedy & Ormrod, 2017). Many methods can be used, but in this case, a random sampling approach is adopted, with each employee in the Harmony Kalgold operation in the province having a known chance to participate in the research.

In this case, a random sample is taken to ensure that everyone in the study has an equal chance of selection. To ensure the objectivity of the sample, all members of the population/sampling framework shall have a known and equal chance of being

selected in the main sample. A sample of 50 participants was eventually selected because it was large enough to represent all the divisions of Harmony Kalgold's operation. Given the stratified nature of the population, all participants from different departments were selected by random sampling to be part of the stratified sample.

A simple sampling method is known as random sampling. This is regularly the purest, and therefore the most common probability sampling approach. This is additionally the most famous technique for selecting a sample among the population for particularly good purposes. In a simple random sampling, each member of the population is similar and will be selected as part of the sample (Kumar, 2014). It stated that "the logic of simple random sampling is that it removes bias from the selection process and will end in representative samples." Preferably, a sample size of about a hundred is necessary to be ready to apply simple sampling in an appropriate way.

The researcher used random sampling in this study. The sampling technique was used in this situation due to the representativeness of the sample group and opportunity for biasness by researchers compared to non-suspicious sampling techniques. However, the use of random sampling techniques is often difficult due to the need for a full list of applicable population members and the oversized sample size. Other versions of random sampling include the following, i.e., stratified sampling, systematic random sampling; multi-stage random sampling and sampling of clusters (Leedy & Ormrod, 2017).

### **3.7 Data Analysis**

Flick (2015) argues that the characterisation process minimises a significant amount of data into coherent and interpretable structures. Creswell and Creswell (2017) define data analysis as a process of sorting, arranging, and classifying the information collected to create solutions to study issues. Accordingly, descriptive statistics were used to analyse the data to be collected for this study. Descriptive statistics refer to a discipline that describes in a quantitative way the vital features of the data set. These illustrative measurements help to present data in a significant way to show appreciation of information. Assessment is also a virtue in this case. It is an attempt to display and assign quantitative features to the properties of objects and opportunities (Leedy & Ormrod, 2017).

Saunders *et al.* (2016) argue that data analysis implies a process of introducing order, structure, and significance for the collected data. Data analysis involves understanding the interpretation and theorisation of data representing the search for general assumptions between categories of data (Saunders *et al.*, 2016). Since the data was analyzed by descriptive statistics, the researcher distributed the data in the form of tables, charts, and diagrams. The dimensions of the frequency were also used in addition to other descriptive measures.

### **3.8 Validity and Reliability**

Given that the study is qualitative in nature, the researchers did not make much use of the concepts of validity and reliability.

#### **3.8.1 Validity**

Measurements of validity and reliability are used to measure the quality of social research in quantitative studies to meet this objective (Coolican, 2014). The validity of the content will be used in the study. The concept of validity deals with the question of whether the author measures what is intended to be done (Coolican, 2014). The four types of validity considered for the study are face, content, criterion, and concurrent validity (Creswell & Creswell, 2017). The validity of the content was used in the study by considering the contents of the questionnaire used to collect the data.

- Facial validity: The method checks the extent to which the research instrument measures what is intended to be measured.
- Content validity: This refers to the extent of how the research instrument measures and satisfies the conduct (content) of the research of what it intended to measure.
- Validity of the criteria: the extent to which the research instrument relates to the results obtained.
- Concurrent validity: To the extent to which the current test coincides with an already existing and reliable test (Creswell & Creswell, 2017).

### **3.8.2 Reliability**

Reliability is a measure of the scope of bias in terms of ensuring consistent measurement cross-items in a research instrument (Kumar, 2014). The reliability of the study was carried out by testing and retesting, as well as internal consistency tests. A pilot study was also conducted regarding the field of research, and the results helped the main research study.

The research instrument underwent a reliability test. The reliability of the research instrument refers to the consistency or repeatability of measuring some given phenomena. There are three main types of reliability, namely parallel forms of reliability, reliability of retesting testing, as well as reliability among evaluators (Coolican, 2014): In this case, the method of retesting (before and after the event) was adopted.

- Parallel forms of reliability: Parallel forms of reliability refer to measuring how dependable a research instrument is by administering different items that evaluate the same construct under the same group of people.
- Reliability of retesting: The reliability of retesting tests measures consistency assessment over a period by conducting an assessment under numerous factors. In this case, the method of retesting was adopted (before and after the event).
- Reliability among evaluators: Refers to the concept of assessing the reliability of how different individuals respond to the same subject when performing an assessment (Coolican, 2014).

### **3.9 Demographic Profile of Respondents**

Only 50 subjects were pulled from Operation Harmony Kalgold in the northwestern province. The researcher needed about 30 males and 20 females between the ages of 30 and 65. Respondents must have been with the mining company for at least the last five years. Respondents must have come from different departments and races to ensure diversity of data and cross-exchange of views.

### **3.10 Ethical Considerations**

Saunders *et al.* (2016) argue that it is essential to consider the ethical implications for any research project involving human participants. As a result, the current study looks at the following ethical considerations. Some members may not be comfortable revealing details about the organisation's business. The researcher reassured the subjects that the study is purely academic and that their views were therefore be safely guarded. No one is injured or suffers negatively in the process. To ensure that the research meets the necessary requirements, it will adhere to the following:

- A cover letter was made available.
- Participants were informed of the reasons for the study.
- Participation was strictly based on being voluntary.
- Confidentiality of the data provided by the participants was ensured.
- The anonymity of the participants was respected.

### **3.11 Limitations of Study**

- Not all members of the target population can be accommodated in the sample due to their generous size. Accordingly, the sample population is limited to senior employees of Operation Harmony Kalgold in the northwestern province.
- The sample size is limited to only 50 participants due to time and financial constraints. The questionnaire schedule consists of several questions, therefore limited to only 20.
- The study exclusively used the quantitative method without referring to a qualitative approach. The researcher could have gained more insight through triangulation and other related methods.

### **3.12 Conclusion**

The essence of the research methodology cannot be overstated. By choosing a research methodology, researchers can formulate a pathway to be used in conducting the study and reporting the findings. The methodology helps to search for literature, develop research questions and create the most appropriate study design. This

chapter thus discussed the different techniques, methods, and approaches to be used in the current research study. The chapter explains the research philosophy that were used. The population and sampling framework were also discussed. The chapter also discussed data integrity measures such as credibility. The ethical considerations of the study are also explained accordingly together with other related concepts.

The following chapter presents the findings of field research with empirical implications.

## CHAPTER 4

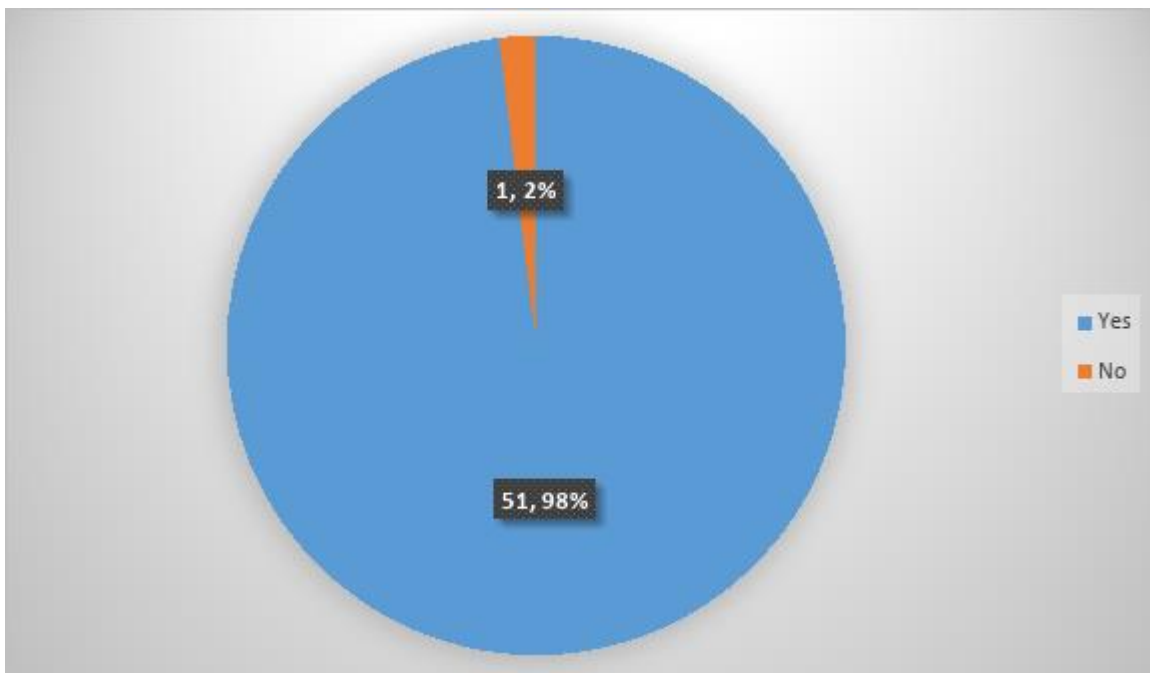
### PRESENTATION AND INTERPRETATION OF RESEARCH RESULTS

#### 4.1 Introduction

The previous chapter presents the methodology used to address the study's problems. The current chapter focuses on the presentation and interpretation of research results. The first section presents demographic details in terms of summary of the sample after gender, age, educational qualifications, and experience. The second section focuses on descriptive statistics on leadership styles and productivity. The third section focuses on discussing the findings as shown in the previous section. Pie charts are used to help present and interpret the results of the study's research.

#### 4.2 Demographic Details

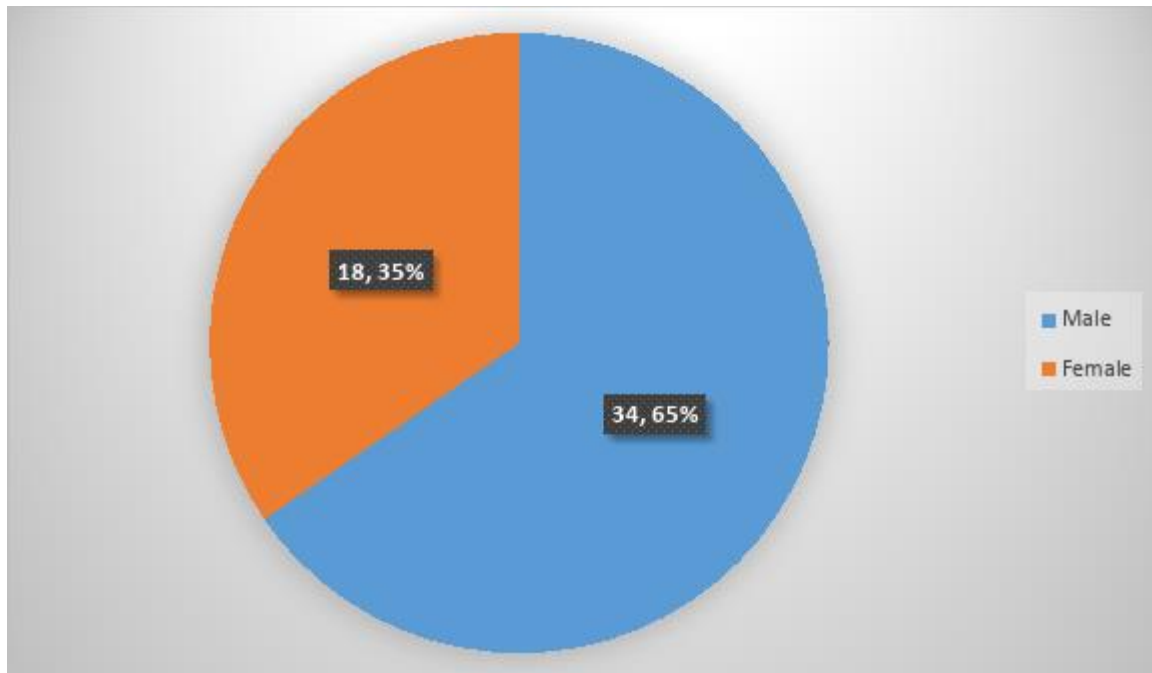
##### 4.2.1 Sample summary



**Figure 4.1: Sample response**

Figure 4.1 presents a summary of the sample. 52 were answered, 0 were skipped and turnout totaled 52. The mean, median and mode are 1.02.

