

THE EVALUATION OF THE VALUE CIRCLE DEPARTMENT AT
BUFFELSFONTEIN G.M. Co LTD.

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UITTREKSEL

Value Circles, as deel van die deelnemende bestuursprogram op Buffelsfontein Gold Mining Company Limited, het verval as gevolg van die negatiewe ekonomiese scenario waarbinne die myn funksioneer. Die studie het deur middel van 'n houdingsvraelys en gevallestudie aangetoon dat Value Circles nie net 'n bydrae tot die maatskappy se deelnemende bestuursprogram lewer nie, maar ook finansieel tot voordeel van die maatskappy funksioneer.

Die tweede hoofdoelwit van die studie is om 'n teoretiese basis vir verdere navorsing daar te stel wat huidiglik in Suid-Afrika ontbreek betreffende die konsep Value Circles. Die studie het nie net suiwer teoretiese deelnemende bestuurselemente oorweeg nie maar het ook enkele sielkundige en sosiologiese aspekte van Value Circles oorweeg in die neerlegging van 'n teoretiese basis vir Value Circles.

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CHAPTER ONE

NATURE AND EXTENT OF THIS STUDY

1.1 INTRODUCTION

Over the past three decades, Japan's annual productivity growth has been greater than that of the United States of America and other European nations. The American managers compared, inter alia, their leadership styles with those of the Japanese and found that the Japanese were concentrating more on the people aspect in producing products. In the words of Sony's Chairman, Mr Akio Morita, "American managers are too little concerned about their workers". (Peters and Waterman, 1983 : 38). Richard Marsh also noted the same when viewing the British industry in the 1950s and 1960s. He stated that British management is to blame for the relative decline in the country's economic performance. The reason being the lack of attention given to labour relations in their companies. (Wickens, 1988 : x)

Van Heerden (1985 : 2 - 4) identified this Western view as the "Newtonian Thinking Paradigm" which emphasise the

laws of cause and effect. To elaborate, this implies that only the measurable, tangible resources are considered in taking decisions and the intangible resources, such as Manpower, are being ignored.

The result of the American managers' comparison was the establishment of worker participation in the workplace. More specifically to allow workers to evaluate their work environment and production procedures. The workers were also invited to propose alternative procedures to the benefit of both the company and the workers. This led to the establishment of quality circles which is by definition a small group of employees who are trained to identify and solve production problems in their area of responsibility. (Szilagyi and Wallace, 1983 : 198).

Since quality circles had limitations such as members were only involved with increasing productivity or the quality of work life of their own work environment, the concept and process of Value Circles were established to eliminate these shortcomings. A Value Circle is defined arbitrarily as a multifaceted tool whereby all levels

of an organisation have the opportunity to participate on an equal basis in problem solving.

1.2 PROBLEM DELIMITATION

Van Heerden (1985 : 1 - 2) identified the failure to make a detailed study of the resources available to them, as one of the major weaknesses of Western managers. Western managers grew up in a very much mechanical, cause and effect frame of mind which embraces the tangible, physical and measurable resources. These include finance, raw materials, machines and equipment.

De Bono (1984 : 4 - 13) describes this type of thinking as a second stage vertical type of thought to include the following:

- Vertical thinking seeks to prove or disprove.
- Vertical thinking is analytical by nature in which the steps in the thought processes follow a definite logical rule.

- The basis for vertical thinking is that no mistakes are allowed in each consecutive step in a thought process.

- Vertical thinking is a closed system. This means that it only concentrates on that which is relevant to a given system.

Western management has been very successful when applying this kind of thought to the tangible resources available to them. Most managers are notably at ease with financial and/or production matters. However, when it comes to the second group of resources available to management, the intangible resources, most managers are at a loss. The major problem is that managers try to apply second stage thought processes to first stage problems. Initial successes are obtained when using this approach but it does, unfortunately, not last.

Van Heerden (1985 : 3 - 4) states that Western managers are aware of intangible resources available to them but fail to make a detailed study of these. Such a study

would overcome the weaknesses of Western managers in comparison with Japanese managers.

With this background in mind, the management of Buffelsfontein Gold Mining Company Limited (Buffels) became aware of its lack of an in-depth knowledge of its intangible human resources. At the end of 1986 a Value Circles Department was established to give attention to this problem.

The primary objective of this department was to establish a mechanism by which both managers and workers can solve production related problems on an equal footing. The secondary objective of the establishment of the Value Circles department is to further participative management on Buffels.

After four years of existence, it has become necessary to evaluate the Value Circles department in terms of its influence on the tangible and intangible resources of Buffels.

1.3 OBJECTIVES OF THIS STUDY

The first aspect which this study will address is to establish a theoretical foundation for the concept of Value Circles as it is found at Buffels. The practical aspects of the value circle will also be described.

The second aspect in this study will be to determine the viability of the Value Circles department in Buffels in terms of its influence on the tangible and intangible resources.

The author will thirdly give special attention as to whether the Value Circles department utilizes its own unique resources and skills and to establish whether the costs involved are of benefit to Buffels.

1.4 THE FIELD OF RESEARCH

The author will limit himself with only one organisation, namely Buffelsfontein Gold Mining Company Limited (Buffels).

Buffels is a gold mine in the Western Transvaal which consists of four shafts running from surface namely, Pioneer, Orangia, Eastern and Southern shafts. A fifth shaft, Strathmore shaft, runs from the Eastern shaft complex. Mining activities, i.e. where ore containing gold is mined, varies from a depth of 900 to 3500 metres. The deepest point is in excess of 4000 metres where only exploration presently takes place. Buffels experiences problems with high temperatures due to the great depths as well as unstable geological conditions such as pressure bursts. This being caused by the structure of the ground being mined. Buffels produces on average around 3 000 kg of gold per quarter from ore containing on average 5.8 grammes gold per ton.

From an organisational viewpoint, Buffels is divided into six departments namely Mining (production), Mining Services such as Geology, Rock Mechanics and Survey, Metallurgy which extracts gold, uranium and silver from the mined ore, Administration including financial services, Engineering and Manpower. The Value Circles department presently resorts under the Manpower Manager for reporting purposes.

Buffels has an estimated labour force of 8 500 Blacks, 40 Coloureds and 800 Whites. The research will be limited to only White employees due to language and literacy problems experienced by the Black labour force. The Coloureds, due to the relative small number are included and is regarded as part of the target population for the purposes of this study.

1.5 RESEARCH METHODOLOGY

The author will make use of the following research methods with regard to the abovementioned objectives and problem delimitation.

Firstly a literature study to place the Value Circles concept into the right theoretical perspective. Since there is, to the knowledge of the author, no formal definition of the concept Value Circle, a literature study will also assist in the establishment thereof.

Secondly, the author will determine the advantages and/or disadvantages of the Value Circles department's activities on the intangible abstract resources of

Buffels. The author will specifically make use of an attitude survey by means of questionnaires. Specific attitudes to be researched will be the attitudes towards small group activities, towards employees and employer, towards the Value Circle department as such and attitudes towards concepts identified as important in the literature study in respect of the intangible resources of Buffels.

1.6 SHORTCOMINGS OF THE STUDY

The first major shortcoming of the study is the limitation of the studied population i.e. only White and Coloured employees will be involved in the research. Although the target population on Buffels is only around 10% of the total population, Whites are predominantly involved with the Value Circle department.

A second shortcoming of this study is the lack of explicit literature on Value Circles. It is also the objective of the author to establish literature by means of this study on Value Circles. Literature in this regard will be used implicitly, i.e. although other

authors may not directly refer to Value Circles, relevant concepts can be derived from these authors to clarify the issues involved.

Finally, a complete financial analysis is also lacking in this study. Due to the complex nature of issues addressed by Value Circles and little or no record keeping regarding financial implications of every Value Circle held, exists. Also, the quantities involved with such an exercise, warrants a separate study.

1.7 TERMINOLOGY

Two terms require some attention for the purposes of this study, namely that of Value Circles and that of Participative Management.

Participative management is regarded for the purposes of this study as where employees are to a lesser or greater degree involved with the decision making process in a company, while the final decision making still resides with the management of the organisation.

A Value Circle is a multifaceted tool whereby all levels in an organisation have the opportunity to participate on an equal basis in decision making and problem solving.

1.8 ACTUALITY

The study is intended to contribute to the better utilisation of a company's intangible resources. Many companies use their intangible resources the same as they use their tangible resources. It is also intended to provide the management of Buffels with support in decisionmaking regarding this Department.

1.9 OUTLAY OF THIS STUDY

The study is divided into four parts covering eight chapters. The first part is to provide the nature and extent of and the causal factors contributing to this study. This part also describes the present scenario in which the study was undertaken.

The second part of the study states the theoretical foundations on which the study is based with the third part describing participative management on Buffels as well as the Value Circles Department.

The final part consists of research undertaken pertaining to the above and also provides results and recommendations on Value Circles as practised on Buffels.

CHAPTER TWO

CAUSAL FACTORS TO THIS STUDY

AND PRESENT SCENARIO

2.1 INTRODUCTION

Gold, as one of South Africa's major earners of foreign capital, has come under severe pressure due to lower gold prices in rand terms as well as to ever increasing production costs. Several gold mines closed down as a result due to their inability to mine and produce gold at profitable margins and to contain costs. Keys, Chief Executive Officer of Gencor, stated that at present everything is against gold. Typical reasons are the low inflation rate and the conservative management of industrialised countries as well as high real interest rates. He added, however, that gold will remain a sought after commodity in the long term which is also reflected in the increased spending on gold exploration by Gencor. (De Lange, 1989 : 13)

2.2 HISTORICAL OVERVIEW

Keys was appointed in September 1986 as Chairman of Gencor. After research done earlier that year on Gencor and all its companies by the American company, Arthur D Little, Keys decided to adopt a decentralised and participative management leadership style and to promote this throughout Gencor. (Marais, 1986 : 57)

It was along these lines that the Value Circles department was established to mark the beginning of participative management at Buffels. This management style continued to grow to such an extent that Field, Consulting Engineer for Buffels commented that every employee is encouraged to come forward with proposals to save costs and improve efficiency on Buffels. (Kruger, 1989 : 14)

This trend of participative management continued to present and the General Manager of Buffels during 1989 and 1990, Schroeder, underlining the following objectives for Buffels for the 1990's:

Improving and promoting

- Participative Management,
- Flexibility in types of work,
- Quality of work, and
- The relationships at the Black/White interface. (Schroeder, 1990)

2.3 VALUE CIRCLES

The Value Circles department on Buffels has shown a steady decrease in staff until the last member left the department during the beginning of 1990. The reasons for this state of affairs are the following:

- Firstly staff reduction programmes were implemented on Buffels due to the economic downturn in South Africa and the low gold price. This resulted in the members of the department leaving Buffels.

- Secondly, some staff members were promoted to other mines. This was especially the case with part time Value Circle catalysts.
- Thirdly, no trained Value Circle catalysts are presently available on Buffels. Also, the cost of recruiting and retaining the services of employees for this department is perceived to be not economically viable.
- Fourthly, the cost of training a Value Circle catalyst is relatively high in terms of lost production of suitable employees on Buffels.
- Finally, alternative structures to facilitate participative management on Buffels, such as Green Areas.

2.4 FUNCTIONS OF VALUE CIRCLES

At present the frequency of Value Circles held are less than one per month and the duration of these Value Circles are on average less than one day.

The function of group problem solving, was provided by the Value Circles department and has been taken over by the staff of the Training Department. Although the staff of the Training Department are not trained as Value Circle catalysts, they are regarded as having sufficient experience in group problem solving techniques such as the Nominal Group technique.

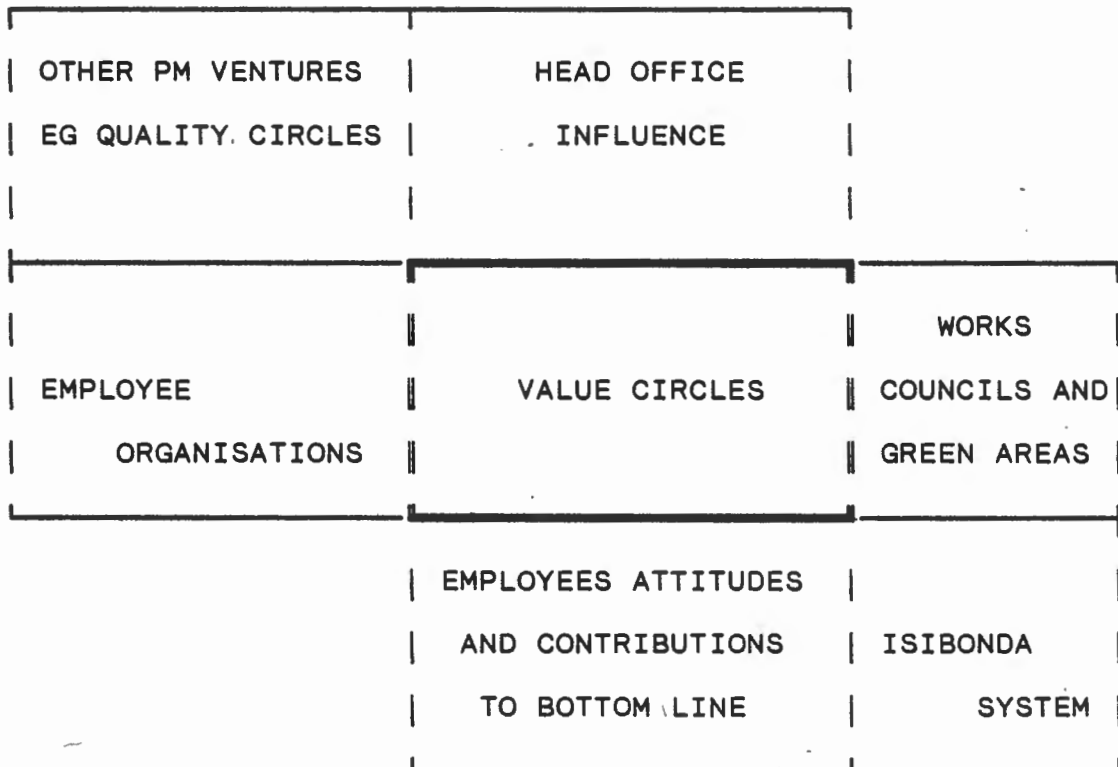
This state of affairs has had a detrimental effect on participative management on Buffels through Value Circles and the management of Buffels is presently in the process of the training of selected employees as Value Circle catalysts. It is foreseen that enough employees should be trained to execute this function on a decentralised part time basis. The intention being that the trained Value Circle catalysts will have, over and above their normal duties, also the responsibility of running Value Circles in their functional area of control.

2.5 CONCLUSION.

To summarise, various contributing factors are playing a role which would influence management's

decision to continue with Value Circles on Buffels. Management's commitment to a participative leadership style is shown in various ways of which Value Circles is only one venture. Other ventures include Green Areas (NISSAN derived), Works Council system, ISIBONDA system (Hostel room representation) and employee organisation recognition agreements. Schematically the role of and influences on Value Circles can be described as follows:

EXTERNAL PARTICIPATIVE MANAGEMENT INFLUENCES:



BUFFELSFONTEIN GOLD MINE ACTIVITIES:

FIGURE 2.1 VALUE CIRCLES IN CONTEXT

Note that the Works Councils and Green Areas are mostly for work related issues whereas the Isibonda system is intended to address hostel related issues.

Due to the versatility of the use of Value Circles, its role can be cardinal in the participative management process, as the above diagram illustrates. In addition, the employees of Buffels has an important role in the production process which is regarded as a labour intensive process. Their positive attitudes and contributions to the company are imperative for the survival and continued prosperity of Buffels.

Finally, Buffels's management has traditionally followed a Tayloristic approach which managed people the same way as any other production factor such as machinery and raw materials. The trend to manage through employees is clearly underlined in the Value Circle process which adds additional importance to this evaluation of Value Circles on Buffels.

CHAPTER THREE

THEORETICAL FOUNDATIONS OF THIS STUDY

3.1 INTRODUCTION

Although little theoretical research has been done on Value Circles per se, enough literature is available conducive to the underlying principles of the concept of Value Circles.

It is not the intention of the writer to provide a comprehensive literature study on Value Circles or participative management. This chapter is intended to provide the reader with sufficient theoretical background information to place the concept of Value Circles as practised at Buffels in perspective. In addition, to provide a foundation on which the functioning of Value Circles on Buffels could be evaluated.

The writer will firstly identify some definitions of participative management relevant to the concept of Value Circles. This will be followed by a few other authors' comments on participative management and some

of the group aspects underlying Value Circles. This chapter will finally deal with some underlying psychological aspects of Value Circles.

3.2 DEFINITION OF PARTICIPATIVE MANAGEMENT

Participative management can elementarily be defined as:

"A basic leadership style in which management has complete confidence and trust in the subordinates and decisionmaking is highly decentralised." (Hodgetts, 1979 : 485)

This definition provides the first element of participative management with the concept of "highly decentralised decisionmaking". Management's responsibility in participative management in that management must have a "complete confidence and trust in the subordinates decisionmaking" provides the second element of participative management. The role of the subordinate, however, is not outlined in this definition.

