CHAPTER FIVE

EMPIRICAL FINDINGS: BIOGRAPHICAL INFORMATION, COMPANY PROCEDURES AND POLICIES AND WORKPLACE OPPORTUNITIES

5.1 INTRODUCTION

The preceding chapters (chapters Two–Four) provided the theoretical background to the study. Chapter Two presented a theoretical framework of gender and gender inequality and discussed several feminist approaches to the origins of gender inequalities. Different issues regarding women and work were highlighted and a contextualisation of 'gender inequality' and 'women and work' in South Africa was done. Chapter Three provided the legislative framework for the transformation of South Africa's labour force, with specific reference to the mining sector. Chapter Four presented an extensive review of literature available on women in mining, globally as well as nationally. The theoretical approaches and perspectives provided in these chapters enabled the researcher to gain a deep understanding of variables that impact on women in the world of work in general and in the mining sector specifically.

The following three chapters present the empirical findings of the research. The research methodology followed had been thoroughly explained and discussed in Chapter One under 1.6. Qualitative and quantitative data are presented in an integrated way, according to relevant thematic issues. Qualitatively, views of research subjects in personal interviews, focus group discussions and direct observations are reflected. The quantitative data mirror the responses obtained from the analysed questionnaires and are presented in frequency tables, graphs and diagrams.

The frequency analysis for each section is reported on per statement as a percentage and the following ranking for scores was used:

1 Not at all/Strongly disagree

2 Seldom/Disagree

3 Partially/Agree

4 Completely/Strongly agree

Descriptive statistics were reported per statement as mean and standard deviation. The benchmark (ideal) in terms of responses for every statement would be 4, which indicates that compliance with the specific statement is satisfactory, except for a small number of reversed statements. Ratings of 2.5 and lower were regarded as 'low' and indicate that compliance with the specific statement is none or very limited. The opposite is applicable for reversed statements; a statement with a mean above 2.5 could point towards a problem area.

An exploratory factor analysis was conducted on each section of the questionnaire to identify the structure and factors of each construct (section) and through this process the structural validity of the survey was also determined. The following values were measured and the results are reported as part of the factor analysis:

- The KMO measure of sampling adequacy
- The p-value of Bartlett's test of sphericity
- Pattern matrices
- The percentage of variance (eigenvalues)
- Communalities
- Cronbach's alpha coefficients
- Factor means
- Effect sizes.

This chapter provides the biographical information of participants obtained from quantitative and qualitative data. Furthermore, the first two main themes as identified through the literature review, namely *Company procedures and policies* and *Workplace opportunities*, are placed under the magnifying lens. Attention is given to employee benefits provided by mining companies as well as company policies. Workplace opportunities for women employed in core mining positions are also investigated and analysed.

5.2 BIOGRAPHICAL INFORMATION

The following section presents the biographical information of the participants obtained from qualitative and quantitative data.

5.2.1 Qualitative data

In total, 12 individual interviews and 19 focus group discussions (69 participants) were conducted (see tables 5.1a–5.1c). The selected participants varied from various categories of employment and mining disciplines, such as management, geologists, engineers, electricians, operators, battery attendants and mining services employees. The following tables reflect the gender and job specification of participants obtained from qualitative data (information gathered from individual interviews and focus group discussions). Despite numerous attempts of the researcher to schedule interviews and focus groups discussions with management participants of the platinum mine, none were realised. This could be due to the difficulties and labour unrest that the platinum mine experienced during the period 2011–2012. In some instances, the researcher made use of the content of the Sustainable Development Report (2012)[3] published by the mine to overcome this problem. Although the researcher was not able to conduct interviews and focus group discussions with management, successful focus group discussions were conducted with male and female employees working in core mining activities of the platinum mine (see Table 5.1 (c)).

Table 5.1 (a): Individual interviews and focus group discussions conducted at the copper mine

Individual interviews	Job specification	Gender
	Manager: Employee relations	Male
	Employment equity coordinator	Male
	Ventilation technician (Underground)	Female
	Instrument technician (Underground)	Female
	Instrument technician (Underground)	Male
	Instrument technician (Underground)	Male
	Development dispatch (Underground)	Female
	Fitter and turner (Concentrator)	Female
	Electrical superintendent (Concentrator)	Female
	Reverb operator (Smelter)	Female

[3] The source is not fully referenced in order to protect the anonymity of the mining company.