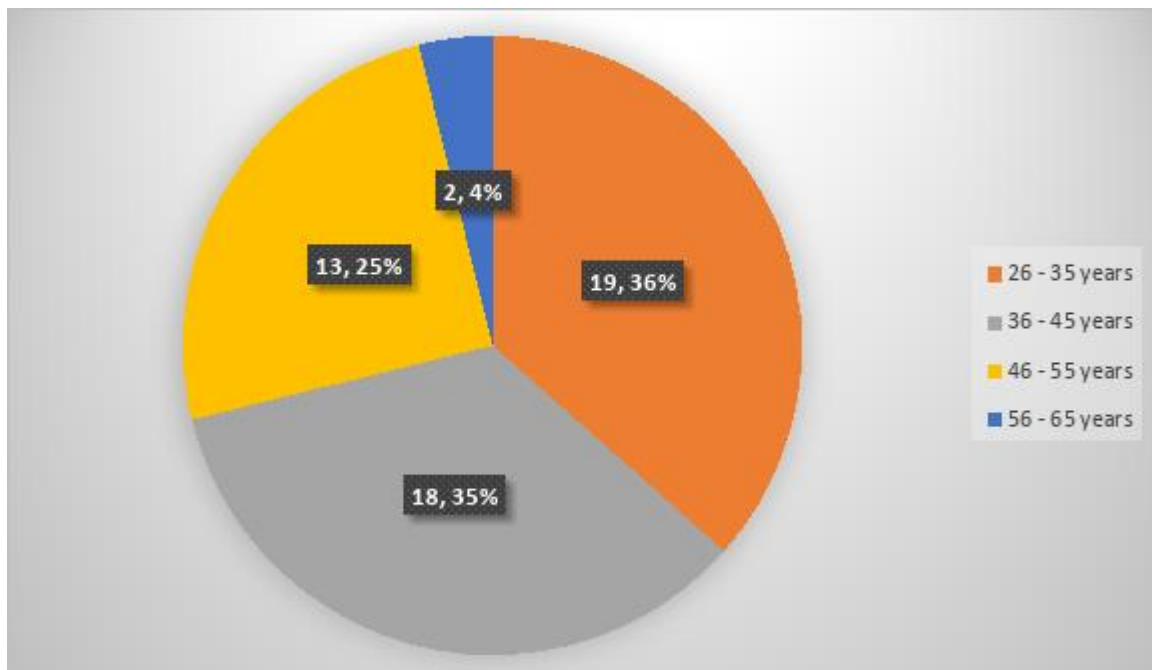
#### 4.2.2 Gender



**Figure 4.2: Gender of participants**

Figure 4.2 indicates a distorted distributed participation between men and women. 52 were answered, 0 were skipped and turnout totaled 52. Of the 52 participants who responded, 34 (65%) were men and 18 (35%) were women.

#### 4.2.3 Age



### Figure 4.3: Age of participants

Figure 4.3 indicates a distorted distributed participation in relation to the age of the participants. 52 were answered, 0 were skipped and turnout totaled 52. Of the 52, 19 (36%) falls in the range of 26 - 35 years, 18 (35%) from 36 - 45 years, 13 (25%) from 46 - 55 years and 2 (4%) from 56 - 65 years.

#### 4.2.4 Educational qualifications

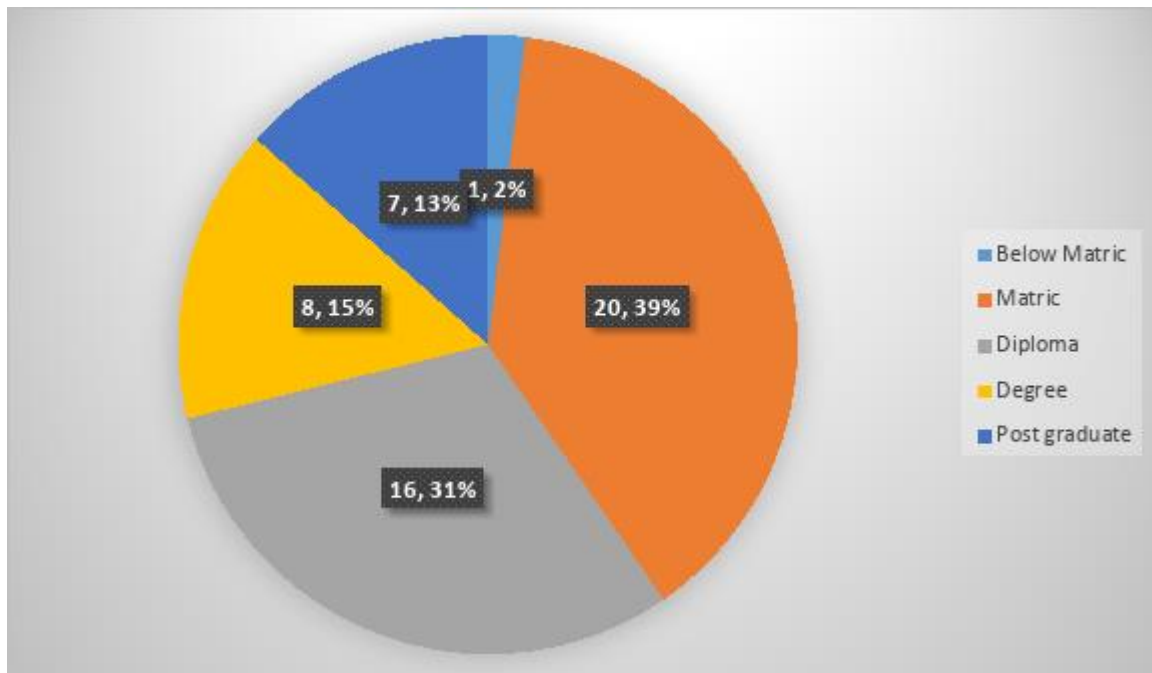
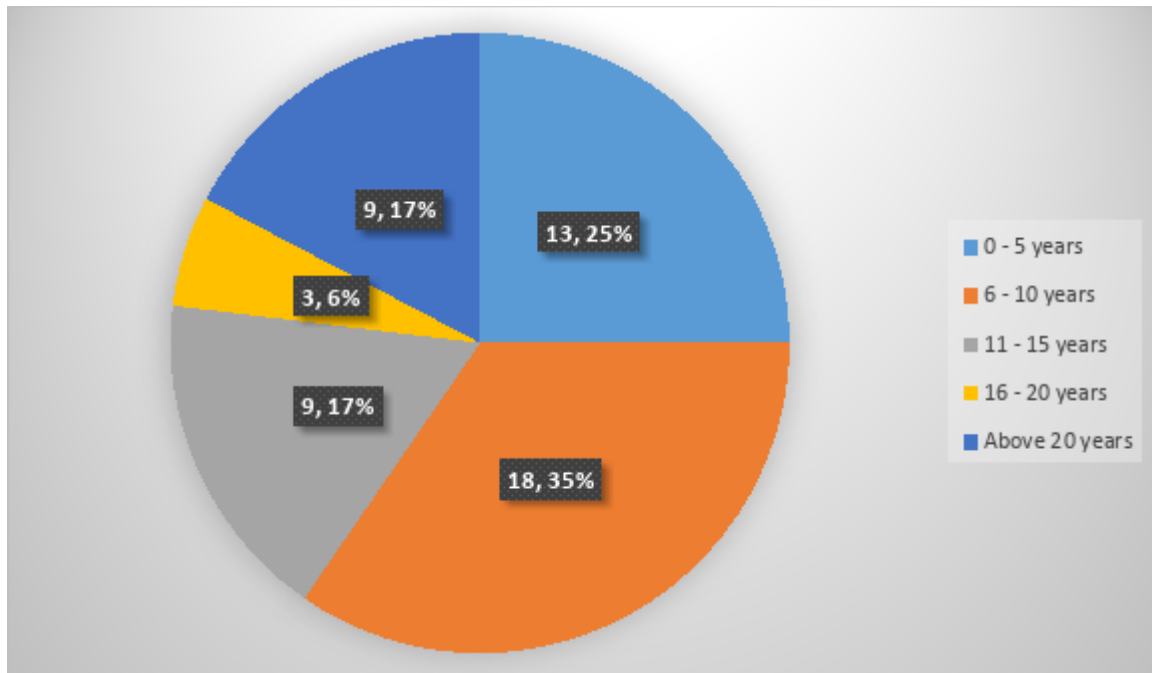


Figure 4.4: Educational qualification of participants

Figure 4.4 indicates the distorted distributed participation regarding the educational qualification of the participants. 52 were answered, 0 were skipped and turnout totaled 52. Of the 52 participants who responded to the level of education, 1 (2%) have a standard below the matrix or without schooling, 20 (38%) have a matrix/class of 12, 16 (31%) have degrees, 16 (31%) have degrees and 8 (15%) have postgraduate degrees.

#### 4.2.5 Mandate/ Experience with the organisation



**Figure 4.5: Participant Experience**

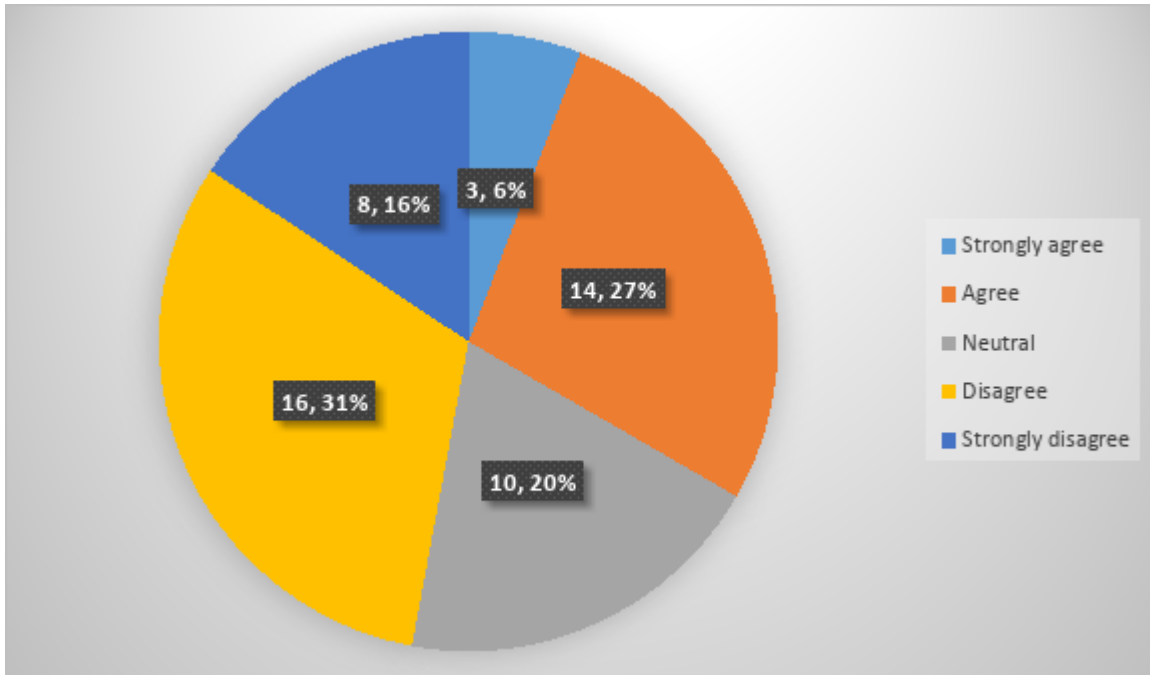
Figure 4.5 indicates the distorted distributed participation in relation to the participants' experience. 52 were answered, 0 were skipped and turnout totaled 52. Of the 52, 13 (25%) falls in the range of 0 - 5 years, 18 (35%) from 6 - 10 years, 9 (17%) from 11 - 15 years, 3 (6%) from 16 - 20 years and 9 (17%) with over 20 years of experience.