Charles Handy (1990 : 93) describes decentralisation as a participative tool in organisations as follows:

"... the centre delegates certain tasks or duties to the 'outlying bits' while the centre remains in control."

- This definition is more in line with some contemporary theories of leadership. As an example, Jopie van Rooyen (1991 : 10) suggests that the different levels of management are identified in terms of their key role responsibilities, tasks or duties in managing organisations. These levels also underlines the concept of delegating tasks to outlying bits. These levels range from a GLOBAL STRATEGIC level where managers are determining the vision and direction of an organisation to a CONCRETE-DIRECT level where managers ensure direct concrete job outputs.

Van Rooyen (1991 : 10) continues by describing the following three challenges amongst others for the Human Resources function in the immediate future as follows:

- "- Democratisation of the workplace and greater distribution of power;
- New definitions of equity and changes in employment practices; and
- Worker differences in interpreting concepts like work productivity and workplace ethics."

These challenges outlines the following aspects important to the concept of Value Circles. Firstly, the democratisation of the workplace. This implies that workers would like more say in matters affecting them in the workplace. Secondly, new definitions of equity is required in employment practices. Along these lines, it can be added that members of an organisation requires a forum where they can speak on the same level with more senior members of the same organisation and vice versa.

Ball and Ashbury (1989 : 86) defines participative management as follows:

"Participation is about getting people to play a meaningful role in decisionmaking, with the objective of eliciting their energy and support for implementing that decision."

They add that "... without communication, there can be no participation". Ball and Asbury also explicitly states that in some companies employees are allowed a great deal of autonomy in decisionmaking but are not participative at all. This avenue leads to a scenario where the company becomes filled with power plays instead of addressing common objectives. This also contradicts Van Rooyen's position as outlined above with a greater distribution of power.

Van der Merwe (1991 : 13) reasons along similar lines when he argues that a company's intra-cultural alignment of its people in an organisation is a process whereby the organisation's members decide whether they follow the route of commitment or compliance to the culture. He continues by stating that commitment is established by members learning to make a choice of commitment or

compliance after a process of involvement and participation. Participative management is thus also a learning process.

To summarise, participative management is by no means an easy concept to define. The above definitions does, however, identify a few underlying elements to participative management relevant to the Value Circles concept.

3.3. VIEWS ON PARTICIPATIVE MANAGEMENT

3.3.1 Kanter's position

To place Kanter's position in perspective, it is firstly necessary to provide the reader with her view on participative management. Kanter (1983 : 244) stated that participative management in organisations are initiated by the following statement: "Participation is something the top orders the middle to do for the bottom". This definition contributes to this study in that it provides an insight as to the realities of participative management in practice in some companies.

Kanter (1983 : 34 - 35) states that participation in United States companies tend to use "quality of work life" and motivational benefits as reasons for participative management rather than the advantages of individual contributions and innovations for the benefit of the company. With this statement, Kanter implies that managements of companies try to apply their human resources as production factors instead of working through people. People are still seen in many companies as machines where certain inputs are required to give certain outputs. This is in line with the mechanistic view of the Scientific Management School focusing on "(a) how to increase productivity (input/output) by making work easier to perform; and (b) how to motivate the workers to take advantage of these new methods and techniques" (Hodgetts, 1979 : 8)

Kanter (1983 : pp 248 - 252) also provides the reader with the following elements to be taken into account when implementing participative management in an organisation.

Kanter firstly proposes that participative management is a leadership style coming from management. This implies that when implementing participative management, it will necessarily be a top-down approach. In addition the need for parameters must be incorporated into the implementation approach and strategies. This implies that certain boundaries are required to establish structure and eliminate unnecessary waste of time in establishing the structure of small participative management activity groups. Kanter also states that leadership, in the sense of people having the power to mobilize others and set constraints, is another important aspect which adds to the benefits of participative management.

Kanter's second point is that although delegation is an integral part of participative management, this does not mean that management can abdicate their responsibilities when implementing a participative management leadership style. Rather that management does not only exert their power to mobilize and set constraints, as described above, but also to remain involved and support employees to reach their objectives.

Kanter's third point regarding participative management is whether the members of an organisation will be allowed to utilise the organisation's time for participative management activities. In this regard a distinction must be made whether the participative management activities are being managed and initialised by the management of the organisation such as Value Circles as practised at Buffels, or if the activities are more external to the organisation such as union activities. Kanter states that in the event of participative management activities managed external to the organisation, the management of these organisations are less willing to allow members to utilise the organisations time for these activities.

Kanter's fourth point involves the accountability and administrative reporting aspects of participative management activities. Kanter regards this as important not only to ensure control measures are available to measure success, but also to create commitment to a participative management venture or activity. It should therefore be insured that proper reporting systems exist for the success of these ventures. This position seems

to contradict the comments of Peters and Waterman (1982 : 241) who, in referring to quality circles, of becoming bureaucratized and eventually rejected. The problem, according to Peters and Waterman, of these "gimmicks" is that it is merely used as a tool and that management still does not use these activities of real people involvement.

Kanter finally notes that participation should involve issues important to the employees involved in a participative management activity. This implies that employees tend to be more committed in reaching an objective or goal in matters that are important to them or play a great role in their lives.

3.3.2 Robbins' and other positions

Robbins (1986 : 251 - 257) also firstly describes Hersey and Blanchard's situational leadership model in which both the leader's and the subordinate's roles are defined and classified according to the situation at hand. According to this theory, a subordinate can be

at any one or more of four maturity levels in an organisation according to the subordinate's task behaviour in combination with his relationship behaviour. Hersey and Blanchard propose that the manager has the following four basic strategies or styles in dealing with the subordinate's maturity level at any given point in time as the subordinate progresses through these levels, namely:

- High task / low relationship Telling
- High task / high relationship Selling
- High relationship / low task Participating
- Low relationship / low task Delegating

This theory already gives an indication of the importance of participation with the subordinate although a distinction is drawn between participation and delegation. In the case of participation, pertinent involvement is shown by the manager in contrast with a lessening involvement with regards to delegation.

Robbins (1984 : 339) notes that according to the contingency theories, leadership is seen on a continuum ranging from autocratic to democratic. According to this approach, the relevant situation determines how a manager should act according to the position on the continuum. These positions can therefore not be seen as absolute by nature, but rather dynamic and situationally determined.

Robbins (1986 : 257) describes the "leader-participation model" developed by Vroom and Yetton when addressing the issue of participative management. According to this model, a leader's behaviour must reflect the task structure at hand. Robbins continues by stating three generic situations where managers increasingly use participation, namely:

- "When the quality of the decision is important

- when it is important that subordinates accept the decision and it is unlikely that they will do so unless they are allowed to take part in it

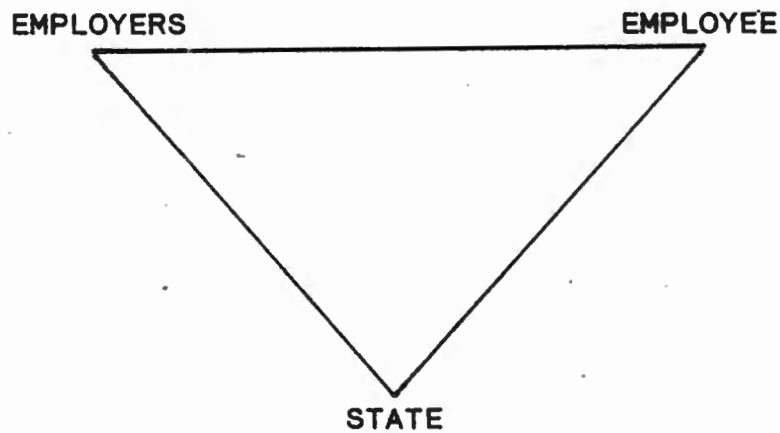
- when subordinates can be trusted to pay attention to the goals of the group rather than simply to their own preferences."

Robbins (1986 : 259 - 260) summarises by stating that managers with high people orientation including participative activities, tend to have subordinates with more job satisfaction. Research, according to Robbins does, however, not make any predictions on if a subordinate would be more productive. Later research in this regard, referring to the comments by Peters and Waterman above, does show a correlation between qualified participation activities and productivity and efficiency of subordinates.

3.3.3 Bendix's position

To be able to place Kanter's position above on externally or internally managed participative activities, the views from Bendix (1989 : 21 - 22) must be taken into account. Bendix focuses on a labour relations approach when distinguishing between an industrial democracy and collective bargaining.

Bendix proposes that a tripartite relationship exists between the management of an organisation, its employees and the state as governing body. Schematically, this system is represented as follows:



Source: Bendix, 1989 : 22

The lines between the parties represent relationship structures and can be reporting to, representing or management of each other. These relationship structures are influenced by both formal rules such as legal contracts eg. an employment contract or union recognition agreements and laws such as the Labour Relations Act, and informal rules such as traditions and ethical codes. Collective bargaining is based on certain

similarities between these three parties, each with its own goals, objectives, interests and power bases, to continue these relationships. The power bases can be formal as in the case of laws, or informal where the employee can withhold his services as in the case of a strike. An industrial democracy is, in contrast with collective bargaining, an attempt to establish structures which will place the establishment of the production process and related activities in the hands of the employees. This to even include the profit sharing process of the organisation, if applicable.

Participative management can be described in this regard as lying somewhere between collective bargaining and an industrial democracy. In the case of collective bargaining, the decisionmaking power still resides with management where the employees are involved to a lesser or greater degree in the decisionmaking process than in the case of participative management. When an industrial democracy is considered in this regard, the whole decisionmaking process is in the hands of the employees. (Bendix, 1989 : 112-116)

3.3.4 Conclusion

Referring to the above, the following streams of thought are identified. These positions range from Kanter's

position that participative management is management driven to the position described by Bendix as an industrial democracy where employees have all the decisionmaking power. Some more contemporary "management theories" also include the concept of participation in the approach of the intangible resources in an organisation, such as Hersey and Blanchard and especially Vroom and Yetton.

3.4 SOCIOLOGICAL CONSIDERATIONS

Due to the group nature of the Value Circles concept as a participative management activity, a short theoretical study of groups is inevitable.

According to Steyn and Uys (1988 : 18 - 19), it is extremely difficult to define the concept of a group. The reasons being the following:

- Firstly, traditionally no distinction is made between a collectivity of people and a closer group of people such as a sports team.
- Secondly, there is no specific demarcating sign between the two groups mentioned above.

According to Joubert and Steyn (1981 : 17 - 21) a group can only then be classified as a group when it satisfies the following characteristics:

- A distinguishable pattern of interaction must exist between more than one person. Interaction is defined where one person has some influence in the covert or overt behaviour of another person.
- Groups differ amongst each other in that the interaction is always in a certain context.
- The members of the group must have an awareness of the group.
- Certain objectives must exist which is based on the motives and / or the satisfaction of needs of the members of the group.
- Certain rules and norms must exist governing the interaction taking place in the group.

Mabry and Barnes (1980 : 4) provides a more applicable definition and defines a group as "a network of people

who have intentionally invested part of their personal decision making power in the authority of a larger social unit in pursuit of mutually desired but separately unobtainable goals."

Payne, Cooper, et al (1981 : 121 - 122) identified the existence of Ad Hoc Groups. These groups are described firstly, as not being part of a formal organisation structure. These groups have a limited life and are regarded as a secondary task for the members of a formal organisation structure. The purpose of these groups is to handle changes (problems) not catered for in a present organisation structure. These changes can be internal as well as external to the organisation and the changes can also be used for anticipated changes, i.e. expected future changes an organisation may encounter. Another purpose of ad hoc groups is to provide horizontal integration in an essentially vertical organisation structure.

3.5 PSYCHOLOGICAL ASPECTS OF VALUE CIRCLES.

Psychological concepts underlying to the Value Circle concept is the problems of existence faced by everyone. Together with these problems are coping mechanisms to encounter these problems.(Graves 1974 pp 72 - 87).

Graves developed ten concepts underlying his theory. These concepts ultimately forms the psychological map. The concepts are the following.

- "- People value different things because they think in different ways. They think in different ways because their brains are different.

- Different organisations occupy different positions on The Psychological Map and need to develop managerial strategies that match their employees and the jobs they perform.

- Managers should develop a consistent and systematic approach to all the issues within the organisational loop - recruitment, selection, placement, training, internal management, and external marketing - so they will "hang together".

- Organisations should be constructed from the "bottom-up" and not the "top-down" in order to manage people as they actually are.

- Successful organisations are in danger of failing if they continue to manage people in ways that made them successful in the first place.
- Many people need to be managed differently today because they have moved on the Psychological Map even further and faster than many of their managers.
- Marketing strategies often fail because the designers of strategies use their "marketing mirrors" and assume the audiences they are attempting to reach have the same value systems as do they.
- The question is not how to motivate people but, instead, how do you relate what you are doing to their natural motivational flow.
- The present problem with productivity is a sign of growth in our culture and not decay and it will force us to find new and innovative ways to manage people based on who we have now become.

- Since people learn in different ways from different kinds of teachers/trainers, the task of education or training is to match learners, teachers and educational strategies.

The Psychological Map pre-supposes that mankind is en route through eight psychological stages. Each stage has its own existential problems facing the individual or group (denoted as A to H) as well as coping methods to combat these existential problems (denoted as N to U). It must be noted that a person could be anywhere in these stages and can act as if in any of the previous stages although being at a more advanced stage.

The stages can be described as follows:

STAGE 1: A-N Automatic Existence

Man at this stage seeks only to satisfy his immediate physiological needs such as hunger, thirst, etc. His actions are directed by the intensity of these physiological needs. This stage can be summarised as the survival existence of man.

This stage is similar to Maslow's physiological needs.

STAGE 2: B-O Tribalistic Existence

Man at this stage strives for stability and security in an environment haunted with spirits and threatening powers. He does this by sacrificing his needs to the wishes of elders or spirits for the sake of the tribe. People at this level are very ritualistic and strives for safety and security.

STAGE 3: C-P Egocentric Existence

At this stage man wields power by taking risks in an aggressive world. Man sees life as a jungle where only the strongest survive even if it is at the expense of others. Summarised, man seeks power and action at this stage.

STAGE 4: D-Q Saintly Existence

Man at this stage seeks to find reasons for human existence and will sacrifice now to receive some reward

later. These people assumes a right/wrong position on everything they encounter and place great value on the truth. Summarised, man seeks stability and salvation at this stage.

STAGE 5: E-R Materialistic Existence

Man at this stage seeks to conquer the world by learning its secrets in terms of what the "self" desires. In contrast with the C-P stage, man does not want to bring down the wrath of others in pursue of his needs. Summarised, man seeks success and material gain at this stage.

STAGE 6: F-S Personalistic Existence

Man at this stage seeks to experience a feeling of being human and to live in harmony with others. This is carried to such an extent that man is willing to forsake his own self for all to obtain now. Unlike the B-O and D-Q stages which is future orientated, man in the F-S stage is present orientated. Summarised, man seeks human development and good relations at this stage.

STAGE 7: G-T Cognitive Existence

Man at this stage seeks to reunite himself with nature in a disordered and ravaged world. He satisfies his own needs in such a way that it is not at the expense of others, but in a way that all may profit. Man at this stage believes in the quality of life on the planet.

STAGE 8: H-U Experientialistic Existence

Man at this stage seeks to obtain knowledge to live on this planet without upsetting the balance of nature as was done in the previous stages. Man at this stage seeks to be one with the cosmos and accepts both constraints and order as well as the incomprehensible aspects of this world. (Graves 1974 pp 72-84)

3.6 ORGANIZATIONAL STRUCTURES

Finally, the Psychological Map can also be applied to organizational development with each stage of the psychological map having a set organization structure. A schematic diagram outlines the organizational structures

relevant to the Psychological Map and is found on the next page.

3.7 CONCLUSION

Value Circles, as an element of participative management, can, based on the definitions stated by various authors above, be defined as

"... a multifaceted tool whereby all levels of an organisation have the opportunity to participate on an equal basis in problem solving." (Value Circle, 1986)

Value Circles provides employees with an opportunity to participate in decision making and joint problem solving with a tool that can be used in any problem solving or decision making situation.

It is also by applying the identification of the members' in a Value Circle positions on the Psychological Map that makes the equal basis participating possible, i e taking each individual member's thought paradigm into account in evaluating the member's contribution.

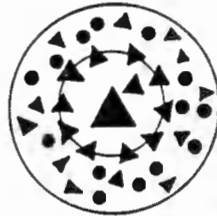
Organizational Legend

Each of the major stations on the Psychological Map has its own unique organizational pattern. These have evolved to adapt that system's resources to the existence problem(s) it has been triggered to solve.