Individual interviews	Job specification	Gender
	Electrician (Smelter)	Female
	Superintendent internal audit (Administration)	Female
	Medical doctor	Female
	Chair person (Women in Mining Forum)	Female
Focus group discussions	**Job specification**	**Gender**
Focus group 1	Senior geologists (Underground) Strata control officers (Underground)	Female
Focus group 2	Dump truck operators (Surface Mining) Multi-skill operators (Surface Mining) Laboratory assistants (Surface Mining) Laboratory supervisors (Surface Mining)	Female
Focus group 3	Engineers in training (Refinery) Operators (Refinery) Nickel & dispatch superintendent (Refinery)	Female
Focus group 4	Women in Mining forum (Meeting)	Female
Focus group 5	Human resource officers	Male
Focus group 6	Supervisors (Underground) Supervisors (Refinery)	Male

Source: Constructed by author (2013)

Table 5.1 (b): Individual interviews and focus group discussions conducted at the phosphate mine

Individual interviews	Job specification	Gender
	Senior manager: Production	Female
	Production superintendent	Male
Focus group discussions	**Job specification**	**Gender**
Focus group 1	Finance manager (Male) Procurement manager (Female) Human resource manager (Female) Group human capital manager (Male)	Female/Male
Focus group 2	Plant operators	Male
Focus group 3	Attendants flotation Laboratory attendants	Male
Focus group 4	Operators operations Attendant sample preparer Lab attendants Attendants bush pumps & fitters	Female

Source: Constructed by author (2013)

Table 5.1 (c): Focus group discussions conducted at the platinum mine

Focus group discussions	Job specification	Gender
Shaft A	General workers (Underground) Loco – operator (Underground)	Female
Shaft A	Team leader: Haulage maintenance (Underground) Production supervisor (Underground) Construction gang: Supervisor (Underground) Rail maintenance (Underground) General: Haulage maintenance (Underground)	Male

Focus group discussions	Job specification	Gender
Shaft B	Learner rock breakers (Underground) Team workers (Underground) Production clerk (Underground)	Female
Shaft B	Mining clerks (Surface) Team leaders (Underground) Electrical assistants (Underground)	Male
Shaft C	Haulage maintenance crew (Underground) Loco – operators (Underground) Production crew (Underground)	Female
Shaft D	Electrical foremen Storemen	Male
Shaft D	Diesel bay attendants Dozer operators Pecker operators	Female
Shaft E	Service crew Winch operators Development crew	Male
Shaft E	Service crew Cleaners (formerly employed underground but was injured, now working on surface) Belt attendants Rigger artisans	Female

Source: Constructed by author (2013)

5.2.2 Quantitative data

As indicated in Chapter One under 1.6.2, research was conducted at the following three mines: a copper mine (underground), a phosphate mine (open-cast) and a platinum mine (underground),. In total, 156 responses were received. The study population consisted of an availability sample of management as well as male and female employees working in core mining activities of the three mines (see Chapter One under 1.6.3). Figure 5.1 reflects the participant breakdown in terms of the mining commodities and Table 5.2 indicates the distribution and response count per mine.