#### 4.3 Descriptive Statistics on Leadership and Productivity Styles

To ensure sequencing of responses, the questions are extracted from the questionnaire for easy reference. The use of "I/my" means that the questions were directed to individual respondents in this study.

##### 4.3.1 Leadership Styles

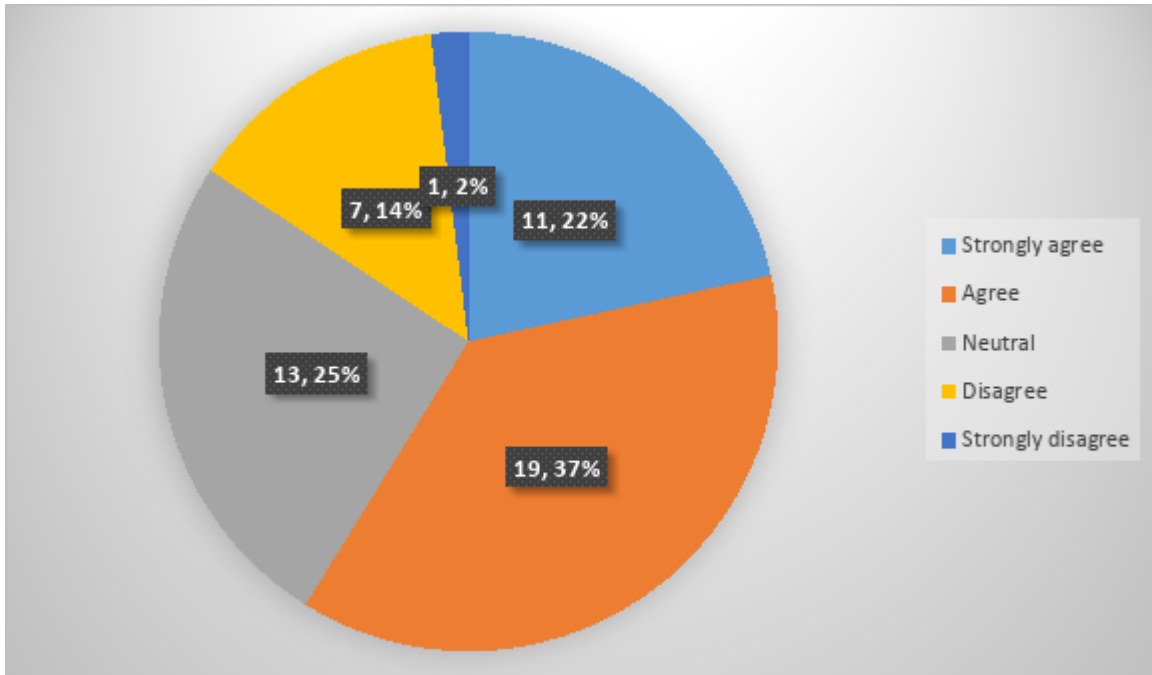
My manager uses an autocratic leadership style



**Figure 4.6: Manager uses autocratic leadership style**

He answered 51, jumped 1, and turnout totaled 52. The mean, median and mode are 3, 2, 3 and do not agree\* respectively. There is disagreement regarding the use of an autocratic leadership style. Ahmed (2017) believes that autocratic leaders allow a pacesetter or leader to impose expectations and expose outcomes. Based on Ahmed's argument and the above results, it can be concluded that most leaders allow creative contributions from team members and are therefore not autocratic.

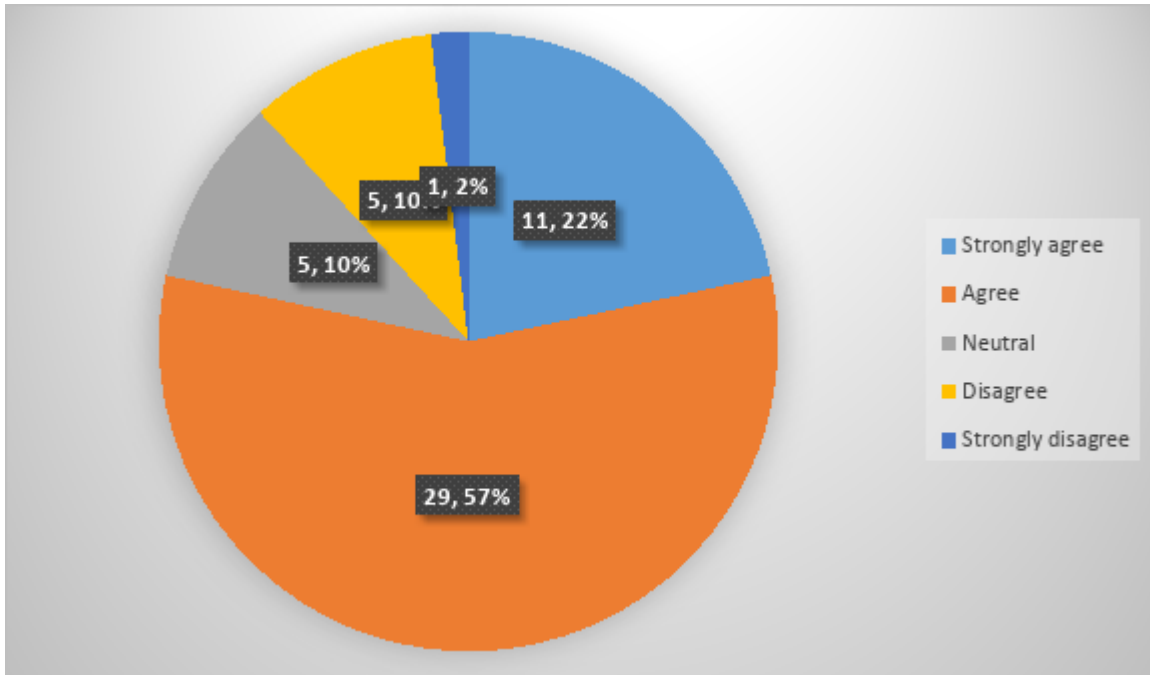
My manager uses a democratic leadership style



**Figure 4.7: Manager uses democratic leadership style**

He answered 51, jumped 1, and turnout totaled 52. The mean, median and mode are 2,37, 2 and agree\* There is an agreement on the use of a democratic leadership style. According to Terry (2017), the leader will have the final stage within the decision-making process. Based on Terry's argument and the above results, it can be concluded that most leaders allow creative contributions from team members and are therefore democratic in nature.

My manager uses a transformational leadership style

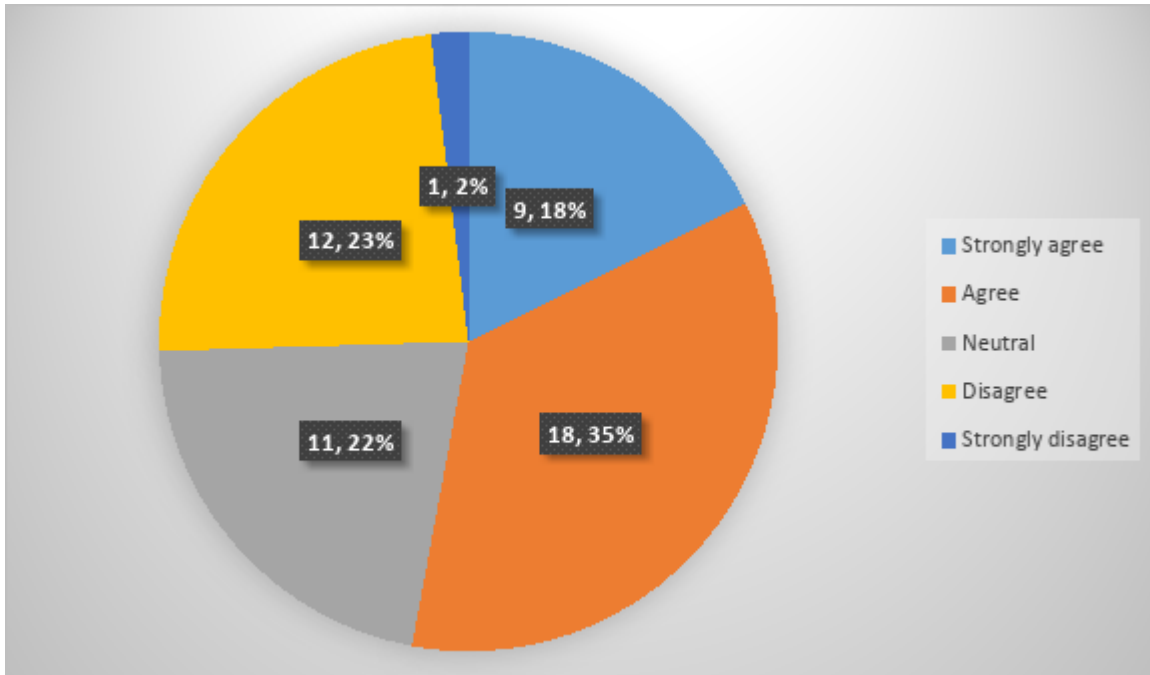


**Figure 4.8: Manager uses transformational leadership style**

He answered 51, jumped 1, and turnout totaled 52. The mean, median and mode are 2,37, 2 and agree\* There is an agreement to use a transformational leadership style. According to Yauney (2018), transformation management is driven and emphasizes the company's vision, among different issues. Based on Yauney's argument and the above results, it can be concluded that most leaders use motivation and think that they will acquire and retain the help of employees and are therefore transformational.