1 A-N – “Band”

- herd-like behavior
- strong members surround and protect the weaker ones
- group bands together for mating, food-gathering, migration, etc.
- movements determined by weather, availability of food and water



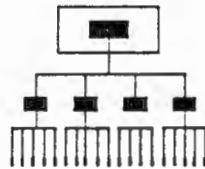
2 B-O: “Tribe”

- circular tribal structure
- led by elder(s), shaman, or chief who makes decisions
- roles determined by kinship, sex, age, strength
- ways of the tribe are sacred and rigidly preserved
- demands obedience to leader(s)



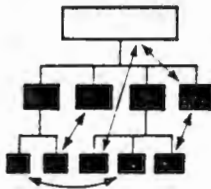
3 C-P: “Empire”

- power-oriented — strongest survive best
- most powerful person makes the decisions
- Big Boss directs Work Bosses who drive the masses
- communication downward only
- strength determines relationships



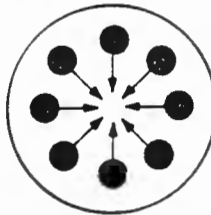
4 D-Q: “Passive Hierarchy”

- rigid rules for structure and rank
- person with appropriate position power makes decisions
- divine authority speaks through secular authority
- communication downward and horizontally across classes
- people stay in their “rightful” places



5 E-R: “Active Hierarchy”

- bureaucratic and status-oriented
- person with the delegated authority makes decisions
- distribution of specific amount of responsibility
- communication down, up, and across
- power related to prestige and position within the structure — allows for upward mobility



6 F-S: “Social Network”

- organization of equals for mutual benefit
- little concern with status or privilege
- the “people” make decisions as a group
- frequent communication in all directions
- emphasis on consensus, sensitivity to feelings, and human needs



7 G-T: “Functional Flow”

- structure according to task at hand
- project-centered with changing “functional” leadership
- competent person makes the decision
- communication only as needed
- may adopt B-O through F-S if appropriate to situation



8 H-U: “Global Flux” (Too early to detect.)

CHAPTER FOUR

PARTICIPATIVE MANAGEMENT AT BUFFELS

4.1 INTRODUCTION

The purpose of this chapter is to provide the reader with some background on the role of participative management in the scenario in which Buffels operates. This will be done by identifying issues in the mission statements relevant to Buffels and participative management.

In addition, the theoretical outline provided in the previous chapter will be applied to participative management at Buffels with specific emphasis on the Value Circles concept as practised at Buffels.

4.2 BACKGROUND AND MISSION STATEMENTS

A short history of the facts relevant to participative management is found in Chapter 2 of this study. An abbreviated overview of the management structure is required to place Buffels in perspective.

Buffels is managed by a holding company, Genmin who in turn is held by Gencor, Genmin being the mining arm of Gencor.

Gencor's mission statement as well as the mission statement of Buffels, forms the underlying foundation of Value Circles at Buffels. Both these mission statements are found in Annexure A.

The leadership style of participative management is explicitly stated in both mission statements i e in Gencor's mission statement under the heading "Gencor's Style", it is stated:

"We encourage the creation and development of independent, entrepreneurial and participative management"

In Buffels' mission statement under the heading "Our Goals", it is stated:

"To actively pursue participative management."

This is in line with Kanter's first element identified in that participative management must be a top-down approach. (see Chapter 3) With regards to Buffels, several participative management ventures were initiated and still exist today. These ventures range from internally generated ventures such as Value Circles, Green Areas, Isibonda system (Hostel room representatives) and Works Councils to externally generated ventures such as recognition agreements with unions and other employee organisations. In some cases it is even a condition of employment to belong to one of the external employee organisations.

4.3 VALUE CIRCLES AS PARTICIPATIVE MANAGEMENT

4.3.1 Definitions

Several definitions relevant to participative management are discussed in Chapter 3 of this study which will be discussed in this Chapter. When these definitions and notes are applied to Value Circles, the following can be said.

Hodgetts' definition of Value Circles, as outlined in Chapter three, only meets with some of the aspects of Hodgetts' definition above. Hodgetts' definition specifies that decisionmaking as such be decentralised. The main element of Value Circles is that it is a problem solving technique which only makes recommendations to management a solution to the problem. This also applies to the element of "complete confidence and trust in subordinates". If Bendix's statements, discussed later in Chapter 3, is taken into account, this definition would rather be one of industrial democracy than one of a participative management leadership style.

Handy's definition on decentralisation provides a more accurate description, especially with regards to Value Circles in that although tasks are given to "outlying bits" (a Value Circle exercise) the "centre (management) remains in overall control". Lastmentioned is also applicable in that management has the final decision on the proposals resulting from a Value Circle exercise.

Ball and Asbury's definition provides additional elements relevant to Value Circles in that people play a role in decisionmaking by providing possible solutions. As a fringe benefit, Value Circles also promotes commitment to a proposed decision when implemented in establishing specific action plans and responsible employees in the solution proposed.

4.4 KANTER'S POSITION

Kanter noted that participation is "something the top orders the middle to do for the bottom". Kanter stated the following:

Firstly, participative management is a leadership style coming from management. This implies that when implementing participative management, it will necessarily be a top-down approach. At Buffels, Value Circles was a top-down approach when top management held some of the first Value Circle exercises to determine the future of Buffels. In addition, the then General Manager, Robinson, also held meetings with all employees promoting and explaining the concept.

The second point Kanter states is that delegation as part of participative management, does not mean that management can now abdicate their responsibilities. This is true of Value Circles in that it provides management with a recommendation as to a solution of a given problem. It is then up to management to decide on the implementation of the recommendation. The responsibility of this decision remains with the management of the organisation.

Thirdly, management must decide if employees must utilise their own time or company time to pursue participative management activities. Most companies are not lenient in providing company time for participative management involving outside organisations such as unions, as discussed in Chapter 3 of this study. In the case of Value Circles on Buffels, management has shown its commitment by allowing Value Circles all the time it needs during normal working hours at managements' discretion. In this regard, external participative activities, such as training provided by the unions to shop stewards, are also being allowed during normal working hours.

Fourthly, Kanter states that participation should involve issues important to the employees involved in a participative exercise. In this regard, the topics to be discussed in a Value Circle is identified by the management of Buffels. It is then the responsibility of the Value Circles catalyst to identify all the people relevant to the problem and to establish a team representative of all involved.

Kanter finally states that specific accountability and administrative procedures must exist in participative management activities, such as Value Circles. In this regard, the process followed in a Value Circle internally generates administrative recordkeeping documents. With regards to reporting structures, the Value Circles concept is presently conducted by the Training Department of Buffels as part of their responsibilities.

4.5 ROBBINS' POSITION

Robbins notes according to Vroom and Yetton, that leaders use participatory methods when the quality of

the decision is important. Due to the high costs of Value Circles, i.e. people taken of production and overheads such as salaries and office space, Value Circles are only held when there is a possibility of a major cost saving or profit involved.

Robbins secondly notes that participative management should be applied when it is important that employees accept a decision which they otherwise would not. A typical example was a Value Circle held on the racial integration of the canteen facilities of Buffels. The results were overwhelmingly in favour of management who only expected that the facility would be racially integrated. The result of the Value Circle was that the facility was closed down and replaced with a take-away facility which saved costs on the one hand and on the other hand satisfied more of the users needs.

Robbins finally noted that participative management can only be where subordinates can be trusted to not exchange the common goal in favour of personal goals. The Value Circle system at Buffels is operated in such a way that it is the duty of the catalyst to facilitate

the activities at the Value Circle in such a way that the discussions remain contributory to the objective of the Value Circle topic.

4.6 CONCLUSION

Participative management is firmly embedded in the mission statement of Buffels outlining management's mission for the company. The previous chapter also outlined the participative management ventures at Buffels including the external influences which could have an affect on these ventures, eg Head Office and employee organisations.

The role and functioning of Value Circles as part of participative management at Buffels will be discussed in the next chapter.

CHAPTER FIVE

VALUE CIRCLES AS PRACTISED AT BUFFELS

5.1 INTRODUCTION.

As outlined in the previous chapters of this study, Value Circles is a process which uses the knowledge and experience of employees to meet objectives and to identify and solve work related problems to the benefit of the company.

As an underlying objective and on a more strategic level, Value Circles were used to introduce a participative style of management that will contribute to the effectiveness of the company through the improved utilisation of Buffels' labour force.

5.2 PROCEDURAL ASPECTS OF A VALUE CIRCLE.

5.2.1 PROBLEM IDENTIFICATION.

In contrast with Quality Circles where the members of a Quality Circle determines the problem to be solved,

the Value Circles Department is informed of a perceived problem by the supervisory or management level employees of Buffels. Permission is then obtained from the Head or Heads of the Department, pending on if more than one department is involved with the problem, to hold a Value Circle on the problem.

5.2.2 VALUE CIRCLE TEAM ESTABLISHMENT.

After obtaining approval from the Head of Department, employees on Buffels are selected to attend a Value Circle. The following criteria are considered when selecting employees for a Value Circle:

- Degree of involvement with the perceived problem or objective.
- Experience and expertise of the environment in which the problem occurs or objective is set.
- Degree of credibility amongst fellow employees and management.

The selected team members are invited to attend a Value Circle and are also informed on the purpose of the Value Circle.

5.2.3 THE PROCESS OF A VALUE CIRCLE.

At the first meeting, the team are briefed on Value Circle purpose as well as on the administrative details such as venues and daily plans.

After the administrative details have been attended to, the objective of the Value Circle is established based on the objective or perceived problem.

The next step is to determine the functions or activities involved with the objective or problem in terms of the established objective.

The functions or activities are then ranked in terms of their perceived level of importance. That is, each member ranks the functions or activities from the most important to the least important from which a group ranking is derived by reaching consensus

amongst the members as to each function. The Pareto Principle is then applied, i.e. the top 20% in terms of importance are marked for further discussion. Note that the Pareto Principle assumes that 20% of the functions or activities contributes 80% to the problem or reaching the objective.

Solutions are then developed to each function or activity through a brainstorming session whereby team members generate possible solutions without evaluating these solutions.

These solutions are then evaluated and the best possible solution is accepted. The solution is only accepted after consensus is reached amongst the group members as to being the best solution(s).

After agreeing on solutions to the activities or functions, an action plan is developed for each solution. The action plan can typically consist of the following elements:

- The identification of a project leader, if applicable.
- The definition of actions and responsible persons.
- The establishment of schedules.
- The determination of costs involved.
- A description of possible savings/benefits

5.2.4 SESSION MANAGEMENT.

Sessions are conducted by qualified catalysts trained extensively in the following areas:-

- Group Dynamics and Small group techniques
- Value systems based on the South African Psychological Map
- Communication and Social skills

- Presentation skills

- Mediating and Conflict Management skills

5.2.5 VALUE CIRCLE CONCLUSION.

The project leader, supported by full Value Circle team, presents the recommendations/action plan to top management and Heads of Departments affected or involved with the problem/objective.

5.2.6 ADMINISTRATION.

All the discussions and decisions that take place during a Value Circle are recorded on flip charts during the sessions. The full pages of flip charts are stuck against the side and front walls to be able to refer back to and to avoid duplication.

This information is then processed into a typed report after the conclusion of the Value Circle.

5.2.7 FEEDBACK TO PARTICIPANTS.

Copies of the typed reports are distributed to all the employees who attended the Value Circle and also to top management and Heads of Departments concerned.

5.2.8 IMPLEMENTATION OF RECOMMENDATIONS.

Team members responsible for specific tasks indicated in the action plan, proceed with the implementation under the guidance of the project leader.

Regular progress reports as defined in the action plan of the Value Circle recommendations are submitted to top management by the project leader.

5.2.9 FEEDBACK TO THE TOTAL WORKFORCE.

The following formal company communication channels exists through which feedback on the results of a Value Circle can be given to the total workforce:

- Isibondas (Hostel Room Representatives),
- Works Councils,
- News Letters, and
- Public address systems.

5.3. GENERAL.

5.3.1 TYPICAL OBJECTIVES AND PROBLEMS DISCUSSED.

The following topics are typically discussed as a problem or an objective at a Value Circle:

- Underground support systems such as hydraulic props, packs and also blasting barricades.
- Bonus schemes.
- Underground loco accidents.
- Flow of people at shafts to eliminate travelling times to the actual workplace.

- Shaft examination.
- Authority of Team Leaders.
- Labour peace maintenance.
- Organisational development to improve organisational effectiveness structure and related problems

5.3.2 DURATION OF VALUE CIRCLES.

Value Circle sessions could last anything between one day to five days. The days need not be consecutive. Sessions could be held intermittently, eg three days over two weeks.

5.3.4 PEOPLE AND DISCIPLINES INVOLVED.

The number of people attending a Value Circle session varies ideally between twelve and sixteen people from a cross section of job categories involved with the objective or problem. Where the disciplines are

concerned, this normally varies between six and eight disciplines or sub disciplines per session (e.g. Stopping, Developing, Engineering, Planning, Ventilation, etc.)

5.4 CONCLUSION

As already noted in the chapters above, Value Circles are integrally part of the participative management process on Buffels. Formal guidelines in the practical execution also exists to enable the catalysts to execute their duties and to provide operational success measurement and control mechanisms necessary for any venture. This part of the study also provides an insight as to the actual physical process of a Value Circle to place the theoretical parts of this study in perspective.

CHAPTER SIX

ATTITUDE TOWARDS VALUE CIRCLES AT BUFFELS

6.1 INTRODUCTION

Guilford and Fruchter (1978 : 3 - 4) provides the following advantages of statistical research which also necessitates this part of this study:

- "They permit the most exact kind of description."
- "They force us to be definite and exact in our procedures and in our thinking."
- "They enable us to summarize our results in a meaningful and convenient form."
- "They enable us to draw general conclusions"
- "They enable us to predict."
- "They enable us to analyse some of the causal factors underlying complex and otherwise bewildering events."

A statistical study is therefore imperative for this study because of the above reasons

6.2 QUESTIONNAIRE

A questionnaire was designed to establish the attitude of employees on Buffels perception towards Value Circles. The questionnaire is designed to address the following issues: (See annexure B in this regard)

- Department where the respondent works.
- Biographical details.
- Specific questions regarding Value Circles.
(Questions 1, 4, 5, 6, 8, 10, 12, 15 and 16)
- Questions addressing underlying concepts of participative management which is also underlying to the Value Circles concept and not specifically relating to Value Circles. (Questions 2, 3, 7, 9, 11, 13 and 14)
- Finally a question on the Psychological Map (discussed in Chapter 3) to give an indication of the respondent's level which would have an influence on the respondents responses.

6.3 PRACTICAL CONSIDERATIONS

The questionnaire was designed to address variables identified on the basis of the theoretical research as outlined in Chapter 3.

The questionnaire was also designed in such a way that it protects the employee from being identified. Anastasi (1976 : 688) refers to the communication of psychometric test scores to employers and quotes from the American Ethical Standards of Psychologists (Principle 14b): "Test results or other assessment data used for evaluation or classification are communicated to employers the test results rather than the score is communicated". In addition Anastasi quotes Principle 16 regarding research in that a researcher "assumes obligations for the welfare of his research subjects". The proposed respondents are given two methods to protect their anonymity namely that they are allowed to post the completed questionnaire to the writer without the involvement of his supervisor. Secondly, no names are required on the questionnaire to link the questionnaire with the respondent.

6.4 RESULTS OF THE QUESTIONNAIRE

6.4.1 Biographical details

As in any company, the number of employees per department differs according to the requirements and to some extent, the internal politics of the department and the company. Buffels is no exception where this is concerned and the distribution of the total population under consideration is as outlined in Figure 6.1(a) below.

A sample was drawn from the total population amounting to 135 employees from all the disciplines and varying age groups, job levels and lengths of service. The distributions of the biographical attributes of the sample drawn from the total population is graphically displayed in Figures 6.1 to 6.4 below.

An analysis of the statistical results of the questionnaire is as follows. The average age of the respondents is between 30 and 39 years.