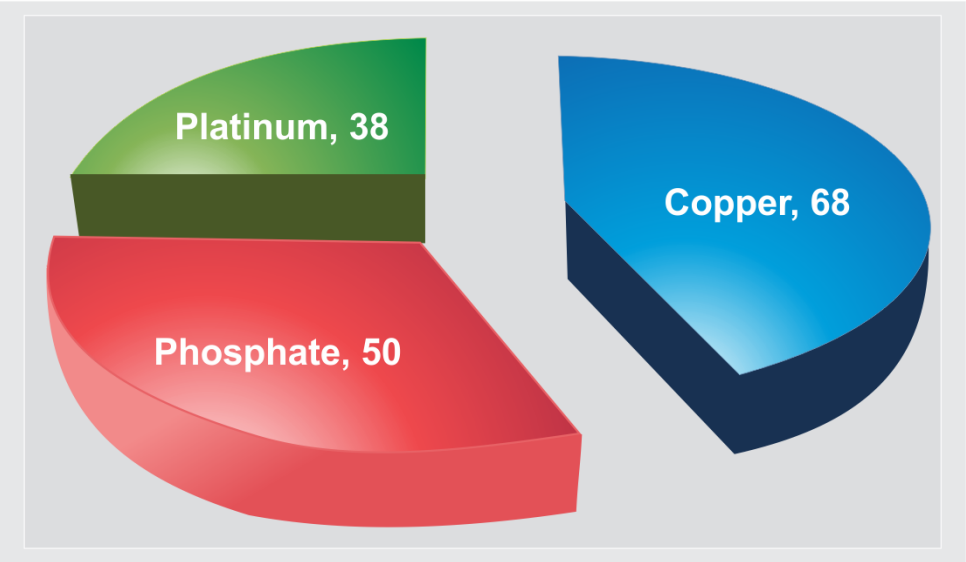


Figure 5.1: Participant breakdown in terms of mine commodities (N=156)

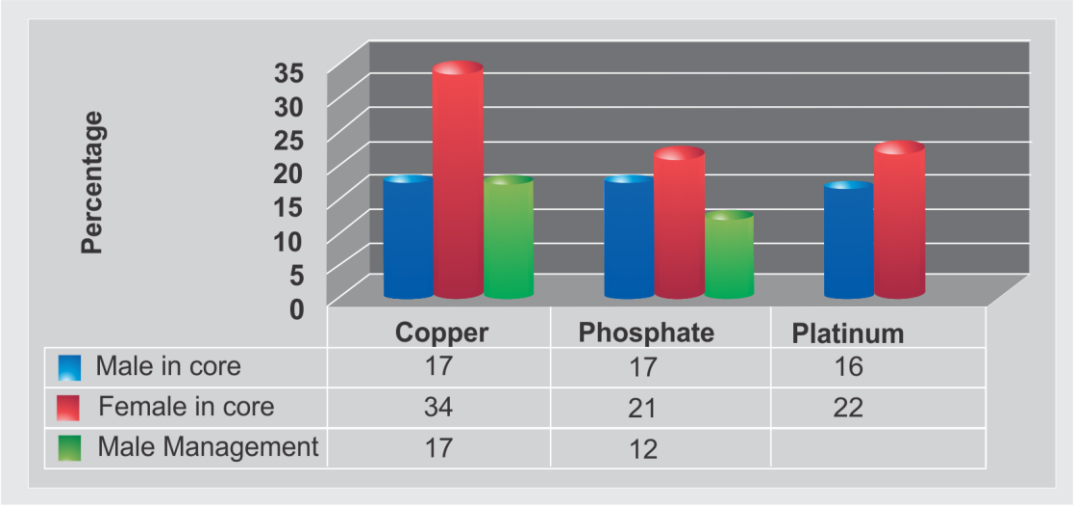
Source: Constructed by author (2013)

Table 5.2: Distribution and response count per mine

Mine commodity	Management		Female employees working in core mining activities		Male employees working in core mining activities		Total distribution count	Total response count
	Distribution count	Response count	Distribution count	Response count	Distribution count	Response count		
Copper mine	30	17	60	34	60	17	150	68
Phosphate mine	30	12	50	21	50	17	130	50
Platinum mine	40	0	180 (15 x 12 shafts)	22	180 (15 x 12 shafts)	16	400	38
Total participants	100	29	290	77	290	50	680	156

Source: Constructed by author (2013)

Questionnaires were distributed to the following three different target groups at each mine: male and female employees working in core mining activities (for example mining, metallurgy and engineering) and employees fulfilling management positions. These three categories serve throughout the study as independent variables and from these three categories associations were examined with other relevant dependent variables. Figure 5.2 reflects the participant breakdown in terms of the different target groups per mining commodity. In total, responses were received from 50 male participants working in core mining activities, 77 female participants working in core mining activities and 29 participants fulfilling management positions, as indicated in Table 5.2. Despite numerous attempts from the researcher, no responses were received from the management target group of the platinum mine. Therefore, data analysis and discussions regarding the management target group are only based on responses of the phosphate and copper mines.