#### **4.3.2 Descriptive statistics on productivity measures**

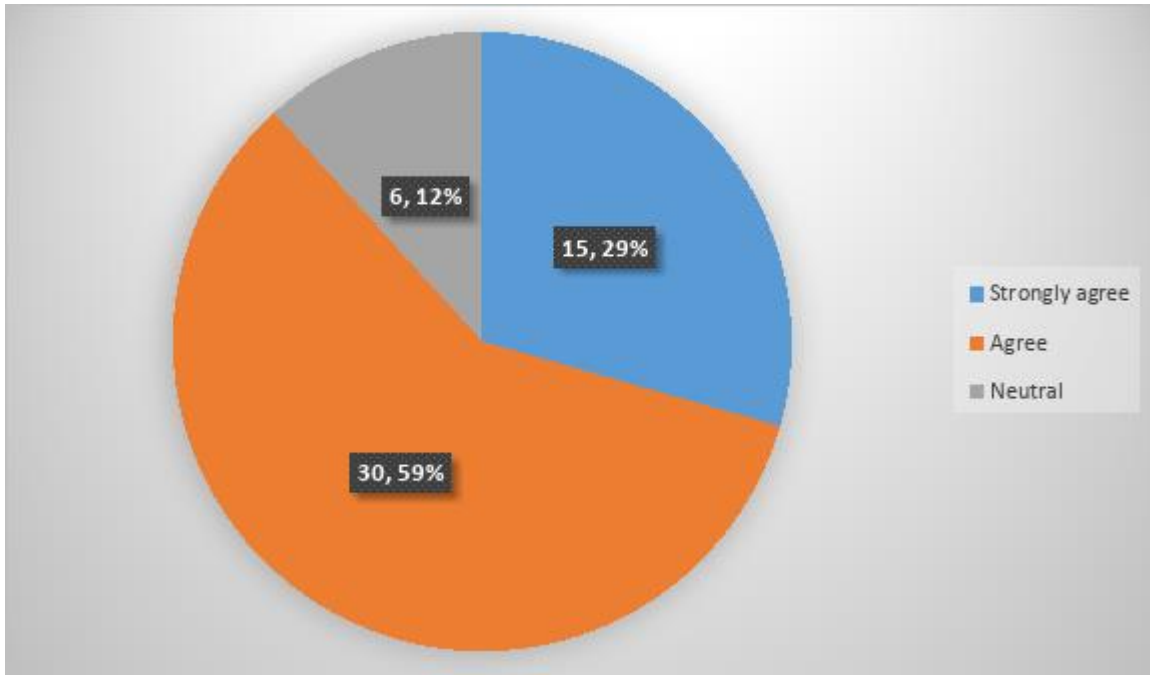
Labour productivity is currently low in the organisation



**Figure 4.9: Labour productivity is currently low**

He answered 51, jumped 1, and turnout totaled 52. The mean, median and mode are 2.57, 2 and agree\* There is an agreement that labour productivity is currently low in the organisation. According to Marcel (2016), the improvement in labour productivity is authentically permanent and can be deciphered from changes in characteristic capital, modern progress, and human capital. Based on Marcel's argument and the above results, it can be concluded that labour productivity is currently low in the organisation and needs to be improved.

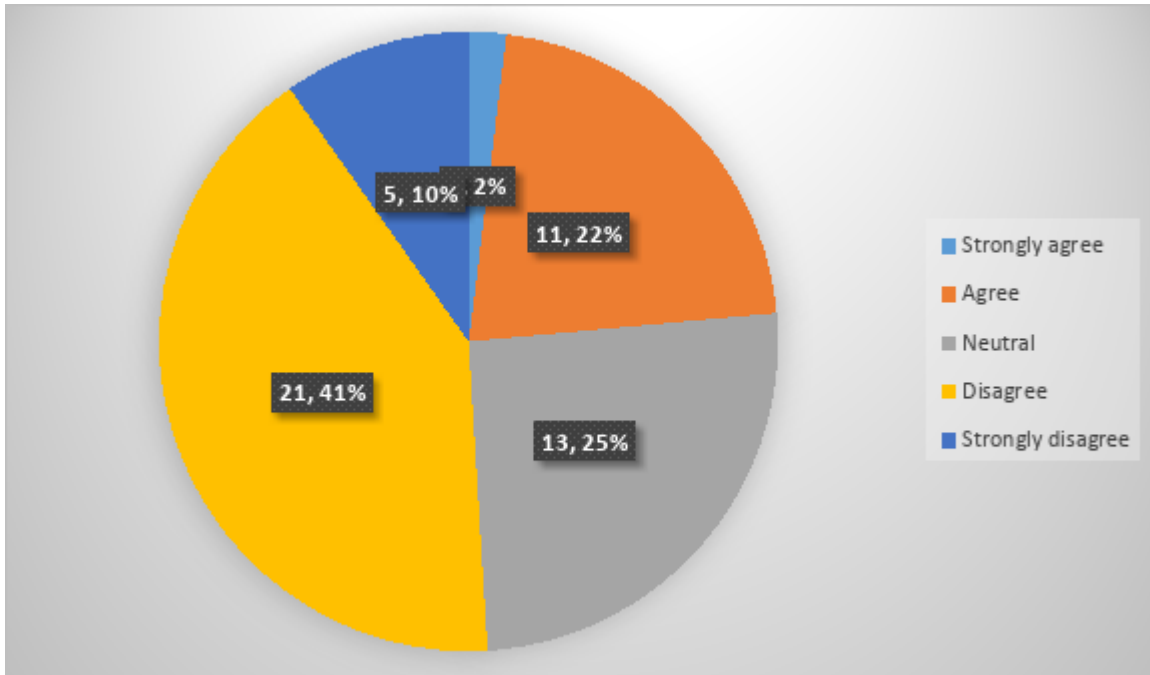
The organisation needs to improve capital productivity



**Figure 4.10: Capital productivity needs to be improved**

He answered 51, jumped 1, and turnout totaled 52. The mean, median and mode are 1,82, 2 and agree\* It is an agreement that the organisation needs to improve capital productivity. Deeply (2017) confirms that capital efficiency refers to returns in line with the stable capital resource assessment unit and demonstrates the adequacy with which a permanent capital fund is used. Based on Deep's argument and the above results, it can be concluded that in the organisation it is necessary to improve capital productivity.

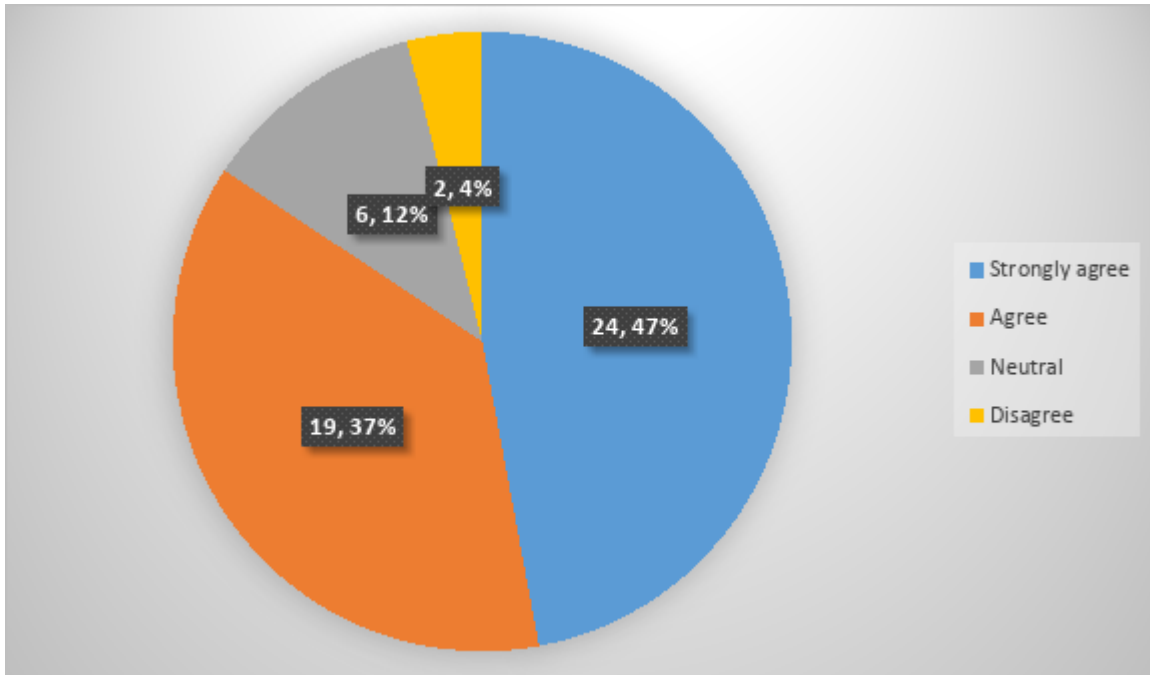
The organisation does not use raw materials efficiently



**Figure 4.11: Raw materials are not used efficiently**

He answered 51, jumped 1, and turnout totaled 52. The mean, median and mode are 3.35, 4 and do not agree\* respectively. This is a disagreement that the organisation does not use raw materials effectively. Kimberlee (2018) acknowledges that the ability to ensure interruption even with an additional yield or additional yield using much fewer tangible assets is considered material productivity. Based on Kimberlee's argument and the above results, it can be concluded that the organisation uses raw materials effectively.

In the organisation, it is necessary to improve the overall productivity

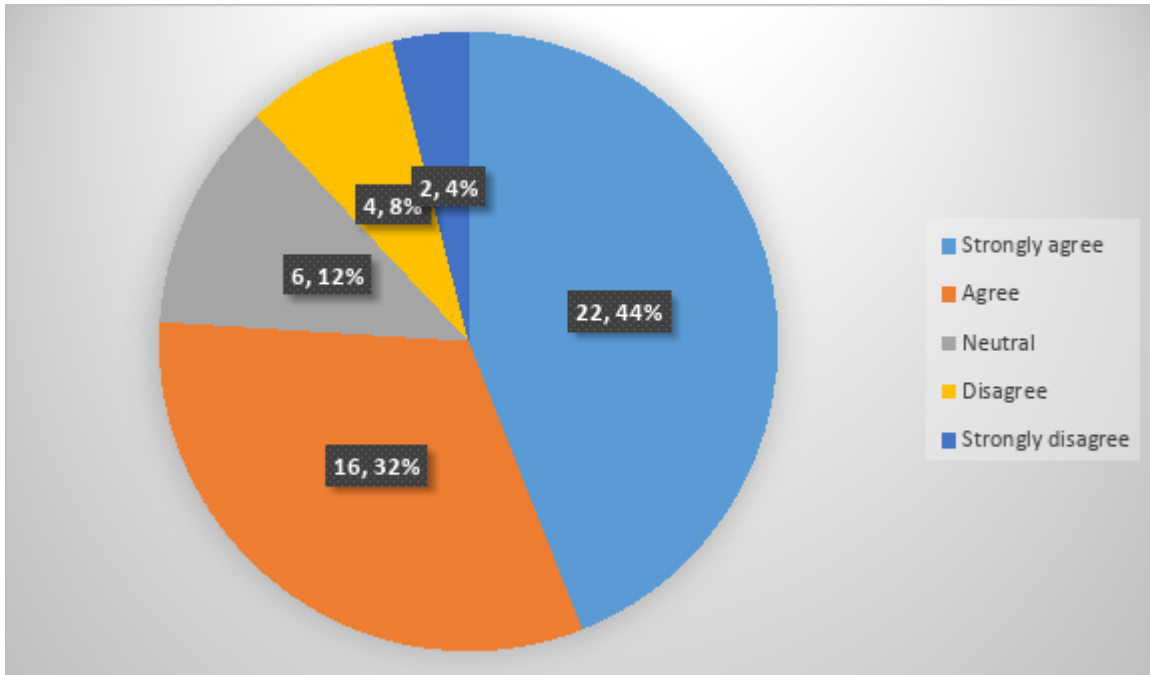


**Figure 4.12: Overall productivity needs to be improved**

He answered 51, jumped 1, and turnout totaled 52. The mean, median and mode are 1.73, 2 and strongly agree\* It is an agreement that the organisation needs to improve overall productivity. Kimberlee (2018) testifies that overall productivity is a manifestation of labour, capital, and materials productivity, all of which are essential for the organisation. Based on Kimberlee's argument and the above results, it can be concluded that overall productivity needs to be improved in the organisation.