DEPARTMENTAL DISTRIBUTION OF TOTAL POPULATION

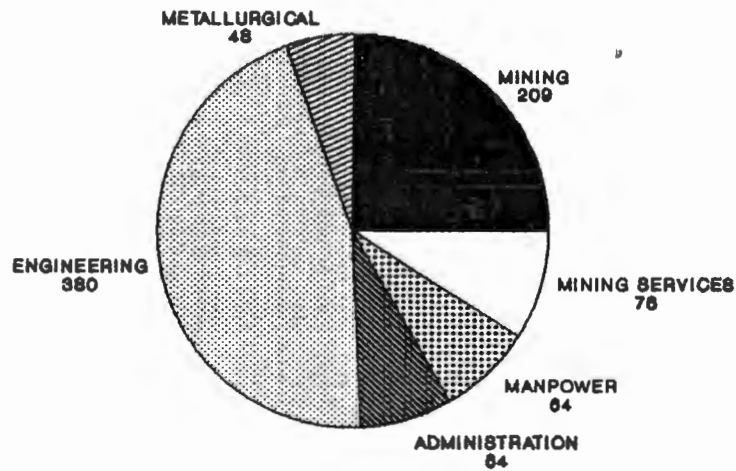


FIGURE 6.1(a)

DEPARTMENTAL DISTRIBUTION OF TOTAL SAMPLE

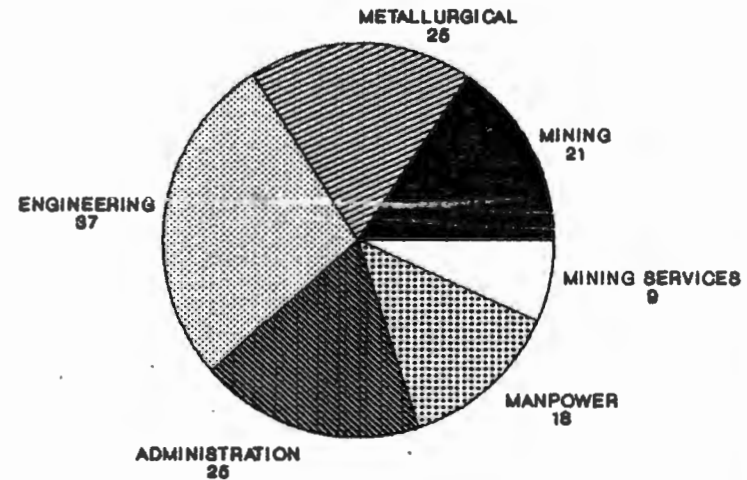


FIGURE 6.1

The averages per department are as outlined in Table 6.2(a) below.

DEPARTMENT	AVERAGE AGE (IN YEARS)
Mining	30 - 39 (3.42)
Metallurgical	30 - 39 (3.92)
Engineering	30 - 39 (3.76)
Administration	30 - 39 (3.68)
Manpower	30 - 39 (3.61)
Mining Services	30 - 39 (3.56)

Table 6.2(a) Average ages

Value in brackets denotes averages based on class allocations of responses.

The average job level of the respondents are categorised in the C-Band of the Paterson Job Grading system in use on Buffels. The averages per department are outlined in Table 6.3(a) below.

DEPARTMENT	AVERAGE JOB LEVELS (PATERSON GRADED)
Mining	C - UPPER
Metallurgical	C - LOWER
Engineering	C - LOWER
Administration	B - LEVEL
Manpower	C - LOWER
Mining Services	C - LOWER

Table 6.3(a) Average job levels

Job level averages are based on class allocations of responses.

The average lengths of service of the respondents are between 10 to 14 years' service on Buffels.

A distribution of the average lengths of service of departments according to the respondents are found in table 6.4(a) below.

DEPARTMENT	AVERAGE LENGTH OF SERVICE (IN YEARS)
Mining	10 - 14 (3.95)
Metallurgical	10 - 14 (3.68)
Engineering	10 - 14 (3.54)
Administration	5 - 9 (2.56)
Manpower	5 - 9 (2.89)
Mining Services	10 - 14 (3.00)

Table 6.4(a) Lengths of service

Length of service averages are based on class allocations of responses.

6.4.2 Specific Value Circle Questions

These questions consider the respondents attitude regarding specific aspects important to the existence and functioning of Value Circles on Buffels. These questions are specifically designed to be closed and the responses are in a "yes - no" format to "force" the respondent to make an attitude judgement.

LENGTHS OF SERVICE (PER DEPARTMENT)

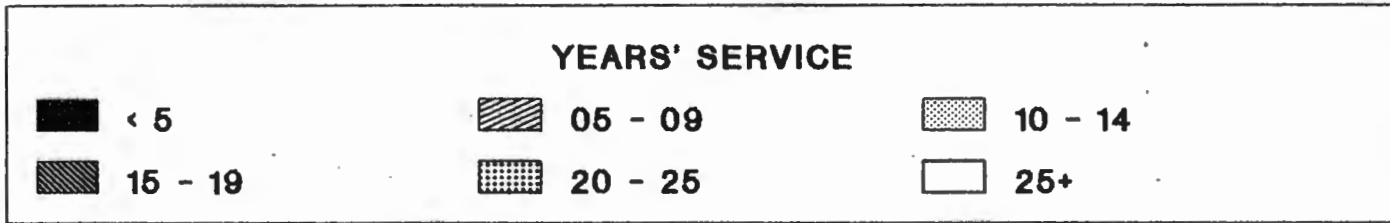
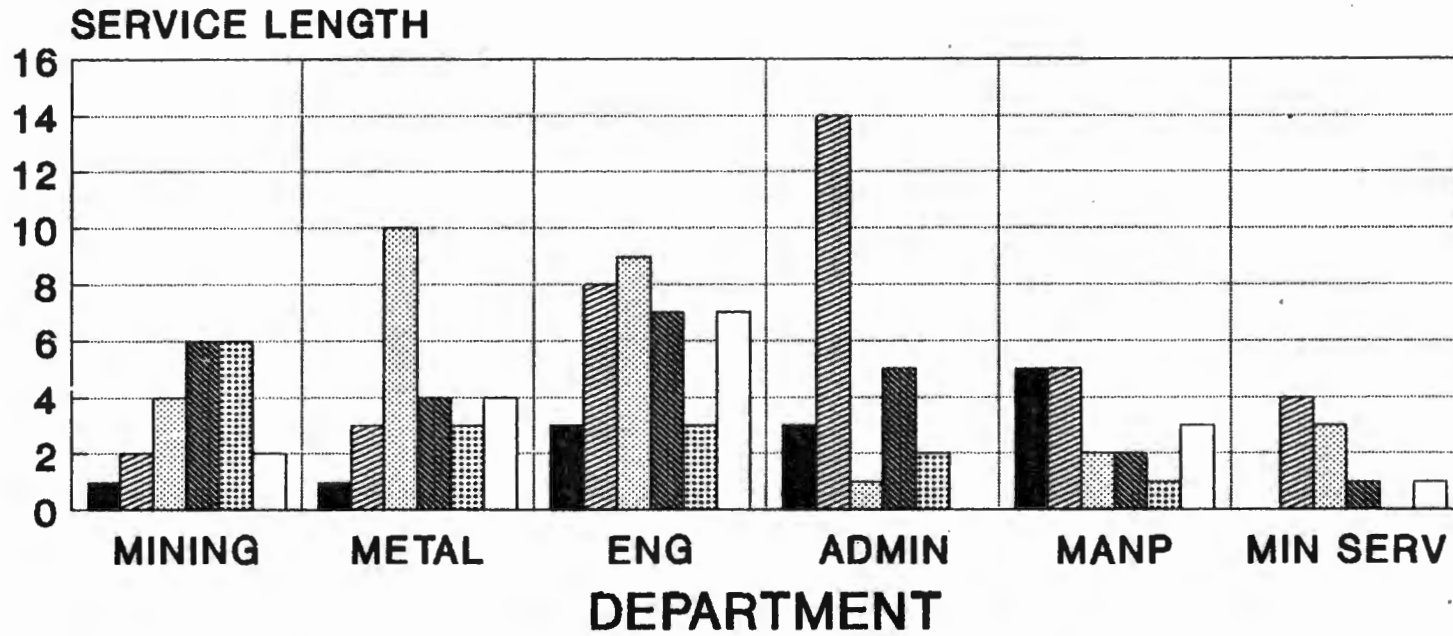


FIGURE 6.4

6.4.2.1 Value Circle attendance (Question 1)

Of the total sample of the target population, 57.04%, i.e. 77 respondents indicated that they have attended a Value Circle before. A distribution per department is given in Figure 6.5 which also indicates that in the Administration and Mining Services Departments, more respondents have not attended a Value Circle. See also Table 6.5(a) below.

DEPARTMENT	HAVE ATTENDED	HAVE NOT ATTENDED
Mining	14	7
Metallurgical	16	9
Engineering	23	14
Administration	8	17
Manpower	12	6
Mining Services	4	5
TOTAL	77	58

Table 6.5(a) Value Circle attendance

6.4.2.2 Value Circles saved money (Question 4)

The respondents strongly believed, i.e. 80%, that Value Circles have saved Buffels money in any form. This is especially true in the case of the respondents from the Mining Department of who 85,7% of the respondents believed that Value Circles have saved Buffels money. See also Figure 6.8, Table 6.8(a) and Annexure C in this regard.

DEPARTMENT	HAVE SAVED	HAVE NOT SAVED
Mining	18	3
Metallurgical	21	4
Engineering	29	8
Administration	19	6
Manpower	15	3
Mining Services	6	3
TOTAL	108	27

Table 6.8(a) Value Circles saves money

**ATTENDED A VALUE CIRCLE
(PER DEPARTMENT)**

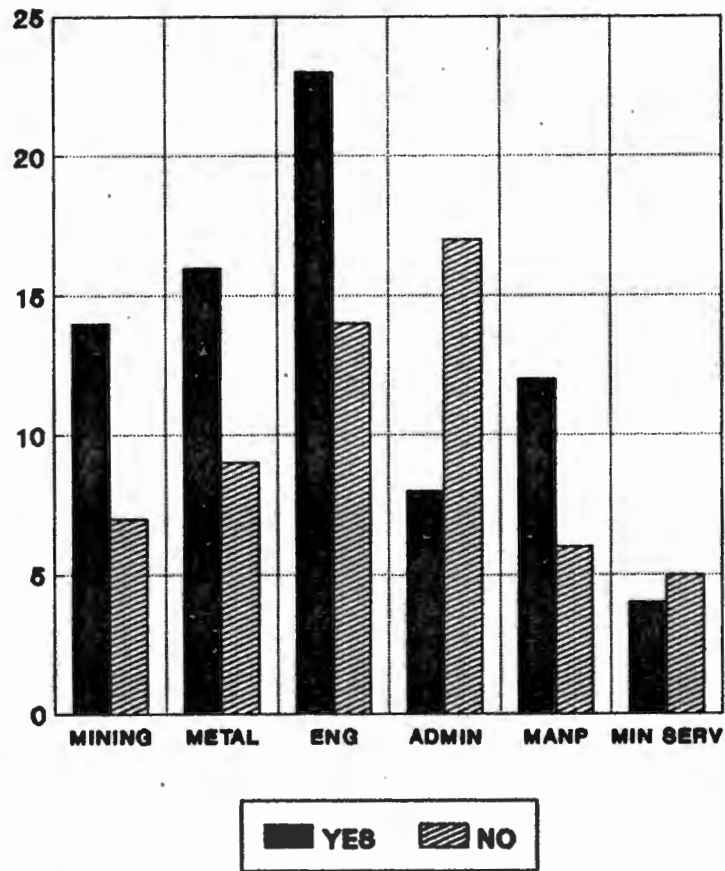


FIGURE 6.5

**VALUE CIRCLES SAVED THE MINE MONEY
(PER DEPARTMENT)**

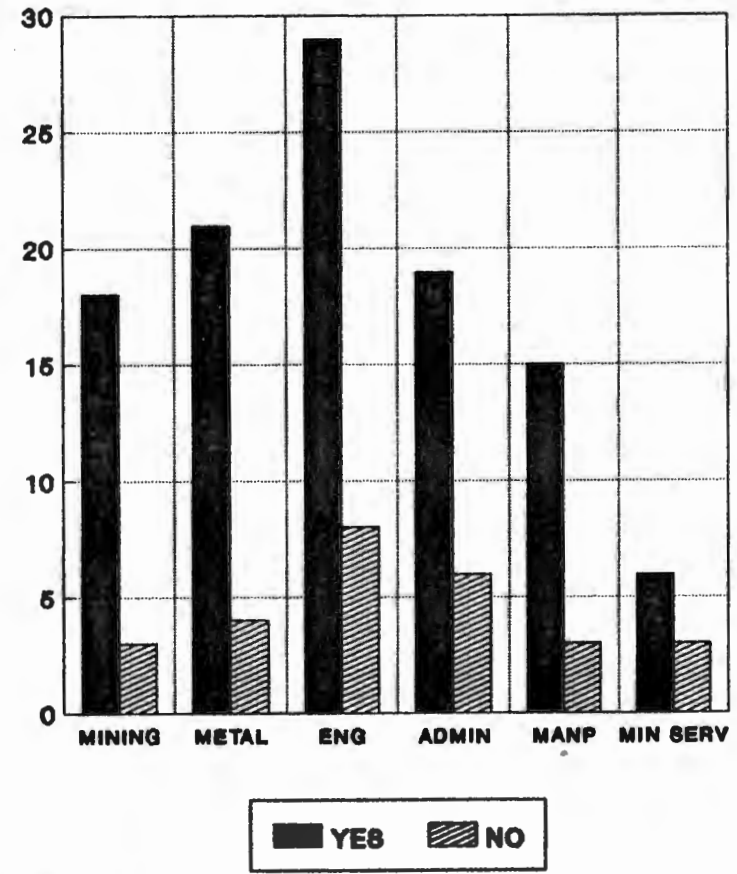


FIGURE 6.8

6.4.2.3 Keep Value Circles alive (Question 5)

82,2% of the respondents believed that management should keep Value Circles alive. 90,5% of the respondents from the Mining Department stated that this was their believe in contrast with the Administration department where only 68% of the respondents indicated that they believed that Value Circles should be kept alive. See also Figure 6.9 and Table 6.9(a) in this regard.

DEPARTMENT	KEEP ALIVE	DO NOT KEEP ALIVE
Mining	19	2
Metallurgical	22	3
Engineering	30	7
Administration	17	8
Manpower	15	3
Mining Services	8	1
TOTAL	111	24

Table 6.9(a) Keep Value Circles alive

6.4.2.4 Non-monetary benefits (Question 6)

85,93% of the respondents indicated their believe that Value Circles have other benefits beside cost savings and increased profits. 100% of the respondents from the Manpower Department agreed to this belief. See also Figure 6.10 and Table 6.10(a) in this regard.

DEPARTMENT	HAVE OTHER BENEFITS	HAVE NO BENEFITS
Mining	19	2
Metallurgical	22	3
Engineering	30	7
Administration	20	5
Manpower	18	0
Mining Services	7	2
TOTAL	116	19

Table 6.10(a) Non-monetary benefits

**MANAGEMENT SHOULD KEEP V.C. ALIVE
(PER DEPARTMENT)**

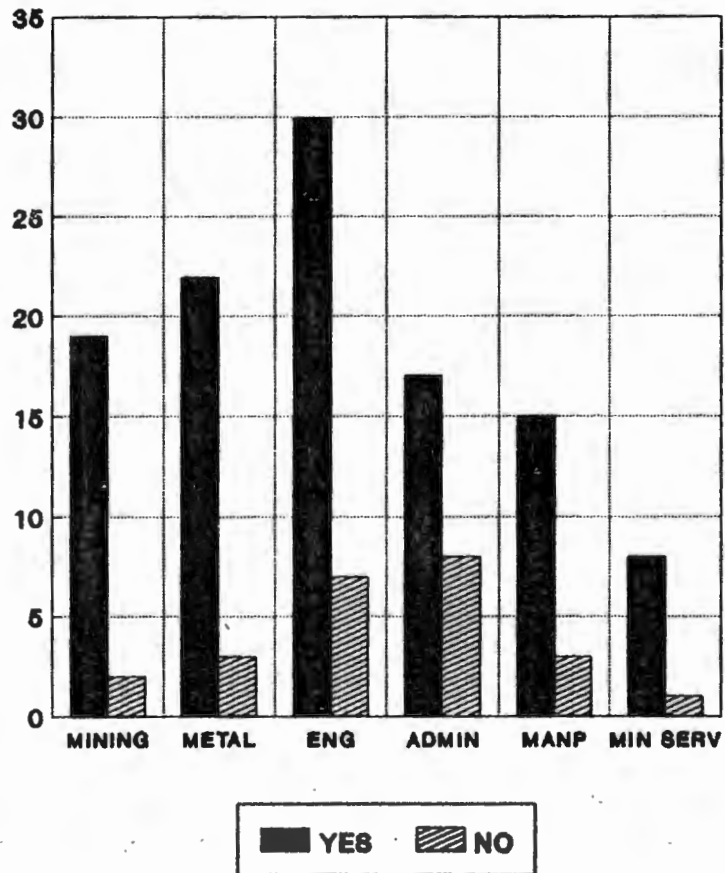


FIGURE 6.9

**V C HAVE NON-MONETARY BENEFITS
(PER DEPARTMENT)**

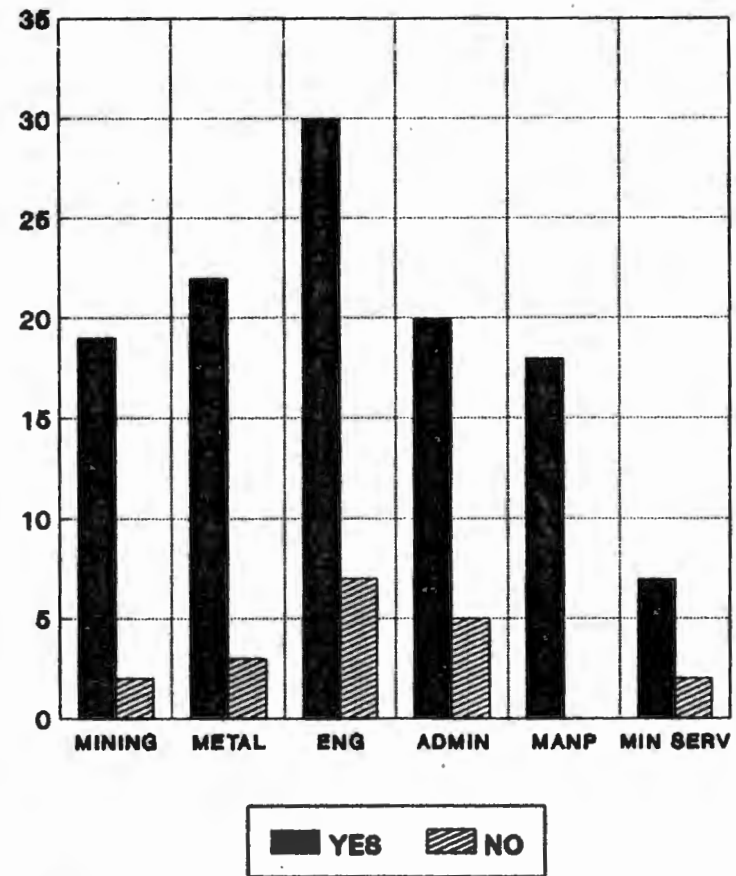


FIGURE 6.10

6.4.2.5 Value Circle usage (Question 8)

81,5% of the respondents believed that Value Circles can be used everywhere on Buffels. Doubts as to this is in the Engineering Department where only 70,3% believed that Value Circles could be used everywhere on Buffels. Also see Figure 6.12 and Table 6.12(a) in this regard.