#### **4.3.3 Descriptive statistics on the impact of leadership styles on productivity**

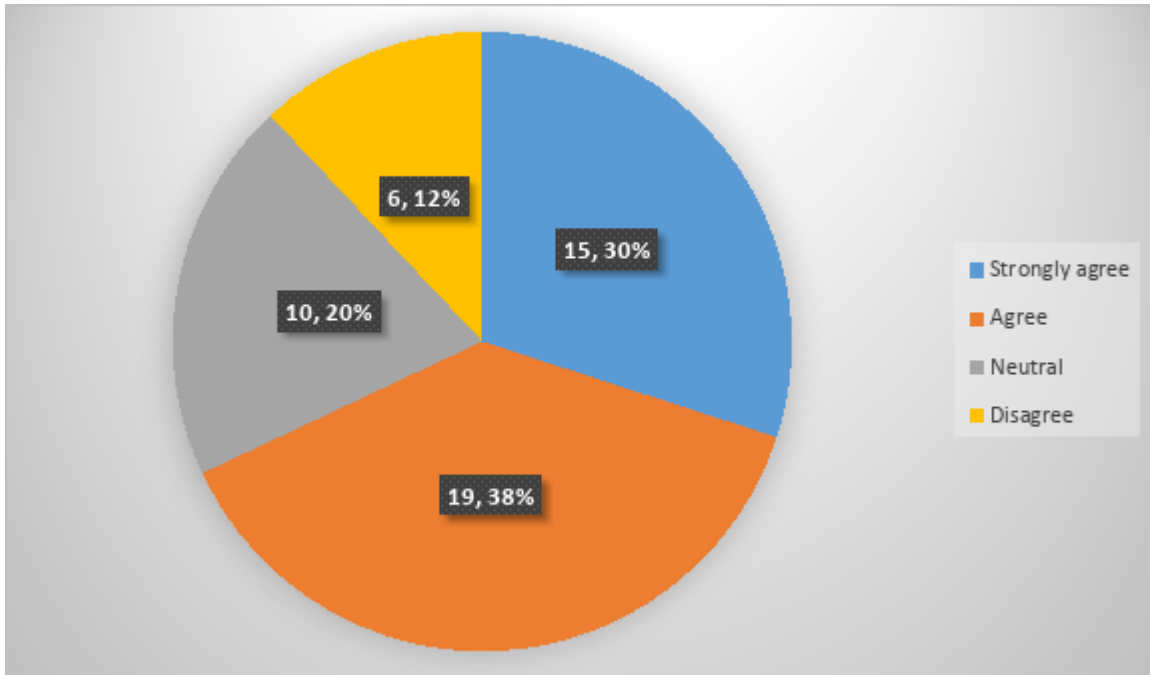
My immediate superior's management style makes it easy for me to engage him on issues relating to my work productivity



**Figure 4.13: Management style and employee engagement**

50 were answered, 2 were skipped and turnout totaled 52. The mean, median and mode are 1.96, 2 and strongly agree \* There is strong agreement that the management style of superiors makes it easier for subordinates to engage them in matters related to labour productivity. Marcel (2016) confirms that the leadership style that entails setting up clear and clean road tickets for the company guarantees that staff recognise what is predicted of them. Based on Marcel's argument and the above results, it can be concluded that the management style of superiors determines whether subordinates can deal with them in matters related to labour productivity.

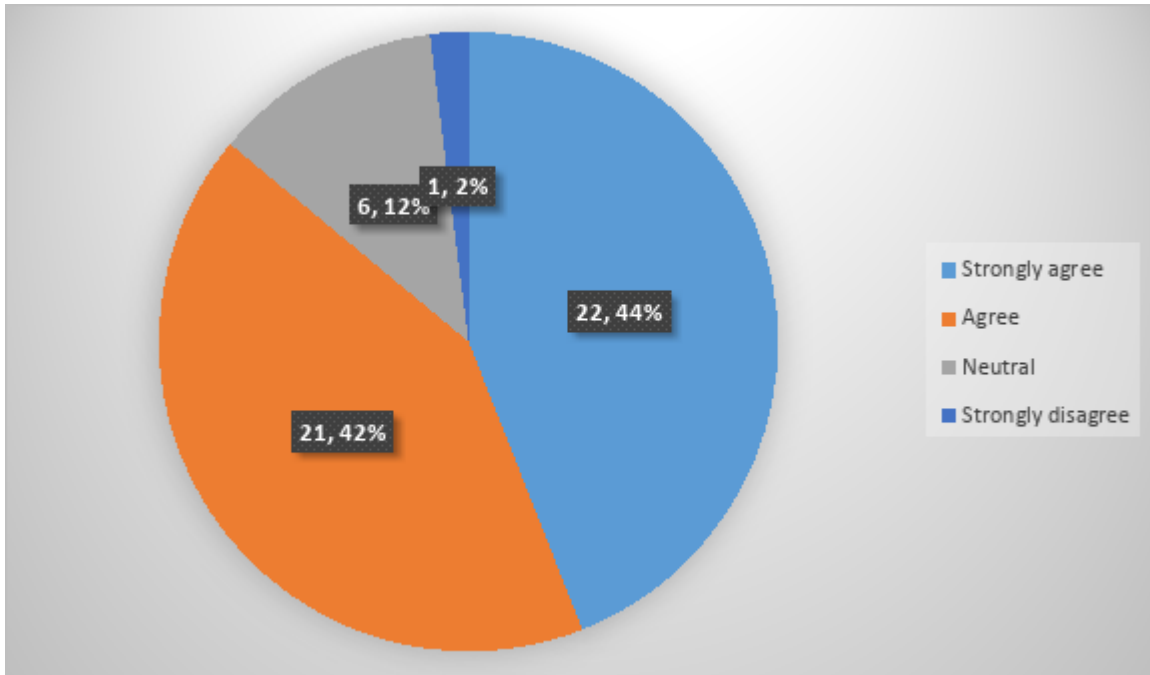
My immediate superior gives me regular feedback on my work productivity



**Figure 4.14: Management style and regular feedback**

50 were answered, 2 were skipped and turnout totaled 52. The mean, median and mode are 2,14, 2 and agree\* There is an agreement for superiors to provide employees with regular feedback on their work productivity. In line with Ibrahim and Daniel (2019), the management style used affects productivity, as it affects workers' morale depending on the availability of feedback. Based on Ibrahim and Daniel's argument and the above results, it can be concluded that most superiors provide employees with regular feedback on their work productivity.

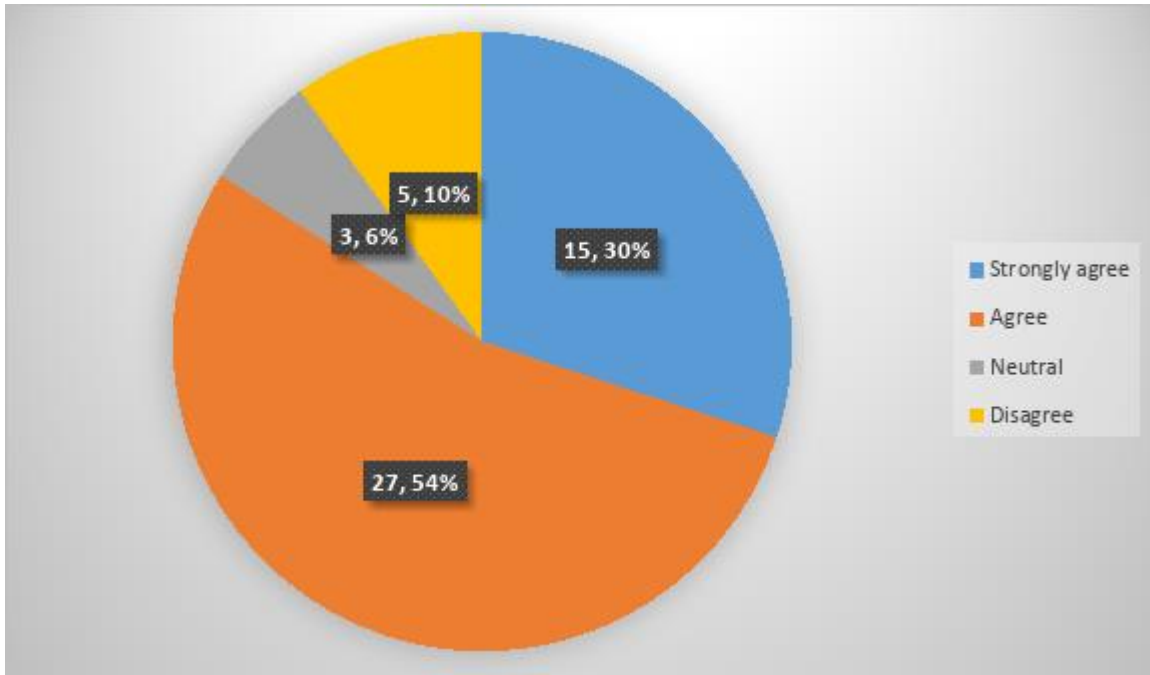
My immediate superior encourages me to work with my associates to achieve organisational goals



**Figure 4.15: Management style and team engagement**

50 were answered, 2 were skipped and turnout totaled 52. The median, median and mode are 1.74, 2 and strongly agree\* There is strong agreement that some superiors encourage employees to work with their associates to achieve organisational goals. In line with Yaune (2018), leaders can use a consensus decision-making style in which everyone's confirmation of the change allows for better productivity. Based on Yaune's argument and the above results, it can be concluded that superiors encourage employees to engage with their co-workers through teamwork to achieve organisational goals.

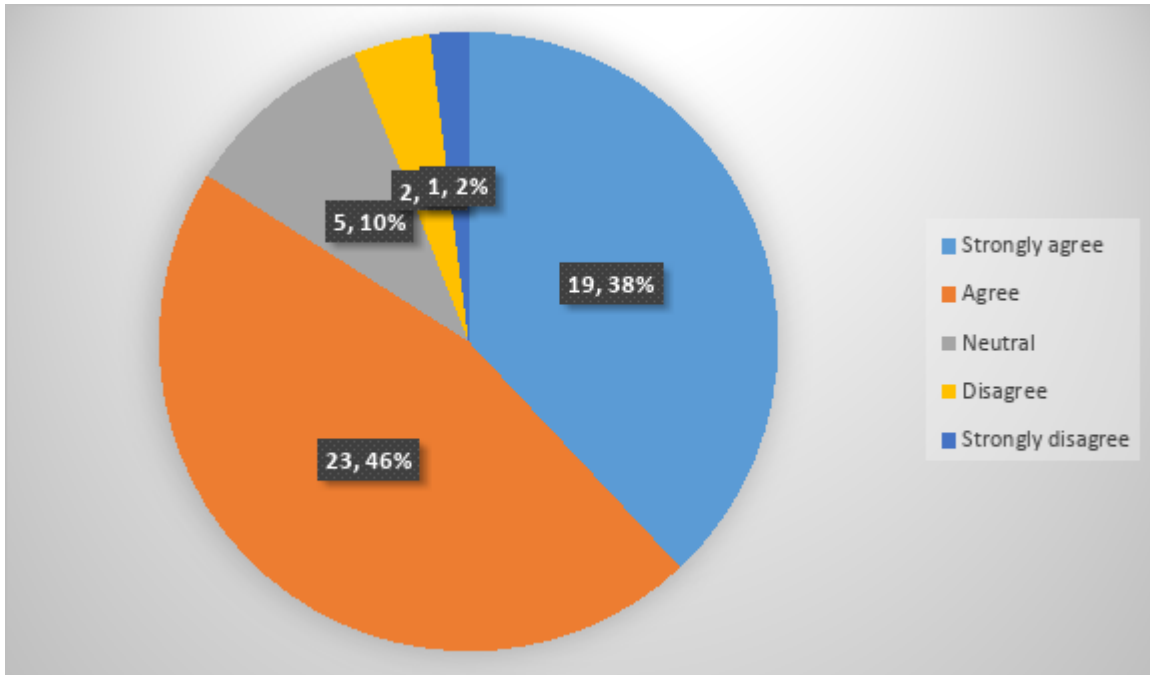
My immediate superior allows me to present my side of the story whenever there are allegations of poor productivity.



**Figure 4.16: Management style and performance assessment**

50 were answered, 2 were skipped and turnout totaled 52. The mean, median and mode are 1.96, 2 and agree \* There is an agreement that superiors allow employees to present their side of the story whenever there are allegations of poor productivity. Ibrahim and Daniel (2019) confirm that effective leaders speak safely and often to ensure that staff understand the strategic direction and their progress in performance. Based on Ibrahim and Daniel's argument and the above results, it can be concluded that superiors encourage a clean and honest conversation with employees so that they can specialize in their work to reduce poor productivity.

My immediate superior engages me in ways and ideas to achieve my productivity at work

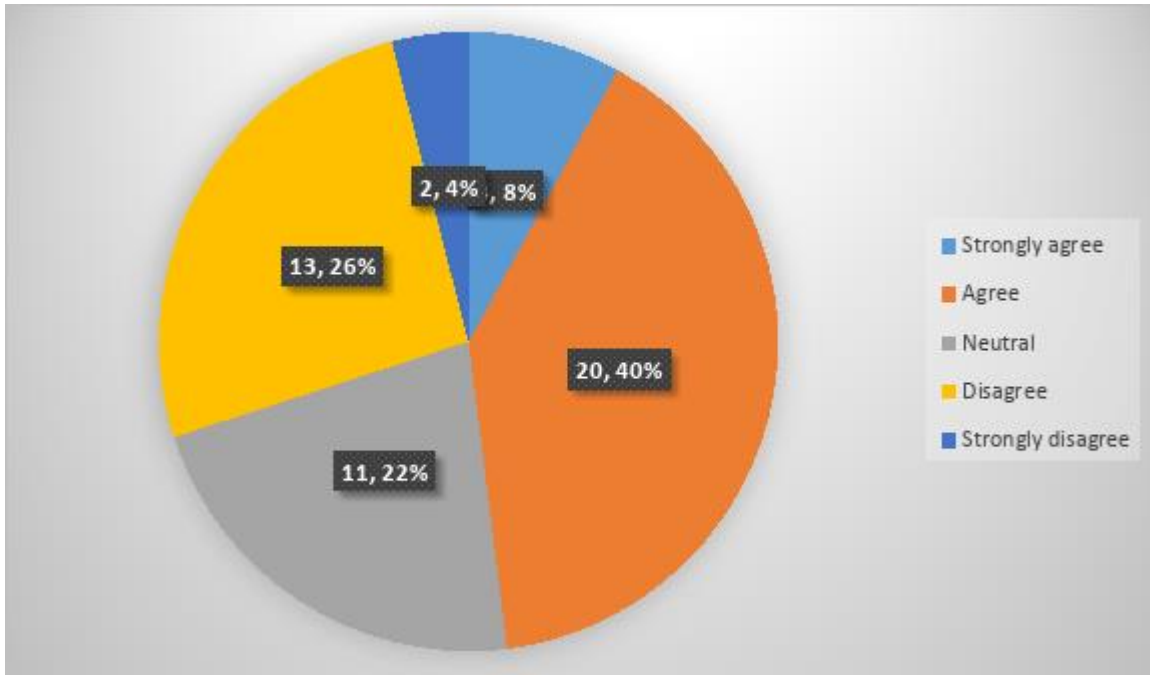


**Figure 4.17: Management style and performance enhancement**

50 were answered, 2 were skipped and turnout totaled 52. The mean, median and mode are 1.86, 2 and agree \* There is an agreement for superiors to engage employees in ways and ideas to achieve productivity at work. According to Terry (2017), the management style used affects the ability of employees to interpret the message and to get better ways of working. Based on Terry's argument and the above results, it can be concluded that superiors engage employees in ways and ideas for achieving productivity at work.

#### **4.3.4 Leadership styles that can be used to improve productivity**

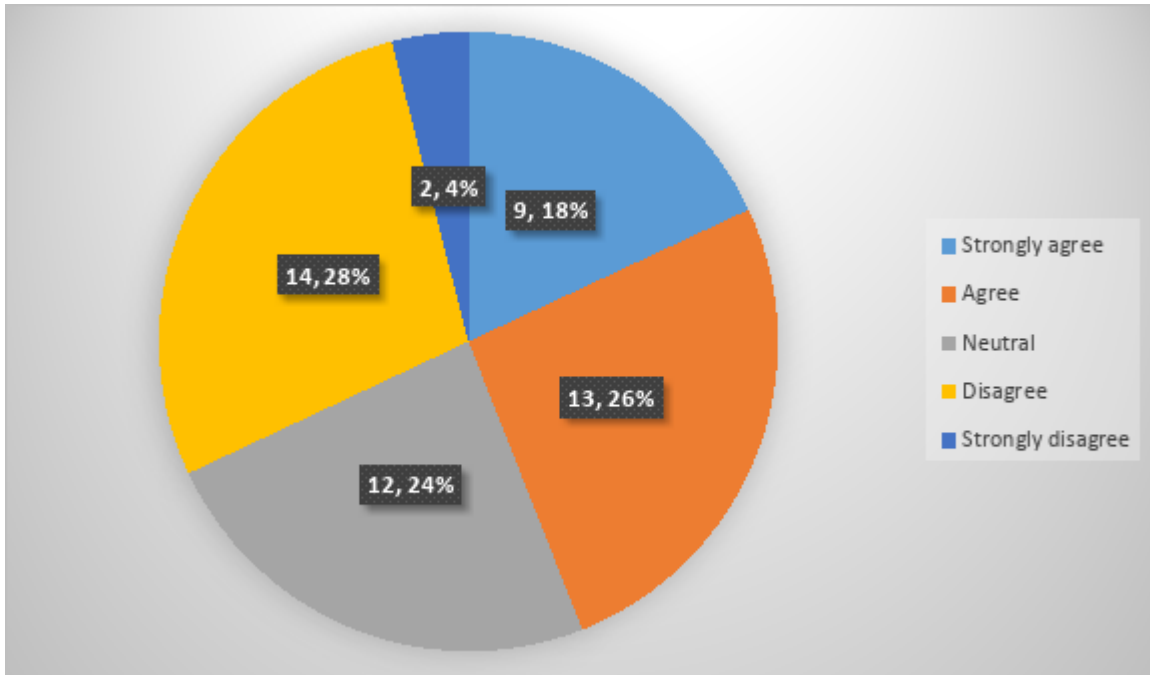
I would be more productive if my immediate superior's leadership style was situational



**Figure 4.18: Situation management style improves productivity**

50 were answered, 2 were skipped and turnout totaled 52. The mean, median and mode are 2,78, 3 and agree\* There is an agreement that employees would have been more productive if their immediate superior's leadership style had been situational. According to Marcel (2016), situational leadership gives leaders a direct and clear process for determining which leadership style will work best with a particular employee in each situation. Based on Marcel's argument and the above results, it can be concluded that employees would be more productive if the leadership style of their immediate superior was situational.

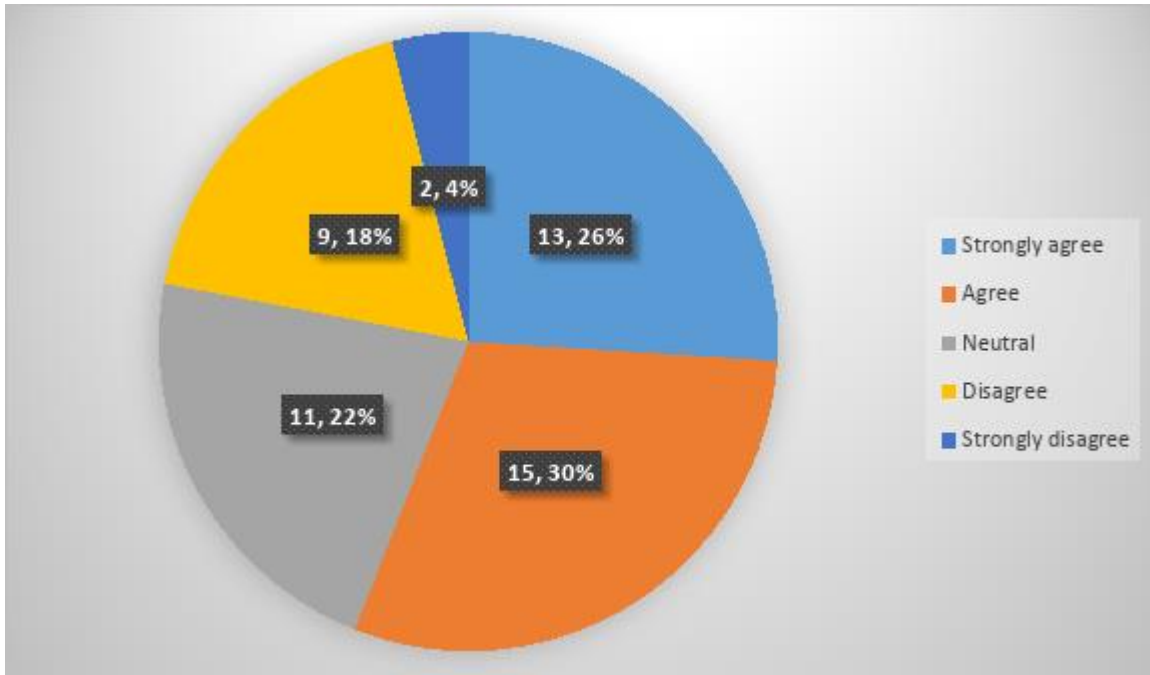
I'd be more productive if my immediate superior's leadership style was transactional.



**Figure 4.19: Transaction management style improves productivity**

50 were answered, 2 were skipped and turnout totaled 52. The mean, median and mode are 2.74, 3 and do not agree\* respectively. There is disagreement that employees would be more productive if their immediate superior's leadership style were transactional. According to Yauney (2018), transactional leadership is a leadership style in which leaders promote follower compliance through rewards and penalties. Through a reward and punishment system, transactional leaders can motivate followers in the short term. Based on Yauney's argument and the above results, it can be concluded that employees would not be more productive if the leadership style of their immediate superior was transactional.