DEPARTMENT	USED EVERYWHERE	NOT USED EVERYWHERE
Mining	20	1
Metallurgical	22	3
Engineering	26	11
Administration	17	8
Manpower	18	0
Mining Services	7	2
TOTAL	110	25

Table 6.12(a) Value Circle usage

6.4.2.6 Value Circle time (Question 10)

62,2% of the respondents believed that Value Circles could be concluded in one day. These percentages can be ascribed to the fact that different people attended different Value Circles with different topics which would explain the uncertainty regarding the time required for a Value Circle. Also see Figure 6.14 and Table 6.14(a) in this regard.

DEPARTMENT	ONE DAY ONLY	MORE THAN ONE DAY
Mining	11	10
Metallurgical	12	13
Engineering	25	12
Administration	17	8
Manpower	12	6
Mining Services	7	2
TOTAL	84	51

Table 6.14(a) Value Circle time

**V C CAN BE USED EVERYWHERE
ON THE MINE (PER DEPARTMENT)**

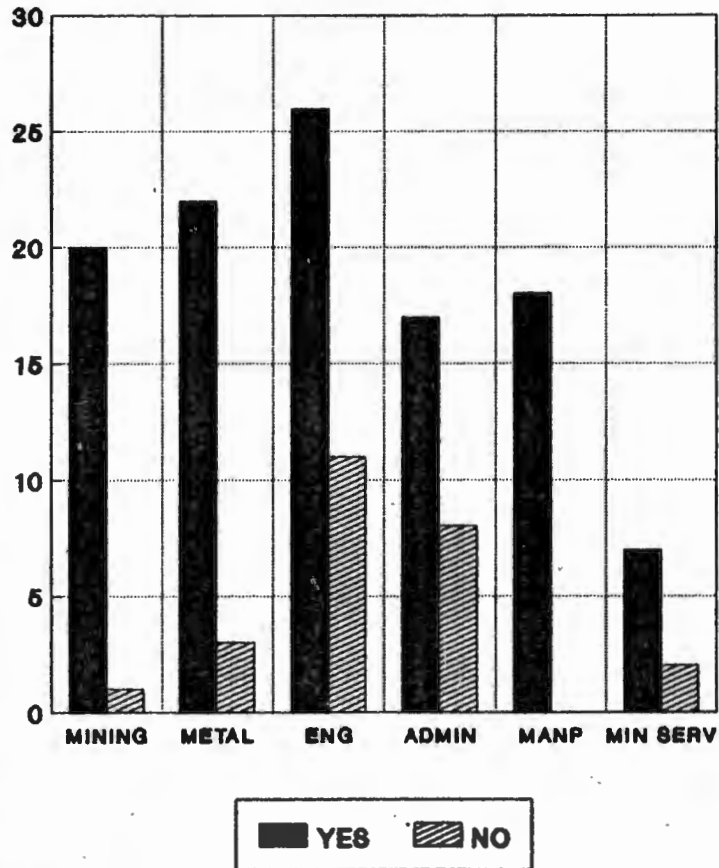


FIGURE 6.12

**VALUE CIRCLES CAN BE CONCLUDED IN
ONE DAY - (PER DEPARTMENT)**

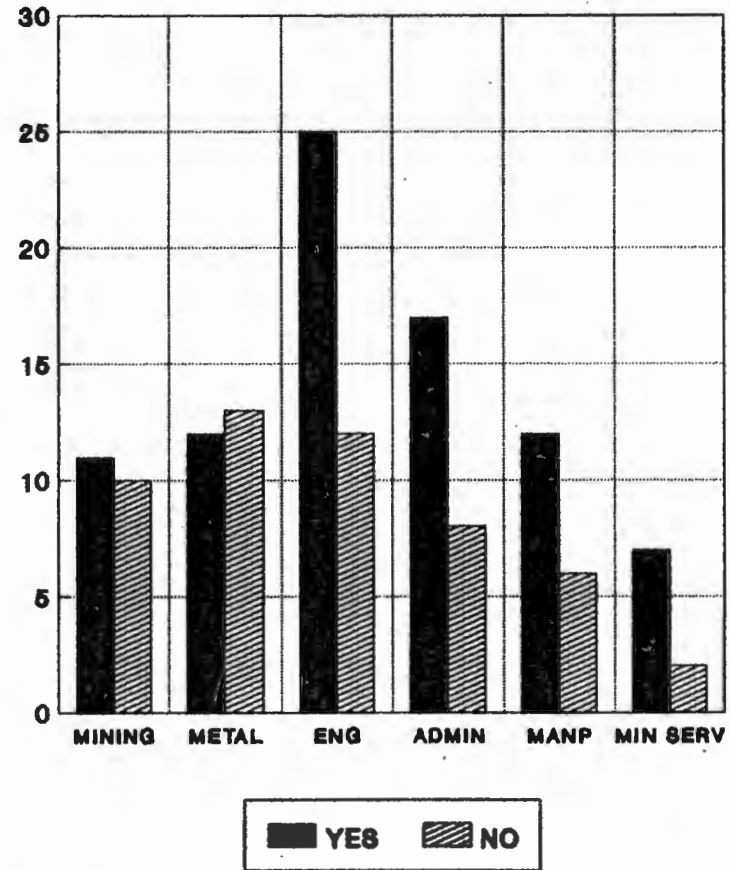


FIGURE 6.14

6.4.2.7 Costs too high

31,3% of the respondents believed that Value Circles cost Buffels too much. More than 50% of the respondents from all the departments did not believe that Value Circles cost Buffels too much. The Engineering Department had the highest percentage in believing Value Circles cost Buffels too much, i.e. 45,9%. See also Figures 6.15 and Table 6.15(a) in this regard.

DEPARTMENT	COST TOO MUCH	DOES NOT COST TOO MUCH
Mining	5	16
Metallurgical	5	20
Engineering	17	20
Administration	9	16
Manpower	3	15
Mining Services	3	6
TOTAL	42	93

Table 6.15(a) Costs too high

6.4.2.8 Knowledge of Value Circles (Question 15)

85,2% of the respondents believed that they knew what a Value Circle is. Uncertainty seems to exist in the Mining Services Departments where 55,6% of the respondents indicated that they did not know what a Value Circle is. See also Figures 6.18 and Table 6.18(a) in this regard.

DEPARTMENT	KNOWLEDGE OF V.C.'S	NO KNOWLEDGE OF V.C.'S
Mining	21	0
Metallurgical	21	4
Engineering	32	5
Administration	20	5
Manpower	17	4
Mining Services	4	5
TOTAL	115	20

Table 6.18(a) Value Circle knowledge

**VALUE CIRCLES COST THE MINE TOO MUCH
(PER DEPARTMENT)**

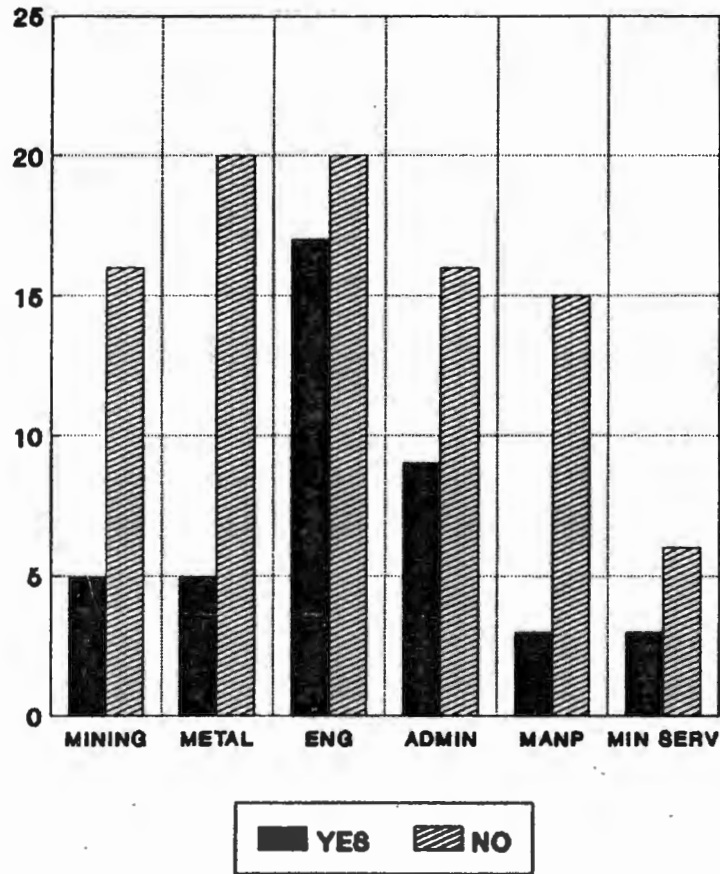


FIGURE 6.15

**RESPONDENTS KNOW WHAT A VALUE
CIRCLE IS (PER DEPARTMENT)**

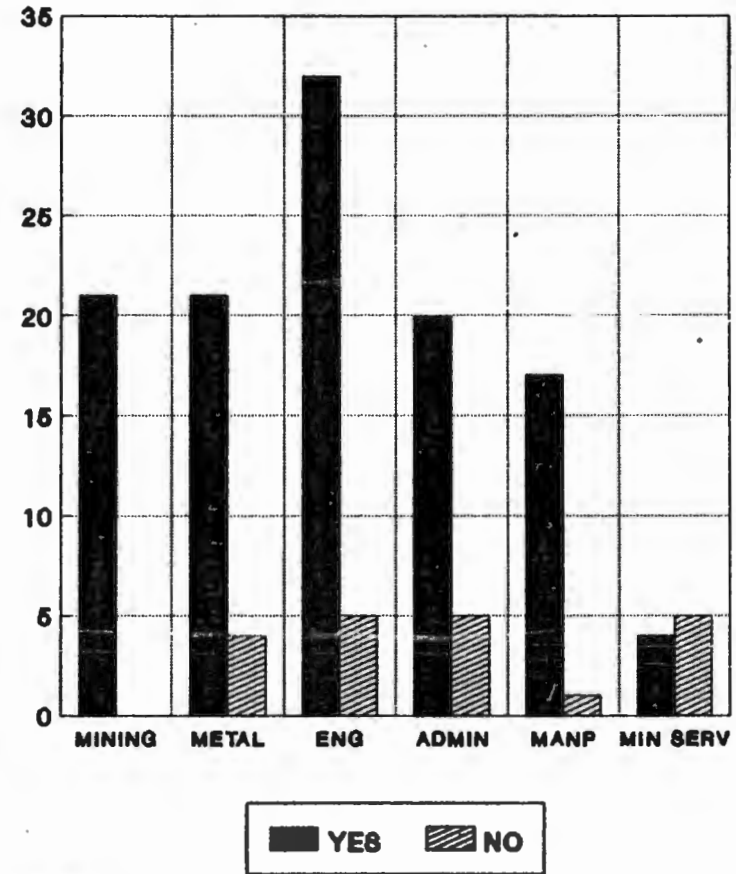


FIGURE 6.18

6.4.2.9 Need for Value Circles (Question 16)

71,9% of the respondents believed that a need still existed for Value Circles in spite of other communication channels available to employees. The only exception being the Administrative Department where 48% of the employees did not see a need for Value Circles when the other communication channels are taken into consideration. See also Figures 6.19 and Table 6.19(a) in this regard.

DEPARTMENT	NEED FOR V.C.'S	NO NEED FOR V.C.'S
Mining	20	1
Metallurgical	20	5
Engineering	22	15
Administration	13	12
Manpower	16	2
Mining Services	6	3
TOTAL	97	38

Table 6.19(a) Need for Value Circles

A NEED EXISTS FOR VALUE CIRCLES WITH ALTERNATIVES AVAILABLE (PER DEPARTMENT)

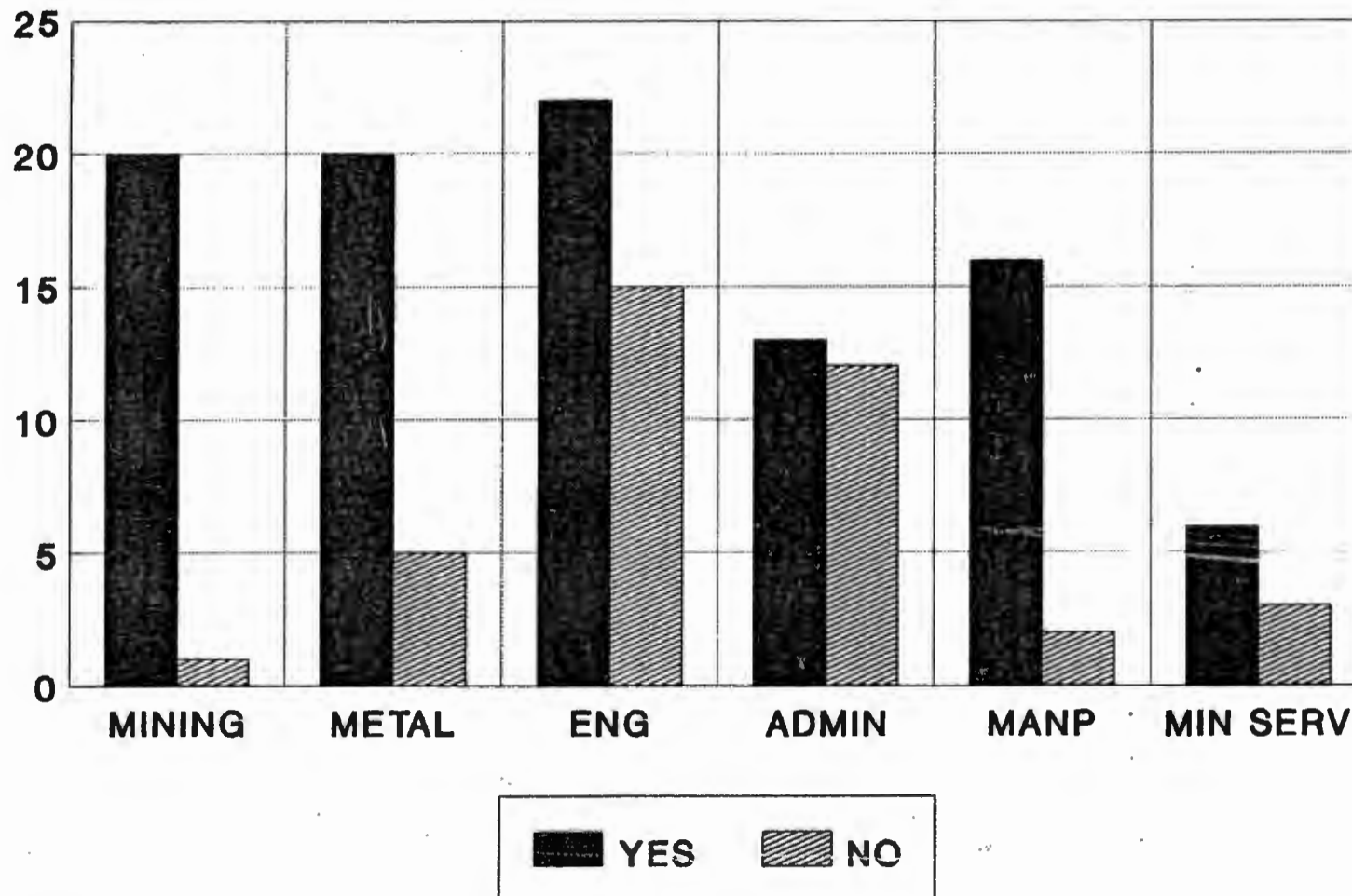


FIGURE 6.19

6.4.2.10 Conclusion

In spite of the fact that only slightly more than half attended a Value Circle before, a positive attitude was noted with regards to most of the aspects specifically pertaining to Value Circles. This includes the monetary, non-monetary as well as versatility of use. The only exception being the time used for a Value Circle where just above 60% of the respondents believed that Value Circles could be concluded in one day.