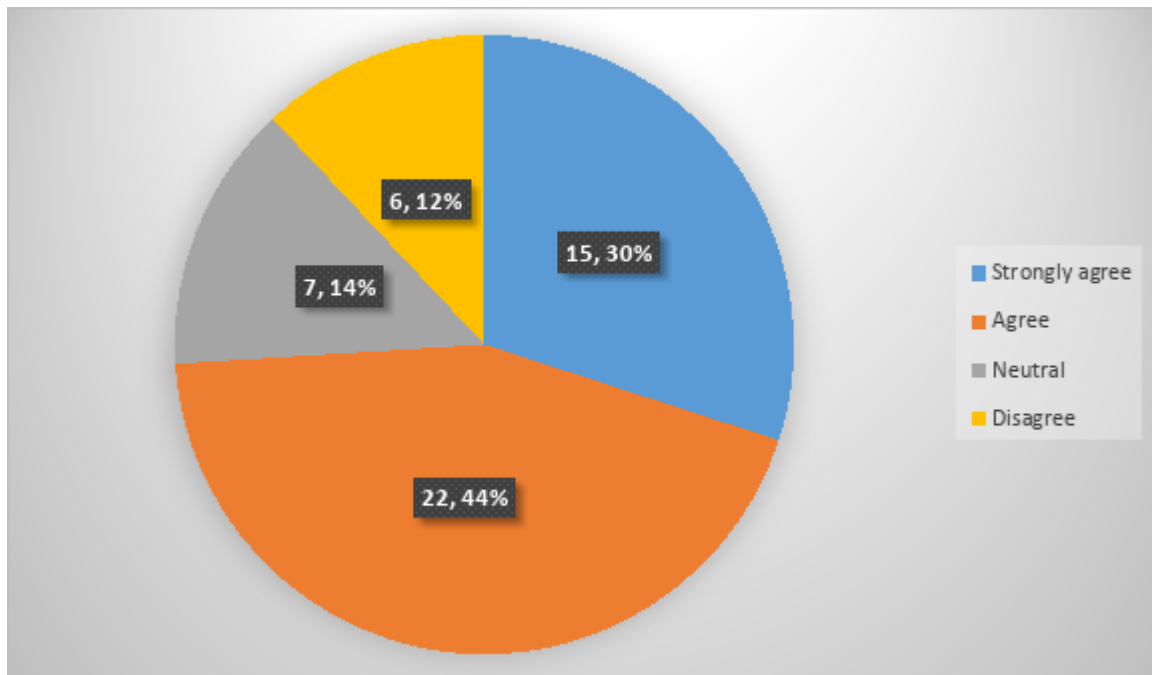
I'd be more productive if my superior's leadership style was democratic.



**Figure 4.20: Democratic management style improves productivity**

50 were answered, 2 were skipped and turnout totaled 52. The mean, median and mode are 2.44, 2 and agree \* There is an agreement that employees would be more productive if their immediate superior's leadership style were democratic. According to Ibrahim and Daniel (2019), democratic leadership, also known as participatory leadership or joint leadership, is a leadership style in which group members take a participatory role in the decision-making process. Based on the arguments of Ibrahim and Daniel (2019) and the above results, it can be concluded that employees would be more productive if the leadership style of their immediate superior was democratic.

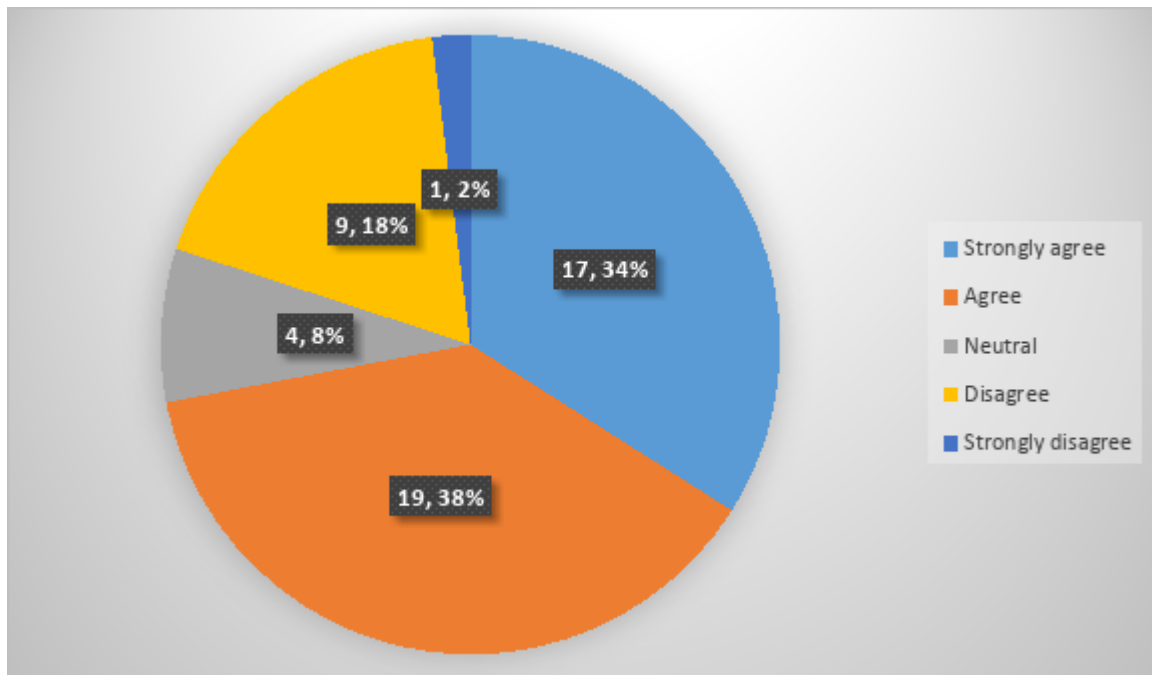
I would be more dedicated and stronger if my superior's leadership style was transformational



**Figure 4.21: Transformational management style improves productivity**

50 were answered, 2 were skipped and turnout totaled 52. The mean, median and mode are 2.08, 2 and agree\* There is agreement that employees would be more productive if their immediate superior's leadership style were transformational. According to Kimberlee (2018), transformational leadership is a leadership approach that causes change in individuals and social systems. In its ideal form, it creates valuable and positive changes in followers with the goal of developing followers into leaders. Based on Kimberlee's argument and the above results, it can be concluded that employees would be more productive if the leadership style of their immediate superior was transformational.

I will be more productive if my immediate superior was charismatic, cheerful, and easy to engage with



**Figure 4.22: Charismatic management style improves productivity**

50 were answered, 2 were skipped and turnout totaled 52. The mean, median and mode are 2,16, 2 and agree\* There is an agreement that employees would be more productive if their immediate superior's leadership style was charismatic. According to Ibrahim and Daniel (2019), charismatic leadership is defined by a leader who uses his communication skills, persuasiveness, and charm to influence others. Charismatic leaders, given their ability to connect with people at a deep level, are especially valuable in organisations that are facing a crisis or struggling to move forward. Based on the arguments of Ibrahim and Daniel (2019) and the above results, it can be concluded that employees would be more productive if the leadership style of their immediate superior was charismatic.

#### 4.4 Conclusion

The main findings of the study are presented and discussed in this chapter. Different leadership styles have different effects on productivity in the case of Operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa. Within the company, there are four main types of productivity as envisioned in the study. The study found that Democratic leaders invite others to participate in the organisation as part of the decision-making process and are related to productivity. The study also found that on the grooved leadership style, it has a strong negative correlation with productivity and

has a strong negative correlation with vigour and commitment. The study also found that charismatic leadership style has a positive correlation with productivity and has a positive correlation with vigour, commitment, and absorption. Similarly, it has been found that transformation leadership style is more associated with productivity, and the leadership style should be developed by modern leaders. The transactional style of leadership had a slightly negative relationship with productivity and implies a carrot and stick method to achieve organisational goals. However, situational leadership theory suggests that no leadership style is the best. Instead, it depends on which type of leadership and strategy best suits the task.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This is the last chapter of the dissertation and is divided into three parts. The first part will provide findings from the study, which is divided into two parts, that is, the findings from the literature and the findings from the primary data. Second, this will be followed by conclusions that in turn helped the study provide answers to research questions. Third, the chapter will provide limitations, study recommendations and the conclusion of this chapter. Accordingly, this chapter will provide answers to the following research questions.

- Determine the leadership styles used in Operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa.
- Determine productivity measures at operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa.
- Determine the impact of leadership styles on productivity in the case of Operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa.
- Propose leadership styles that can be used to improve productivity in the case of Operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa.

#### 5.2 Findings

Participants were asked about different leadership methods and how they affect productivity. Each leadership style has its own impact on the level of productivity. There is no comprehensive treatment for the best method of leadership. The importance of leadership usually depends on the current situation. Within the organisation, there are four main types of productivity as foreseen by the study. Capital productivity speaks of the ratio of products or services to physical capital. Physical productivity looks at the ratio of products or services to materials also called natural resources. Labour productivity considers whether companies are effectively turning labour inputs into a product or service. The overall productivity of workers covers everything that capital, materials, and labour productivity do not consider. Each type

of productivity affected various parts of the organisation. Productivity is therefore important to everyone in the organisation. This means that staff can achieve more in less time, and organisations see higher incomes using fewer resources (Terry, 2017; Yauney, 2018).

Most leaders were found to be adopting democratic leadership. This is because it fosters a work environment in which everyone shares their ideas, rational and flexible, and staff members participate in meetings and discussions. It was found that most supervisors always appreciate the work of team members and encourage team spirit. Democratic supervisors always allow team members to use their creativity, resources, and expertise to help themselves fulfill daily production. In line with these findings, Marcel (2016) argues that democratic leadership turns out to be one of the most effective types of leadership style due to perceived high productivity compared to leadership authoritarianism related to productivity. The Democratic leader calls for the participation of others in the organisation as part of the decision-making process. Democratic Leaders, encourages everyone to participate, this leads to an improved sense of participation, recognition, and fulfilment (Marcel, 2016).

Some superiors were found to use authoritarian leadership. Only a handful of leaders control all decisions and little or no input from others. Only a few do not allow creative contributions from team members. Some leaders make decisions based on their ideas and judgment and hardly take the advice of subordinates. In line with these results, Terry (2017) is concerned that authoritarian leadership may interfere with any sense of creativity among team members, although in some cases it is useful. An example is when decisions are needed quickly without consulting a large group of related individuals. However, authoritarian leadership is very indirectly linked to staff participation and is very indirectly linked to strength and commitment (Terry, 2017).

Charismatic leadership was also found to be common among leaders. It turned out that some leaders have a charismatic personality in nature, role models and tend to treat team members with dignity and respect, providing motivation to their followers. In this regard, Yauney (2018) argues that charismatic leaders are particularly valuable in organisations facing a crisis or struggling to thrive. Charismatic leadership is highly associated with productivity and is highly associated with strength, commitment, and

assimilation. Charismatic productive leadership expects better from authoritarian leadership (Yauney, 2018).

Some leaders were found to be using transformative leadership. These leaders inspire employees to achieve organisational productivity. Some bosses make the jobs of employees more meaningful and comfortable to perform. Transformative leadership methods motivate employees to contribute beyond their usual key areas of performance. Others include staff on issues related to personal development goals. In line with these results, Kimberlee (2018) confirms that a transformative leadership style is more related to staff commitment and has recommended the development of this type of leadership by the heads of organisations. This suggests that the focus should be on training leaders in transformative leadership skills to achieve the desired staff commitment (Kimberlee, 2018).