6.4.3 Underlying concepts questions

The following questions address some underlying concepts to Value Circles and participative management per se. Obviously, a complete set of questions regarding participative management is impossible due to practical and theoretical constraints. The author has, however tried to identify the most critical elements of both participative management and Value Circles applicable to evaluating whether Value Circles should be continued on Buffels.

6.4.3.1 More say in job matters (Question 2)

Of the total sample of the target population, 94.8%, i.e. 128 respondents indicated that they would prefer to have more say in job related matters concerning them. Although these figures does not necessarily reflect a need for Value Circles, a definite need exists for a more participative management style. See also Table 6.6(a) below and Figure 6.6 in this regard.

DEPARTMENT	NEED MORE SAY	DOESN'T NEED MORE SAY
Mining	20	1
Metallurgical	24	1
Engineering	34	3
Administration	24	1
Manpower	18	0
Mining Services	8	1
TOTAL	128	7

Table 6.6(a) More say in job matters

6.4.3.2 Individuals make better decisions (Question 3)

The respondents strongly believed, i.e. 85,9%, that individuals are not better decisionmakers than groups of people. See also Figure 6.7 and Table 6.7(a) in this regard.

DEPARTMENT	INDIV BETTER DECISIONS	GROUP BETTER DECISIONS
Mining	6	15
Metallurgical	2	25
Engineering	7	30
Administration	1	24
Manpower	1	17
Mining Services	2	7
TOTAL	19	116

Table 6.7(a) Individuals make better decisions

**WORKERS MUST HAVE MORE SAY
IN JOB MATTERS (PER DEPARTMENT)**

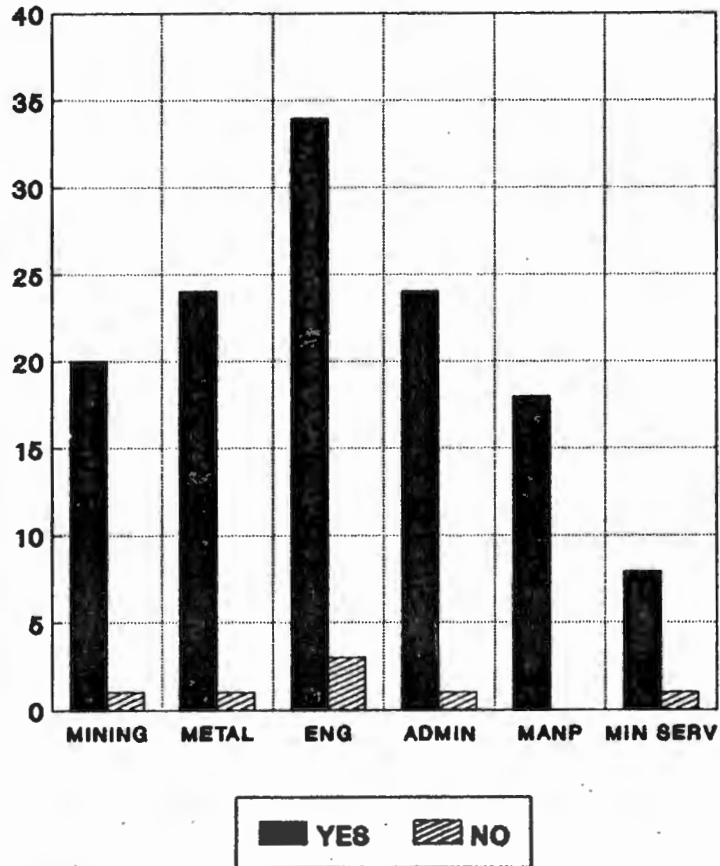


FIGURE 6.6

**INDIVIDUAL DECISIONMAKING BETTER
THAN GROUP (PER DEPARTMENT)**

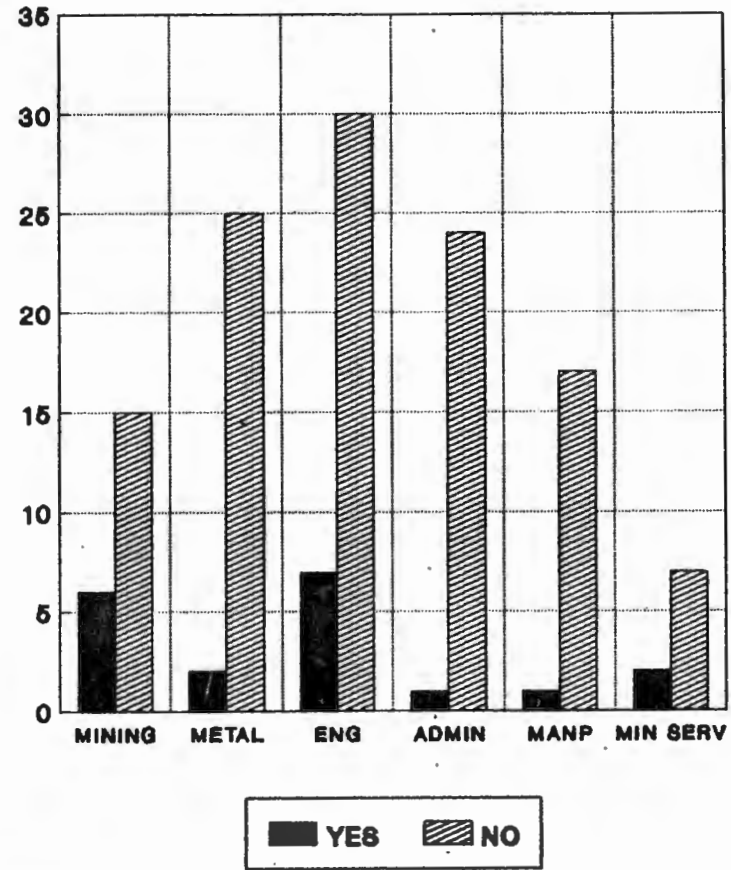


FIGURE 6.7

6.4.3.3 Preference to work in a group (Question 7)

57,8% of the respondents preferred to work in a group while 42,2% of the respondents preferred to work alone. In the Administration Department, 56% of the respondents preferred to work alone rather than in a group. In this regard, in the Mining Services Departments, 77,8% of the respondents preferred to work alone. See also Figure 6.11 and Table 6.11(a) in this regard.

DEPARTMENT	PREFER A GROUP	PREFER ALONE
Mining	18	3
Metallurgical	14	11
Engineering	20	17
Administration	11	14
Manpower	13	5
Mining Services	2	7
TOTAL	78	57

Table 6.11(a) Preference to work in a group

6.4.3.4 Subordinates make better decisions (Question 9)

64,43% of the respondents believed that they could make better decisions than their leaders with the exception of the Administration Department where 64% of the respondents indicated that they believed that their leaders' decisions are generally better. See also Figure 6.13 and Table 6.13(a) in this regard.

DEPARTMENT	INDIV BET- TER DECISION	LEADER BET- TER DECISION
Mining	15	6
Metallurgical	14	11
Engineering	26	11
Administration	9	16
Manpower	16	2
Mining Services	7	2
TOTAL	87	48

Table 6.13(a) Subordinates make better decisions

**PREFERENCE TO WORK IN A GROUP
(PER DEPARTMENT)**

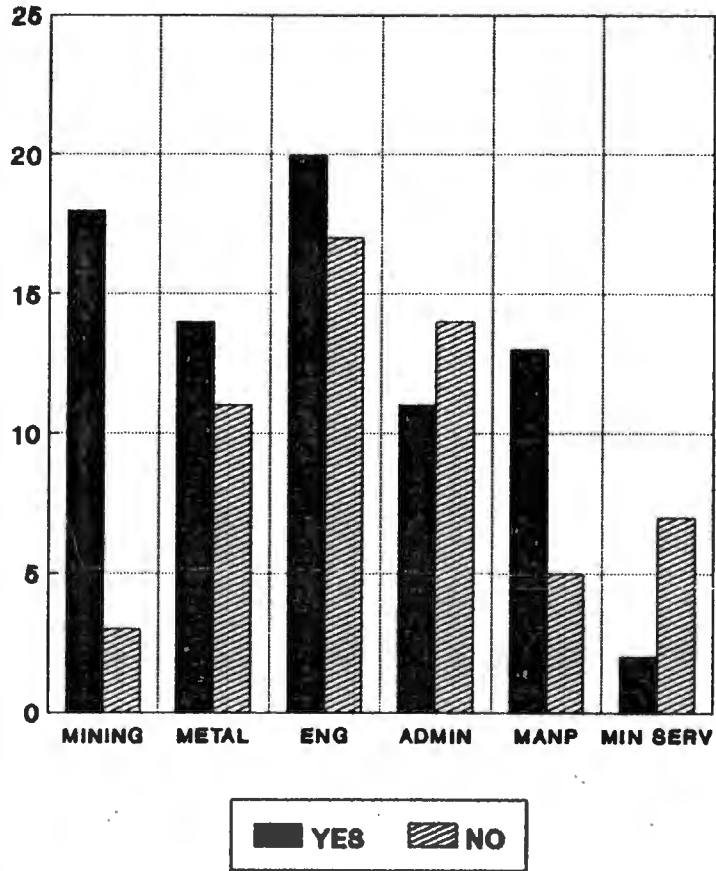


FIGURE 6.11

**INDIVIDUALS MAKE BETTER DECISIONS
THAN LEADERS (PER DEPARTMENT)**

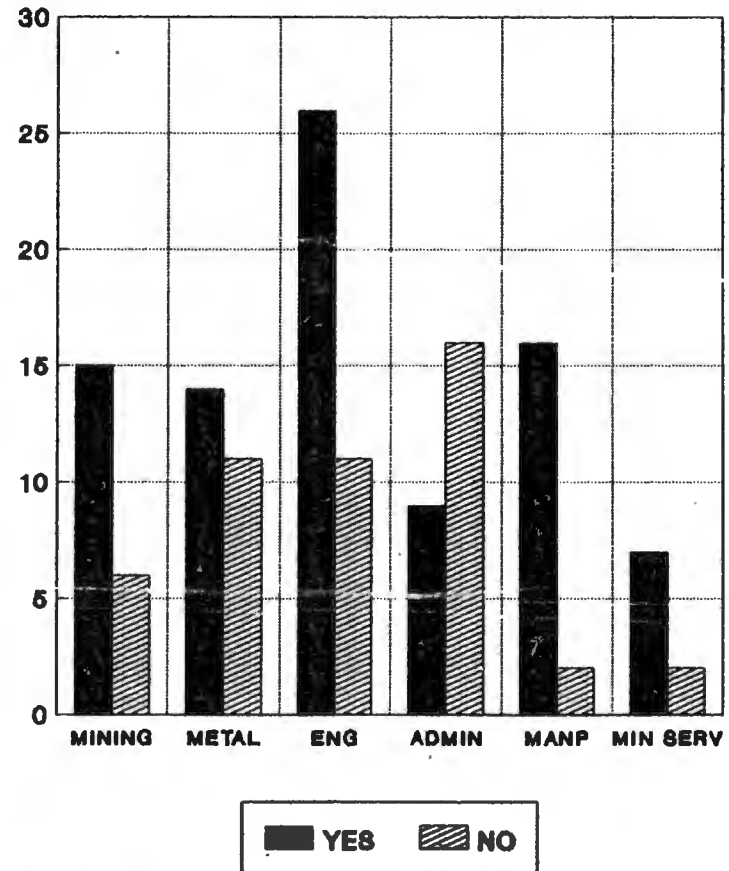


FIGURE 6.13

6.4.3.5 More people complicates problems (Question 13)

Only 34,1% of the respondents believed that the more people (quantitatively) become involved with a problem, the more complicated the problem becomes. The respondents who are uncertain regarding this are the Engineering (45,9%) and the Mining Services (44,4%) Departments. See also Figure 6.16 and Table 6.16(a) in this regard.

DEPARTMENT	MORE COMPLI- CATIONS	NOT MORE COM PLICATIONS
Mining	6	15
Metallurgical	9	16
Engineering	17	20
Administration	7	18
Manpower	3	15
Mining Services	4	5
TOTAL	46	89

Table 6.16(a) More people complicates problems

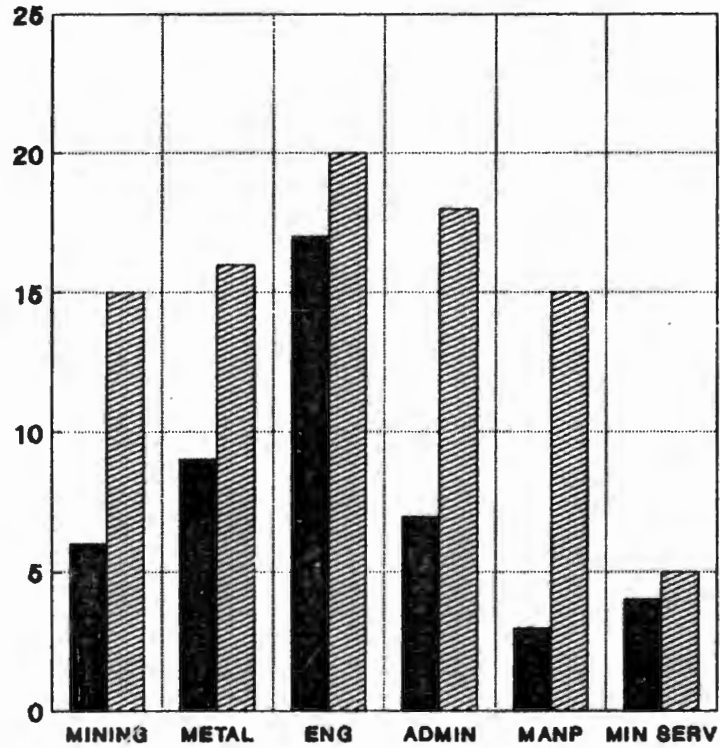
6.4.3.6 Own opinion entitlement (Question 14)

91,9% of the respondents believed that every individual is entitled to his or her own opinion regarding problems at work. All departments agreed to this and in the case of the Mining and Mining Services Departments, no respondents disagreed with this statement. See also Figures 6.17 and Table 6.17(a) in this regard.

DEPARTMENT	OWN OPINION ENTITLEMENT	NO ENTITLEMENT
Mining	21	0
Metallurgical	24	1
Engineering	32	5
Administration	22	3
Manpower	16	2
Mining Services	9	0
TOTAL	124	11

Table 6.17(a) Own opinion entitlement

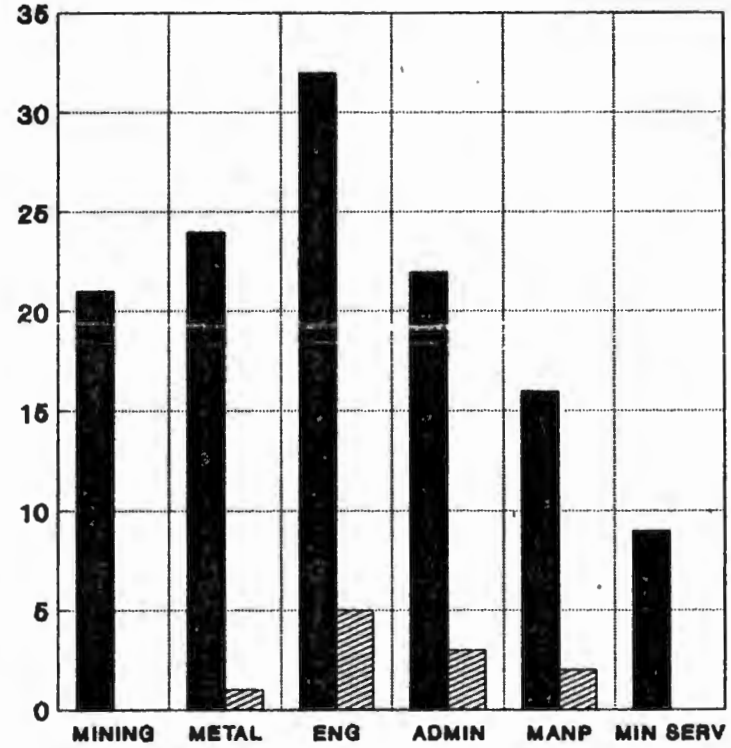
**THE MORE PEOPLE, THE MORE COMPLICATED
A PROBLEM BECOMES (PER DEPARTMENT)**



■ YES ▨ NO

FIGURE 6.16

**INDIVIDUALS ARE ENTITLED TO THEIR
OWN OPINION REGARDING WORK**



■ YES ▨ NO

FIGURE 6.17

6.4.3.7 Conclusion

The respondents were generally very positive to a more participative management style with a preference to group decisionmaking. In this regard, respondents also strongly believed in individual entitlement to his opinion. Where the actual execution of individual responsibilities are concerned, the sample group in total were undecided if they preferred to work in a group or individually. This is also the case with the regard of the knowledge of the supervisors by the respondents.