It also found that the way transactions are managed is common among leaders. Some bosses allow employees to present their side of the story whenever there are accusations of inferior performance. Staff are also expected to work beyond expectations. Transaction leaders have a good understanding of regulatory needs and prefer structured policies and procedures. These findings are in line with the argument of Ibrahim and Daniel (2019) that the method of conducting transactions has a negative attitude towards staff commitment. Therefore, the application of this form involves a contractual relationship with workers that relies on the expansion of the rod and carrot method to achieve organisational productivity (Ibrahim & Daniel, 2019).

### **5.3 Conclusions**

This section sets out the conclusions of the study in line with the following objectives:

- Determine the leadership styles used in Operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa.

It can be concluded that there are at least five of the most common leadership styles that affect the productivity of the Harmony Kalgold operation. These are autocratic, democratic, laissez-faire, transactional and transformational leadership. In an autocratic environment, the leader makes decisions without the input of the rest of the team. Leaders with a democratic style appreciate the opinions of their colleagues. Leaders who possess a laissez-faire leadership style often work best with employees

or team members who can be managed and directed, such as those from the satellite office. The transaction leader evaluates the order and systems. They set targets for employees and amount to rewards and penalties related to meeting or failing to meet those goals. Transformational leaders exist to encourage teams and sell the company's vision.

- Determine productivity measures at operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa.

It can be concluded that there are up to four productivity measures in operation Harmony Kalgold in Mahikeng-Kraaipan. These are capital, physical, labour, and overall productivity. Capital productivity speaks of the ratio of products or services to physical capital. Physical productivity looks at the ratio of products or services to materials also called natural resources. Labour productivity considers whether companies are effectively turning labour inputs into a product or service. The overall productivity of workers covers everything that capital, materials, and labour productivity do not consider. Each type of productivity affected various parts of the organisation. Productivity is therefore important to everyone in the organisation. This means that staff can achieve more in less time, and organisations see higher revenues using fewer resources.

- Determine the impact of leadership styles on productivity in the case of Operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa.

It can be concluded that leadership styles affect productivity in diverse ways in the case of Operation Harmony Kalgold in Mahikeng-Kraaipan. Autocratic leaders set goals without input from employees. This leads to low morale and absenteeism, leading to lower productivity, increased waste, more mistakes, and less customer satisfaction.

- Propose leadership styles that can be used to improve productivity in the case of Operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa.

It can be concluded that each situation requires each of its own leadership styles to improve productivity in the case of operation Harmony Kalgold in Mahikeng-Kraaipan. Democratic leadership has been shown to be one of the most effective types of leadership style due to perceived high productivity. The Democratic leader calls for the

participation of others in the workplace to be part of the decision-making course. However, authoritarian leadership is very indirectly linked to staff participation and is very indirectly linked to strength and commitment. Charismatic leadership is highly associated with productivity and is highly associated with strength, commitment, and assimilation. Transformative leadership style is more related to the dedication of staff and recommended the development of this type of leadership by the leaders of organisations. The leadership of the application transaction involves a contractual relationship with workers that relies on expanding the stick and carrot method to achieve organisational productivity.

#### **5.4 Recommendations**

This section provides the study recommendations in line with the following objectives:

- To determine the leadership styles used in Operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa.

Authoritarian leadership styles allow the leader to enforce prospects and define consequences. An authoritarian leadership style is also used when team members need clear guidance. Participating leadership styles are entrenched in democratic theory. The main objective is to involve team members in the decision-making route. It can define as "laissez-faire leadership," the delegate leadership style put efforts on delegating the initiative or ideas to team members. Transactional guidance styles use "transactions" between the leader and his followers - rewards, punishments, and other exchanges - to get the job done. In transformational leadership styles, the leader inspires and motivates his followers with unobstructed vision, then encourages and empowers then give them all resources achieve this. The leader also obliges as a model for the achievement of the vision (Kimberlee, 2018; Ibrahim and Daniel, 2019).

- To determine productivity measures at operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa.

The two main components that reduce productivity in the workplace are waste and inefficiency. Inefficiency and waste can be recognized as the distance between the company and the limit of efficiency. Labour productivity, for example, can be four output units per working time. If it does not focus on a certain form of process input units (such as working hours), but all types of input units (such as materials, energy,

labour, etc.) are considered, this is a multifactorial productivity. Because process inputs and process output units are often difficult to measure and compare, financial measurements such as revenues and costs can be used instead. Financial measurements are also required to compare different input units (working hours, materials) in the multifactorial scenarios (Terry, 2017; Yauney, 2018).

- To determine the impact of leadership styles on productivity in the case of Operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa.

Good leaders understand that there is a significant difference between challenging work and productivity. Asking people to just work harder is how a lazy leader tries to increase production. Instead, good leaders ensure that their teams have the right tools, resources, and training to be effective. In the literature, it is evident that group performance and the achievement of goals is associated with the leadership style used by the manager, since it directly affects the behavior of employees. This leads them to additional efforts in their workplaces and they perceive their leaders as effective (Terry, 2017; Yauney, 2018).

- To propose leadership styles that can be used to improve productivity in the case of Operation Harmony Kalgold in Mahikeng-Kraaipan, South Africa

An effective leader is primarily a condition for a successful business. Extremely successful leaders adopt a combination of multiple leadership styles or just one selective style. As a fluid practice, leadership is always changing and improving the way the company grows. There are diverse types of leadership styles in the work environment. The culture and vision of the organisation determine what is the most appropriate style. One of the most effective leadership styles is the transformational leadership style. Democratic leadership is another amazingly effective leadership style. The leadership of Laissez-faire is effective in creative jobs and workplaces with experienced employees. There is no universal leadership for every situation. Leaders can carry a mix of the above leadership styles depending on their industry and the obstacles they face. Situational leadership remains the way to go (Kimberlee, 2018; Ibrahim and Daniel, 2019).

## **5.5 Limitations**

Not all members of the target population could be accommodated in the sample due to their generous size. Accordingly, the sample population was limited to senior employees of Operation Harmony Kalgold in the northwestern province. The sample size was limited to only 50 participants due to time and financial constraints. The questionnaire schedule consisted of several questions and limited to only 20. The study exclusively used the quantitative method without referring to a qualitative approach. The researcher could have gained more insight through triangulation and other related methods.

## **5.6 Application of research findings**

The main aim of any organisation is to maximise profits. One of the ways Operation Harmony Kalgold can maximise profitability is through improved employee productivity. The findings of this study indicate that the prevalent leadership style in an organisation is an important influencer of employee productivity and profitability. The findings of this study are consistent with the finding of other studies such as Obasan and Hassan (2014), Erskine and Georgiou (2017) and Rehman et al. (2018). It is therefore recommended that organisations in the mining industry should constantly influence leadership behaviour to maximise employee productivity. This can be achieved through policy formulation, recruitment, training, and promotion as well as by enforcing the appropriate organisational behaviors (Munir & Aboidullah, 2018).

The findings of this study indicate that the existing mix of leadership styles prevalent in Operation Harmony Kalgold does not maximise the productivity of its employees as the primary leadership style of autocratic negatively impacts employee productivity. It is recommended that the organisation review its leadership training and selection processes to maximise its leadership pool with the desirable goal of maximising employee productivity (Lawal & Osifo, 2018; Ohemeng *et al.*, 2018). Regular pulse checks should be conducted to ascertain that the current leadership style in the organisation and interventions implemented to ensure the desired leadership style is maintained. Future studies should examine the impact of other factors such as cultural differences, employee attitude and expectations, organisational policies, and power distance and how they inter-relate with leadership styles and employee productivity (Ewell, 2018; Getachew & Erhua, 2018).

Furthermore, Lawal and Osifo (2018) as well as Ohemeng *et al.* (2018) indicate that organisations should pay attention to the leadership styles needs of their employees if they desire improved employee productivity. While some leadership styles improve employee productivity, others impair productivity; the onus on the discerning organisation is to determine the prevalent leadership styles and required leadership styles to maximise employee productivity and enact training and policies to bridge identified gaps. Amiscua *et al.* (2018) posit that democratic leadership style has a positive impact on motivation and employee productivity. Accordingly, the study contributes to the existing literature on leadership behaviour and its effect on employee productivity and validates the findings and relevance of the body of literature reviewed in Chapter two. This study is also intended to be a reference point to scholars and researchers for further studies on leadership practice and other related subject issues.

### **5.7 Action plans and further recommendations**

Employee productivity is fundamental to the growth, profitability, and continued existence of any organisation. Charismatic leadership styles and democratic leadership styles are best suited to improving employee productivity, bureaucratic and laissez-faire leadership styles exert a minimal positive effect on employee productivity while transactional and autocratic leadership styles impede employee productivity (Lawal & Osifo, 2018; Ohemeng *et al.*, 2018). While the choice of leadership style impacts employee productivity, the results of this study also indicate that other factors exist that influence employee productivity and these factors should be identified and researched to enable researchers, leaders, and academia to have a well-rounded understanding of determinants of employee productivity (Mukonga & Awolusi, 2019; Matira & Awolusi, 2020).

It is important for leaders to understand the diverse types of leadership styles available to them and when each might be used most effectively. Leaders exhibit a range of leadership styles depending on the company or situation they are in, and the traits and characteristics of their employees or team members (Lawal & Osifo, 2018; Ohemeng *et al.*, 2018). The leadership styles fall on a continuum from most directive (autocratic, authoritarian) to least directive (democratic, laissez-faire) – the others fall in between. More directive styles of leadership are best suited to situations where employees have lower-level skills and experience, as well as situations where time is of the essence

and danger, or security, may be involved. Fewer directive styles of leadership work well when employees are experienced and comfortable working autonomously (Matira & Awolusi, 2020; Mukonga & Awolusi, 2019; Olatunji & Awolusi, 2019; Blazi & Awolusi, 2020).

Situational leadership is highly recommended. According to Getachew and Erhua (2018), it is a leadership style that adapts to the situation (Getachew & Erhua, 2018); in some cases, the leader may behave in a more laissez-faire way, in others they may be more authoritative (Gaines, 2018). It is a leadership style that is adaptable and flexible, requiring an elevated level of expertise and confidence from the leader (Ewell, 2018; Getachew & Erhua, 2018). Situational leadership requires leaders to be able to exhibit four different forms of leadership style: directing, coaching, supporting, and delegating, depending on the situation. The foundation of situational leadership is the recognition that there is no one style that will suit all situations. It requires a higher level of expertise among leaders who are flexible and comfortable with ambiguity and able to change their style as the situation requires (Matira & Awolusi, 2020).

## **5.8 Conclusion**

The study looked at the impact of leadership styles on productivity in the case of Harmony Kalgold surgery in Mahikeng-Kraaipan, South Africa. It can be concluded that there are at least five of the most common leadership styles that affect the productivity of the Harmony Kalgold operation. These are autocratic, democratic, laissez-faire, transactional and transformational leadership. It can be concluded that there are up to four productivity measures in operation Harmony Kalgold in Mahikeng-Kraaipan. These are capital, physical, labour, and overall productivity. It can be concluded that leadership styles affect productivity in diverse ways in the case of Operation Harmony Kalgold in Mahikeng-Kraaipan. It can be concluded that each situation requires each of its own leadership styles to improve productivity in the case of operation Harmony Kalgold in Mahikeng-Kraaipan. There is no universal leadership for every situation. Leaders can carry a mix of the above leadership styles depending on their industry and the obstacles they face.

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