6.4.4 Psychological Map

6.4.4.1 Psychological Map question

The purpose of this question was to obtain an indication of the level on the Psychological Map (discussed in Chapter 3) from which the respondent acts. The question was limited to the respondents preference to work in a certain organisational environment. The responses are found in Table 6.20(a) below (See also Figure 20 in this regard):

DEPARTMENT	AN	BO	CP	DQ	ER	FS	GT
Mining	0	3	3	3	5	7	0
Metallurgical	0	2	0	8	11	2	2
Engineering	0	7	4	5	16	3	2
Administrative	0	0	2	14	3	6	0
Manpower	0	0	2	3	4	9	0
Mining Services	0	0	1	3	0	4	1

Table 20(a) Psychological Map distribution

6.4.4.2 Conclusion

The data presented in paragraph 6.4.4.1 (above) indicates that most of the respondents prefer a D-Q / E-R organisational structure where their work environment is concerned.

PSYCHOLOGICAL MAP (PER DEPARTMENT)

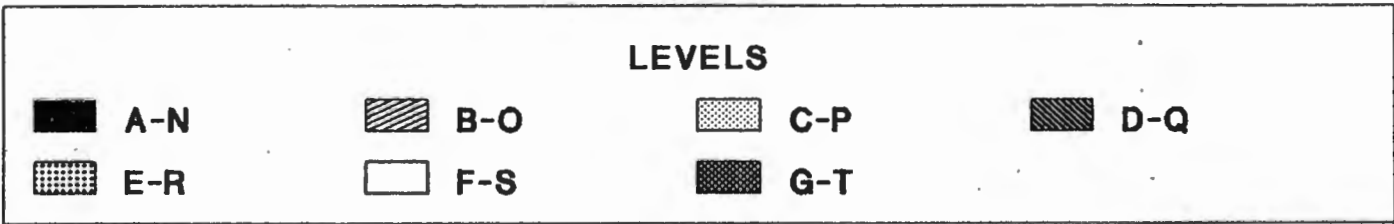
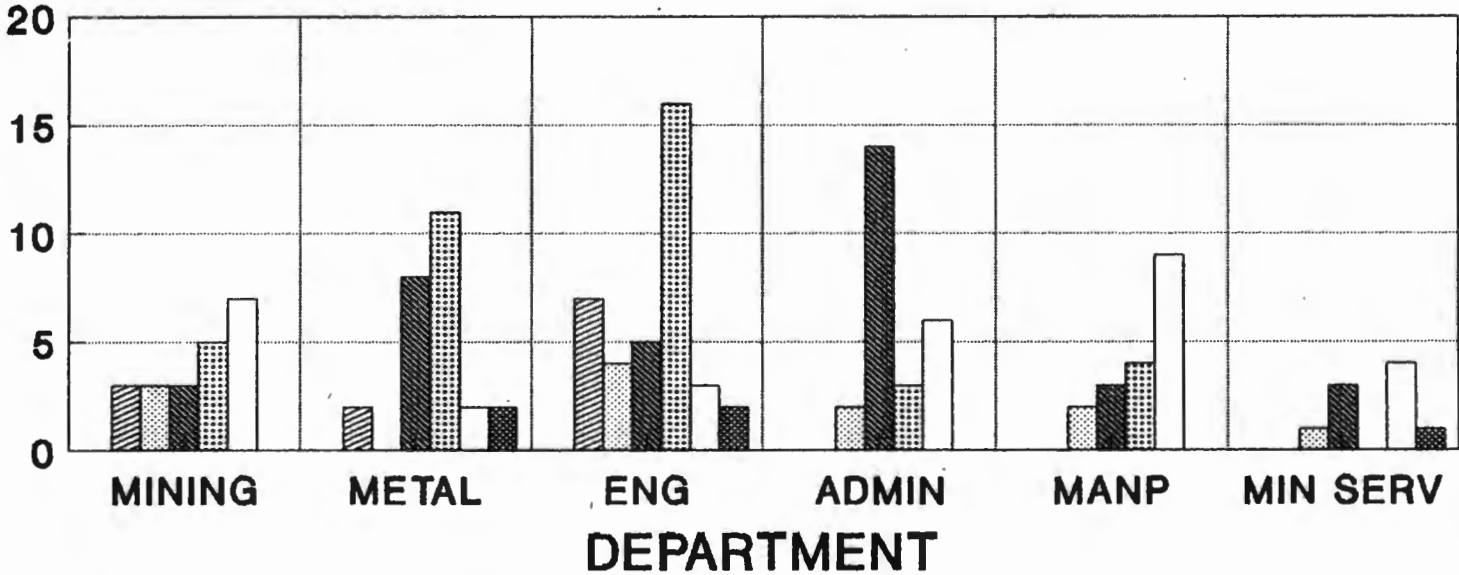


FIGURE 6.20

6.5 CORRELATION MATRIX

A correlation matrix was drawn from the sample comparing all the questions with each other and with the biographical detail. The correlation matrix is found on the next page. Only thirteen out of a possible 380 correlations scored above +/- 0.5 with the highest correlation (0,74) being between questions 4 and 5, i.e. between the perception that Value Circles have saved Buffels money and the perception that management should keep Value Circles "alive".

Other significant correlations, i.e. higher than +/-0,5, were found between the following.

Firstly the perception that management should keep Value Circles "alive" and Value Circles have non monetary benefits, Value Circles can be used everywhere and that Value Circles does not cost Buffels too much. These factors also showed significant correlations with each other.

Secondly the perception that management should keep Value Circles "alive" and Value Circles are still needed where other participative management ventures exist which also correlates with the perception that Value Circles could be used anywhere on Buffels.

Thirdly, a significant correlation was found between the belief that groups make better decisions than individuals and that Value Circles are still required even when other participative management ventures exist.

Finally a significant correlation was found between the ages of the respondents and their lengths of service.

6.6 CONCLUSION

The sample drawn from the total population under consideration in this study prove to be representative of the total population. Although more employees from the Engineering and fewer employees from the Metallurgical Departments are proportionally selected, it must be noted that a large proportion of the Engineering Department's employees functionally resorts under the Metallurgical Manager although administratively reporting to the Resident Engineer. An estimated 35% of the respondents in the Engineering Department falls in this category.

Value Circles per se are very well received by the respondents and are also being regarded as contributing positively to the bottom line of the company.

----- CORRELATION MATRIX -----

HEADER DATA FOR: C:1991 LABEL: TESIS M B A
 NUMBER OF CASES: 135 NUMBER OF VARIABLES: 20

TOTAL SAMPLE - ALL VARIABLES

	DEPT	AGE	JOBLEVEL	SERVICE	QUES1	QUES2	QUES3	QUES4
DEPT	1.00000							
AGE	-.00739	1.00000						
JOBLEVEL	.04749	.11822	1.00000					
SERVICE	-.26514	.55116	.29059	1.00000				
QUES1	.12363	-.02885	-.24307	-.24526	1.00000			
QUES2	-.00205	-.02708	.19288	.01580	.13447	1.00000		
QUES3	.11689	-.10312	-.04615	-.03936	.09307	-.19356	1.00000	
QUES4	.08686	-.04746	.03964	-.02194	.01496	.30067	-.11715	1.00000
QUES5	.08375	-.06748	-.10520	.00227	-.05132	.06602	-.09038	.73624
QUES6	.01535	-.02286	-.10581	.02534	-.05004	.09749	-.14247	.59642
QUES7	.19793	-.00394	-.04963	-.17350	.07608	.20592	-.17155	.20996
QUES8	.06723	-.00418	-.11211	-.00186	.00999	.14652	-.02640	.52440
QUES9	-.04768	-.15356	-.20946	-.24081	.19937	.03567	.03362	-.13927
QUES10	-.15738	.08835	.03149	.14458	-.05898	.02450	.13961	-.27501
QUES12	-.00164	-.05562	.11135	-.04691	-.00298	-.11855	.29943	-.54301
QUES13	.03402	-.00479	.12781	-.07208	.05566	-.04334	.24835	-.14847
QUES14	.08010	-.01542	-.08550	-.06389	.01499	-.06965	.04268	-.14892
QUES15	.21415	.00457	-.01997	-.04829	.31202	.09056	.10882	-.05213
QUES16	.13735	.09453	-.20771	-.02586	.05570	.07649	-.17297	.46943
PSYCHMAP	.13413	.06220	.04498	-.02698	.06590	.07453	-.12899	.18833
	QUES5	QUES6	QUES7	QUES8	QUES9	QUES10	QUES12	QUES13
QUES5	1.00000							
QUES6	.70323	1.00000						
QUES7	.15168	.21467	1.00000					
QUES8	.52648	.57476	.24881	1.00000				
QUES9	-.10254	-.12262	.08564	-.03541	1.00000			
QUES10	-.24243	-.22748	-.14023	-.21414	.02766	1.00000		
QUES12	-.56723	-.47537	-.13695	-.50608	.18037	.24048	1.00000	
QUES13	-.11537	-.15846	-.20814	-.18031	.01161	.20559	.35524	1.00000
QUES14	-.13849	-.04268	-.03533	-.07229	.00503	.15885	.08863	.04274
QUES15	-.13938	-.10882	.15010	.06958	.12584	-.02389	.02233	-.09614
QUES16	.52751	.45715	.26530	.59206	-.01759	-.11400	-.63314	-.21032
PSYCHMAP	.14820	.12899	.15513	-.01216	-.11433	-.07437	-.08288	-.00906
	QUES14	QUES15	QUES16	PSYCHMAP				
QUES14	1.00000							
QUES15	-.12421	1.00000						
QUES16	.05441	.20263	1.00000					
PSYCHMAP	-.13807	.14922	.08352	1.00000				

CRITICAL VALUE (1-TAIL, .05) = + Or - .14223
 CRITICAL VALUE (2-tail, .05) = +/- .16899

N = 135

Uncertainty does, however, exist whether the time allowed for a Value Circle should exceed one day. In this regard it must be noted that the questionnaire did not establish whether the complexity or size of the objective at hand has any influence on the duration of the Value Circle.

The respondents proved to be very positive with regard to the underlying concepts of Value Circles in aspects such as more say in job matters, groups making better decisions and own opinion entitlement. Very few negative attitudes were identified with regards to the participative management concepts underlying Value Circles.

CHAPTER SEVEN

FINDINGS AND RECOMMENDATIONS

7.1 INTRODUCTION

The objective of this chapter is to evaluate the results from the research described in Chapter 6 above and, if necessary, to make recommendations based on the research.

This chapter firstly addresses the results from the biographical, Value Circle and participative management questions after which any tendencies will be discussed. Secondly, any derived trends identified will be addressed, such as departmental trends. Specific recommendations will be made in the text and will not be addressed under separate headings.

7.2 BIOGRAPHICAL DETAILS

7.2.1 INTRODUCTION

When comparing the departmental distributions of the total population and the sample, a discrepancy was found in the proportion of the sample and the total population in the Metallurgical and Engineering departments.

It was found that at least five employees normally resorting under the Engineering Department stated on their questionnaires that their place of work was in the Metallurgical Plant. A possible reason for this was that the questionnaire did not specify whether "DEPARTMENT" is the physical place of work or the functional reporting structure. Even in this regard it was found that in certain instances an artisan reports organisationally to the Metallurgical Manager and functionally (dotted line) to the Resident Engineer. The remainder of the sample proportion is acceptable. It must be noted that the departmental correlation between the sample and total population is 0.68 including the Metallurgical and Engineering Departments.

7.2.2 AGE DISTRIBUTION

When comparing the age distributions between departments, a tendency towards a normal distribution is identified with a negative skewness in the Mining Services Department, i.e. the employees' in this Department's average age (statistically derived by using class midpoints) is 40,6 years in comparison with the total sample's average age of 41,8 years. It must also be noted that there are no employees under the age of 40 years in the sample taken from the Mining Services Department.

When comparing the job level distributions, normal distributions are found in the Metallurgical and Mining Departments. A positive skewness was found in the Engineering Department and a strong positive skewness in the Administrative Department. This means that the average job level for the respondents from this Department is lower than the average for the total sample taken from Buffels. Respondents from the Manpower Department, in contrast, showed a slight negative skewness.

7.2.3 LENGTH OF SERVICE DISTRIBUTION

A slight negative skewness was found with respondents in the Mining Department where lengths of service were concerned. A slight positive skewness was found in the Metallurgical, Engineering and Mining Services Departments and a strong positive skewness in the Manpower and Administrative Departments.

7.2.4 CONCLUSION

The biographical distributions per Department are satisfactory and the only recommendation resulting from the research, although not related to this research, is that management should consider a manpower planning exercise in terms of specifically ages and lengths of service.

7.3 PARTICIPATIVE MANAGEMENT

7.3.1 INTRODUCTION

The objective of this part of the research was to establish respondents attitudes regarding participative management per se. Three issues were addressed under this heading, namely decision making, group aspects and the employees' influence in job related matters.

7.3.2 DECISION MAKING

The results of the research indicated that respondents perceived group decision making being better than individual decision making in all Departments. When confronted to choose the better alternative between decisions made by the leaders and the decisions made by their subordinates, only the Administrative Department believed that their leaders made better decisions. Significantly high differences were found in the Manpower, Engineering and Mining Services Departments followed by the Mining Department and finally the Metallurgical Department where only slightly more than 50% of the respondents believed that they made better decisions than their leaders. Where decision making is

concerned, the respondents are in line with the participative management principles and no recommendations can be made.

7.3.3 GROUP ASPECTS

All Departments showed a tendency to perceive that the more people are involved with a problem, does not imply that a problem becomes more complicated. The only anomaly being the Engineering Department where 45,9% of the respondents believed that the more people involved with a problem, the more complicated it becomes. Uncertainty existed amongst the respondents per department as to whether they preferred to work in a group structure rather than to work independently. The Mining Department showed the highest preference to work in a group, followed by the Manpower, Metallurgical and Engineering Departments respectively. The Administrative Department preferred to rather work alone followed by the Mining Services Department.

Some marketing is recommended in the Engineering, Administrative and Mining Services Departments as to the value of groups in an organisation and the role of the individual in a group. Employees in these departments could, for example, be sent on a Synergy course promoting group forming team spirit and team work.

7.3.4 EMPLOYEE INFLUENCE

A significantly strong belief existed amongst all respondents as to their entitlement to their own individual opinions regarding work related matters. Along with this belief, this research also showed that the majority of respondents shared a strong belief that employees should have more say in job related matters.

The respondents indicated their readiness for participative management in that a strong feeling exists that they are entitled to their own opinion regarding work related issues. An unusually high response set was obtained in the respondents wish to have more say in job related matters. It is therefore recommended that all organisational vertical communication channels be re-evaluated in terms of their effectiveness.

7.3.5 CONCLUSION

To summarise, various participative management ventures exist on Buffels and the respondents indicated their willingness to commit themselves to these ventures. It must, in contrast, firstly be noted that the respondents are either not au fait with the principles of

participative management as researched, or that the present ventures does not meet with the needs of the respondents. These problems could mostly be alleviated with a participative management marketing strategy. Secondly, the participative management ventures could in spite of their existence per se, not be functioning as intended. It is a shortcoming of this study in the sense that no reasons were established on the trend identified in this regard.

7.4 VALUE CIRCLES

7.4.1 INTRODUCTION

This section of the research dealt with specific aspects regarding Value Circles per se and how it functions on Buffels. The section also deals with the respondents evaluative perceptions on the Value Circles concept as functioning on Buffels.

The section is divided into knowledge of Value Circles, cost and benefits of Value Circles, need for Value Circles and some practical considerations and usage of Value Circles.

7.4.2 VALUE CIRCLE KNOWLEDGE

The responses under this heading are divided into two categories, namely if the respondent knew what a Value Circle is and if the respondent actually attended a Value Circle. Although only 57% of the respondents have actually attended a Value Circle, more than 85% of the respondents indicated that they knew what a Value Circle is. The major reason for this is that Value Circles was intensively launched on Buffels. Together with this, Buffels has had a labour turnover of less than 10% per year, excluding redundancies due to rationalisation of operations on Buffels caused by the negative economic environment of the Gold Mining Industry.

Based on the above, it can be assumed that the respondents possess sufficient knowledge of Value Circles to justify responses summarised below.

7.4.3 COST AND BENEFITS

All the respondents are in agreement that Value Circles have saved Buffels money. Together with this, the majority of respondents also believe that Value Circles does not cost Buffels too much. The only exception to this is the Engineering Department where 45,9% of the

respondents believed that Value Circles did cost Buffels too much. Along these lines, 85,9% of the respondents believed that Value Circles have non-monetary benefits.

It is recommended that future Value Circles be formally budgeted to establish and emphasize a sound financial basis from which to operate and to determine the feasibility of holding the Value Circle. It is also recommended that strict financial control be exercised which will in the longer term only of benefit to the Value Circle venture as part of participative management.

7.4.4 NEED FOR VALUE CIRCLES

Several formal alternative vertical upward communication channels are available for employees to express their opinion regarding their work environment. Some examples are the Green Area system (similar to the NISSAN Green Area system), works councils and external employee organisations. In spite of these alternatives, more than 70% of the respondents believed that a need still exists for Value Circles. To support this, more than 82% of the respondents believed that management should "keep Value Circles alive". The only exception being the

Administrative Department where 48% of the respondents believed that a need does not exist for Value Circles with all the alternatives available. It must, however, be noted that, to the knowledge of the author, only one Value Circle was held with a topic directly relating to the Administrative Department.

7.4.5 PRACTICAL CONSIDERATIONS

Two criticisms are generally directed towards Value Circles namely the time taken for a Value Circle and the applicability of Value Circles. Both these issues were addressed in the questionnaire. As to the time taken by Value Circles, with the exception of the Metallurgical Department, most respondents believed that a Value Circle could be concluded in one day. This would depend largely on the complexity and/or quantity of the problem or objective addressed by the specific Value Circle. As to the applicability of Value Circles, most respondents believed that Value Circles could be used anywhere on Buffels.

The only recommendations that can be made under this heading is that alternatives such as the Nominal Group Technique can be considered to solve work related problems instead of Value Circles.

7.4.6 CONCLUSION

Value Circles have been very well received and implemented on Buffels. Some marketing, however, still need to be done, especially in terms of the benefits resulting from Value Circles. In addition, budgeting and cost control measures should also be implemented to provide the Value Circle venture with a sound economic and financial foundation. Since Value Circles have virtually come to a standstill on Buffels, alternatives can at this stage also be considered, such as the Nominal Group Technique. Since significant resources have already been spent on Value Circles, with little costs, it can be revived on Buffels to contribute to the bottom line of Buffels.

7.5 PSYCHOLOGICAL MAP

Most of the respondents favoured the D-Q/E-R organisational structure. Commonalities between these two "stations" is a hierarchical structure from which the employee can act. These results are in contradiction to the C-P type organisational structure traditionally typical of a mining production environment. It must also be noted that a high E-R orientation was found amongst the respondents in the Metallurgical and Engineering

Departments while a strong D-Q and F-S orientations were found with respondents from the Administrative and Manpower Departments respectively. In general it would be ideal to follow a D-Q/E-R approach when approaching the employees of Buffels.

7.6 CONCLUSION

The respondents mostly indicated that they are positive towards participative management ventures and Value Circles. Two major shortcomings have, however, been identified, namely financial reporting and marketing to "revitalise" Value Circles on Buffels. It must also be stressed that without management support, no participative management venture will ever succeed.

CHAPTER EIGHT

CONCLUSIONS AND RECOMMENDATIONS

8.1 INTRODUCTION

This chapter will address issues as outlined in Chapter 1 of this study, and specifically the following. Firstly to verify whether the objectives of this study have been met. Secondly, whether any additional shortcomings to this study, other than the shortcomings outlined in Chapter 1 were identified. Finally, any recommendations as to the future most likely scenario of Value Circles on Buffels.

8.2 OBJECTIVES OF THIS STUDY

8.2.1 THEORETICAL FOUNDATION

A theoretical foundation was laid down in Chapter 3 of this study outlining some basic principles of participative management relevant to the Concept of Value Circles. Although relatively small, a theoretical foundation for the Value Circle concept was provided and future research can be based on this foundation.

8.2.2 VIABILITY OF VALUE CIRCLES

Research, according to the completed questionnaires by the respondents, indicates that the respondents were receptive and positive towards Value Circles. The general belief amongst the respondents are also that the management of Buffels should keep Value Circles alive and that Value Circles have definite non-monetary benefits for the employees of Buffels. Respondents also indicated that in spite of all the alternative vertical communication channels available, a need still exists for Value Circles. In addition, most respondents also believed that Value Circles can be used anywhere on Buffels. It can therefore be deduced that Value Circles remain viable on Buffels.

8.2.3 COST IMPLICATIONS

The majority of respondents indicated a belief that Value Circles have saved Buffels money and also that Value Circles does not cost Buffels too much. It can therefore be deduced that Value Circles does have cost benefits for Buffels and that costs does not exceed income derived from Value Circle ventures.

8.2.4 CONCLUSION

The objectives as outlined in Chapter One of this study have mostly been met by the study. The only major exception being the cost aspects of Value Circles. In this regard, only two factors were considered namely the attitudes of the respondents and a case study of an actual Value Circle.

8.3 SHORTCOMINGS

Over and above the shortcomings as outlined in Chapter 1 of this study, one major shortcoming was identified. In the study, only respondents perceptions were taken into account when evaluating Value Circles' monetary aspects with the exception of a case study. In addition, no other formal financial facts or figures were obtained to evaluate the financial viability and/or feasibility of Value Circles. A formal study is therefore recommended covering this aspect prior to any decision being taken as to the future of Value Circles on Buffels.

8.4 RECOMMENDATIONS

8.4.1 INTRODUCTION

Employees in any organisation strive to derive three basic satisfactions from their work and their work environment. These needs can be described as follows:

Firstly, the need for achievement. This includes both achievement of company goals and personal goals.

Secondly, the need for power to include both formal power as allocated by an organisational position in a company as well as informally obtained power which is not organisationally bound.

Thirdly, the need to affiliate to a group. Since employees spend most of their awaken hours at work, affiliation to groups are inevitable.(Schutte 1991)

Since traditional bureaucratic organisation structures limit employees to satisfy these needs, management of organisations had to consider ways to satisfy these needs to enable employees to function at maximum

possible productivity. Participative management programmes, in this regard, promotes the feeling of ownership, partnership and affiliation. This implies the empowerment of employees in the organisation where employees' can become more pro-active in problem solving in reaching personal goals and organisational goals, strategies and the vision of the organisation. This also implies allowing people the freedom to contribute and to involve themselves in company issues voluntarily.

8.4.2 PRACTICAL CONSIDERATIONS

As stated above, Value Circles have come to a standstill on Buffels. The reason primarily being the unavailability of suitably trained staff. Since Value Circles prove to be financially viable and feasible and necessary in the opinion of the respondents on Buffels, it is recommended that Value Circles be re-established on Buffels.

Due to characteristics specific to Buffels, it is recommended that a decentralised approach be followed. The reasons being the following. Firstly, The approach of having a single department responsible for Value

Circles have proved to be successful with the initial implementation and introduction of Value Circles on Buffels. In the medium term, i.e. five year period, this approach have been unsuccessful since the employees in the Value Circle Department have either resigned or have been retrenched. In addition, a second single department have been responsible for Value Circles, namely the Training Department. During this period until present, only two Value Circles were held in the space of a year.

The Manpower Department on Buffels are both organisationally and geographically decentralised. This allows for a decentralised approach to be followed pending certain constraints that will have to be met.

These constraints being the following. Firstly top management approval and support which is imperative for any venture to be successful in an organisation. In this regard it will be the responsibility of top management to provide topics and/or objectives for Value Circles. Top management will also be responsible to provide the necessary logistic support and provide members of their staff to attend Value Circles.

Secondly, employees must be critically identified to present Value Circles in terms of both suitability as well as commitment to Value Circles and participative management. In this regard an attempt was made to train employees in presenting Value Circles, but due to various reasons, less than 50% of the targeted employees attended the course.

8.4.3 SUMMARY

To summarise, Value Circles are necessary from the employees on Buffels view both in terms of monetary and non monetary benefits. As part of the participative management programme on Buffels, Value Circles also provide an avenue for the empowerment of employees.

On the practical side, Value Circles can be re-established without the problems of establishing a new venture providing certain criteria are followed.

8.5 CONCLUSION

Schutte (1991) stated that the battle for South Africa will not be in the political or social arenas but will

essentially be on the shop floor. This means that the intangible resources of a company must be in line with the company's objectives, strategies and also the vision for the company. The most important element of the intangible resources of Buffels is its human resources. The empowerment of this element is critical in the survival of Buffels, especially in the contemporary negative economic environment in which Buffels operates. The empowerment of the human resources on Buffels will primarily be through participative management programmes where employees become partners with management and a feeling of ownership is created.

Value Circles contribute to the empowerment process and have direct monetary and non-monetary advantages to Buffels as well. Value Circles also contribute to the satisfying of the basic key needs of employees in the company.

ANNEXURE A

GENCOR MISSION STATEMENT

GENCOR'S AIM	Real growth
GENCOR'S BUSINESS	Starting or acquiring major business ventures, and Accelerating the development of our existing businesses.
GENCOR'S GOALS	To achieve <ul style="list-style-type: none">- the esteem of the communities in which we operate,- an identity of interest with our employees,- the admiration of our customers and suppliers, and- a higher than average return for our shareholders.

GENCOR'S STYLE

We encourage the creation and development of independent, entrepreneurial and participative managements to whom we delegate responsibility for their share of our mission.

The above formed the foundation of Buffels' mission statement which reads as follows:

BUFFELS' MISSION STATEMENT

"OUR PURPOSE

We are striving to be an organisation which has an outstanding productivity, human relations and safety record achieved through well trained and well motivated people.

We are committed to equality of opportunity, the development of all our people to their full potential and the support of our local industry and community with a view to the uplifting of living standards.

In pursuing our purpose we aim to ensure the continued economic viability of our company.

OUR GOALS

- To extract all available gold and associated minerals in the most economic method known to us.

- Achieve an employee productivity level that becomes a benchmark in the mining industry.
- Motivate all our employees in the Buffels family by promoting a feeling of belonging and striving for goals that are recognised as rewarding and worthwhile.
- To actively pursue participative management.

OUR VALUES

- These goals will be achieved without sacrificing safety and environmental standards.
- Developing a feeling of trust and respect for the individual amongst all who work on Buffels.

ANNEXURE B

BUFFELSFONTEIN GOLD MINING COMPANY LIMITED

VALUE CIRCLE QUESTIONNAIRE

Dear Participant,

The management of Buffels values the opinions of all the employees on the mine. This is made possible through your honesty and willingness to give your opinion. One way in which you can give your opinion is by completing questionnaires such as this one.

This questionnaire will not only serve to assist the management of this mine in making better decisions regarding Value Circles, but will also assist me in obtaining my Masters Degree in Business Administration of which this forms part.

Please complete this questionnaire as honestly and completely as possible. You do not have to give your name which means that you remain anonymous and can therefore be honest when answering the questions.

PLEASE COMPLETE THIS QUESTIONNAIRE, PLACE IT IN AN ENVELOPE AND SEND IT TO:

HENNY DE WAARDT
TRAINING CENTRE

Thank you for your help.

HENNY DE WAARDT

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(1 - 3)

DEPARTMENT: (4-5)	SHAFT: (6)	JOBTITLE: (7)
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MAKE A TICK IN THE SPACE NEXT TO YOUR ANSWER:

AGE: (YEARS)	(8)	JOB LEVEL:	(9)	SERVICE: (YEARS)	(10)
LESS THAN 20		B-LEVEL		LESS THAN 5	
20 TO 29		C-LOWER		5 TO 9	
30 TO 39		C-UPPER		10 TO 14	
40 TO 49		D-LOWER		15 TO 19	
50 TO 59		D-UPPER		20 TO 25	
OVER 60		E-LOWER		OVER 25	

ANSWER THE FOLLOWING QUESTIONS ABOUT YOURSELF BY TICKING "YES" OR "NO":

	YES	NO	
1. I have attended a Value Circle.			(11)
2. I think workers should have more say in job matters that concern them.			(12)
3. I believe individuals make better decisions than groups of people.			(13)
4. I believe that Value Circles have saved the mine money.			(14)
5. I believe management should keep Value Circles alive.			(15)
6. I believe Value Circles have other benefits beside cost savings and increased profits.			(16)
7. I prefer to work in a group rather than by myself.			(17)
8. I believe Value Circles can be used everywhere on the mine.			(18)
9. I believe that in some cases I can make better decisions than my leader because I have more experience.			(19)
10. I believe most Value Circles can be concluded in one day			(20)

PLEASE TURN OVER

ANSWER THE FOLLOWING QUESTIONS ABOUT YOURSELF BY TICKING "YES" OR "NO":

	YES	NO	
11. I believe that management only use Value Circles to get people to do something they otherwise would not do.			(21)
12. I believe Value Circles cost the mine too much.			(22)
13. I believe that if more people become involved with a problem, the problem becomes more complicated and unsolvable.			(23)
14. I believe every individual is entitled to his own opinion with regards to problems at work.			(24)
15. Do you know what a Value Circle is?			(25)
16. Do we still need Value Circles if we have Green Areas, Works Councils, Isibondas, etc.?			(26)

CHOOSE ONE STATEMENT WHICH YOU FIND AS IDEAL FOR AN ORGANISATION STRUCTURE ...

1. An organisation structure where strong members surround weaker ones for protection.		(27)
2. A family type structure led by a fatherly leader who listens to my problems.		
3. A strong and powerful leader where my strength and actions determines my position in the organisation.		
4. A regulated structure that has clear rules and operating procedures.		
5. A structure where the person with authority negotiates the decisions with workers.		
6. A structure which has little concern for status, and groups make decisions through agreement after consulting people involved.		
7. A structure formed according to the task at hand where the most competent person makes the decision.		
8. Any other structure not mentioned above.		

THANK YOU FOR YOUR HELP!!!!!!

A N N E X U R E C

CASE STUDY

A CASE STUDY

1 INTRODUCTION

An indication of the financial benefits of Value Circles for Buffels would seem to be imperative for this study. Several factors exist that prohibits the author from a complete financial analysis. For instance, some Value Circles are held to specifically address problems or objectives concerning the intangible resources of the company such as culture, motivation and organisational development. Value Circles, in this regard, can only indirectly be measured i.e. assuming that it was Value Circles that has had an effect on the financial statements of Buffels.

A complete study on the financial evaluation of Value Circles on Buffels is therefore too comprehensive for a study such as this and should rather be done as an independent study. A need does, however, exist to provide some indication of the possible financial benefits of Value Circles for Buffels. This will be done by means of a case study of a Value Circle held during the beginning of 1990 where relatively accurate records were kept of a venture involving a Value Circle.

2 BACKGROUND

The case study to be discussed involves the use of winches in the underground mining production situation. Winches are used extensively in the production process, inter alia for the transport of materials such as packs used for support and to scrape the mined ore from the place of work to the gullies to be taken to surface for further processing.

It was brought to the management of Buffels's attention that the repair of damaged winches contributed substantially to the costs of Buffels and it was suggested that a Value Circle be held to determine if anything could be done to alleviate the situation.

To place the problem in perspective, the average annual costs of repairing damages to winches were R4 104 per month.

3 THE VALUE CIRCLE

A Value Circle was held involving employees from the Mining, Engineering, Manpower and Training Departments. The proposals to management resulting from the Value

Circle were twofold. Firstly, on the physical side, a "casing" was recommended in which to transport the winches. Secondly, training was recommended for all employees involved with the moving of winches. The Value Circle also specified the contents of the training programme to be presented to all employees involved with the moving of winches.

4 RESULTS

As stated above, the costs of repairing damages to winches before the findings of the Value Circle were implemented was R4 104 per month per shaft. The cost of the needs analysis, with the greatest proportion being the cost of the Value Circle, was R6 178 and the development of the training course was R10 315. Finally, the actual training course presentation cost was R5 180. The total expenditure amounted to R21 673 of which the Value Circle process were less than R6 178.

The average costs of repairs to damaged winches after the Value Circle and the implementation of the training course dropped from the abovementioned R4 104 per month to R1 400 per month. Projected over twelve months this amounts to a saving of R32 448 per annum for one shaft and R97 344 per annum for the whole mine, i.e. for the three operating shafts.

The return on investment, expressed in this regard as the difference between the savings and expenditure as a percentage of the expenditure can be described as follows:

$$\begin{aligned} \text{R.O.I.} &= (\text{SAVINGS} - \text{EXPENDITURE}) / \text{EXPENDITURE} \times 100\% \\ &= (\text{R97 344} - \text{R21 673}) / \text{R21 673} \times 100\% \\ &= 350\% \end{aligned}$$

In layman's terms, this implies that for this specific venture, every one Rand that was spent, R3-50 was generated in return.

5 CONCLUSION

Although not all Value Circles generates such high returns, the case study indicates that Value Circles have the potential to contribute to curb the ever escalating cost spiral which plagues the Gold Mining Industry.

A formal study is, however, recommended to determine the financial feasibility of Value Circles on Buffels together with possible contributions it could make to the "bottom line" of Buffels.

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