	Copper	Phosphate	Platinum
Male in core	17	17	16
Female in core	34	21	22
Male Management	17	12	

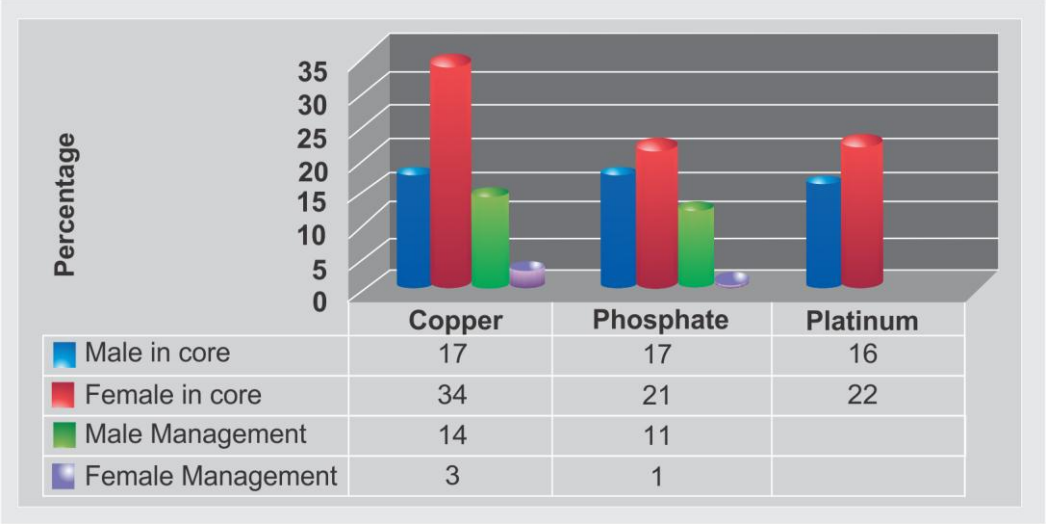
Figure 5.2: Participant breakdown in terms of the different target groups per mining commodity

Source: Constructed by author (2013)

5.2.2.1 Gender

Figure 5.3 reflects the breakdown of participants according to gender. The majority of the participants (77) were from the target group female employees working in core mining activities – the main focus of the study. Only a few responses (four participants) were

obtained from female participants in management positions. The majority of participants in management positions (25) were male.



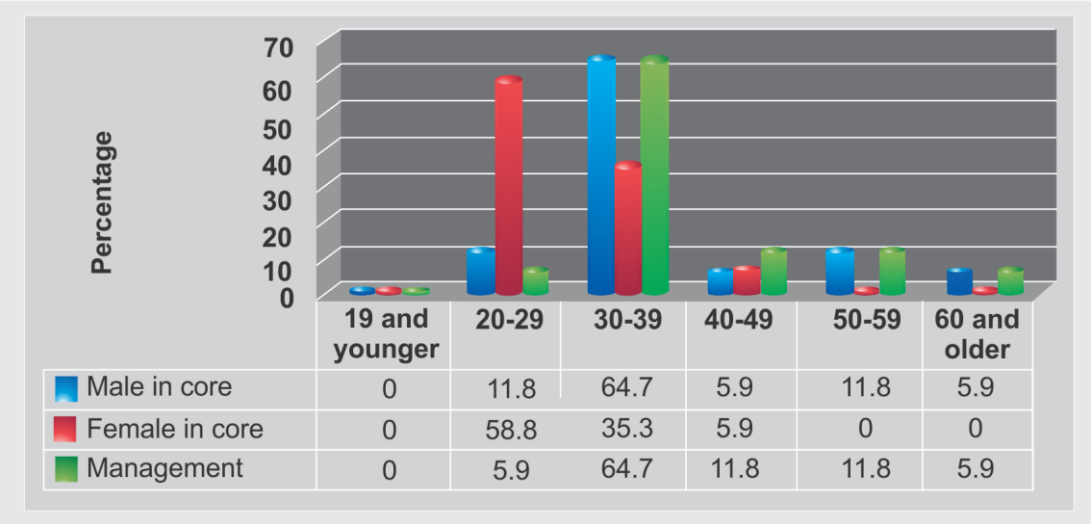
	Copper	Phosphate	Platinum
Male in core	17	17	16
Female in core	34	21	22
Male Management	14	11	
Female Management	3	1	

Figure 5.3: Gender distribution of research participants

Source: Constructed by author (2013)

5.2.2.2 Age

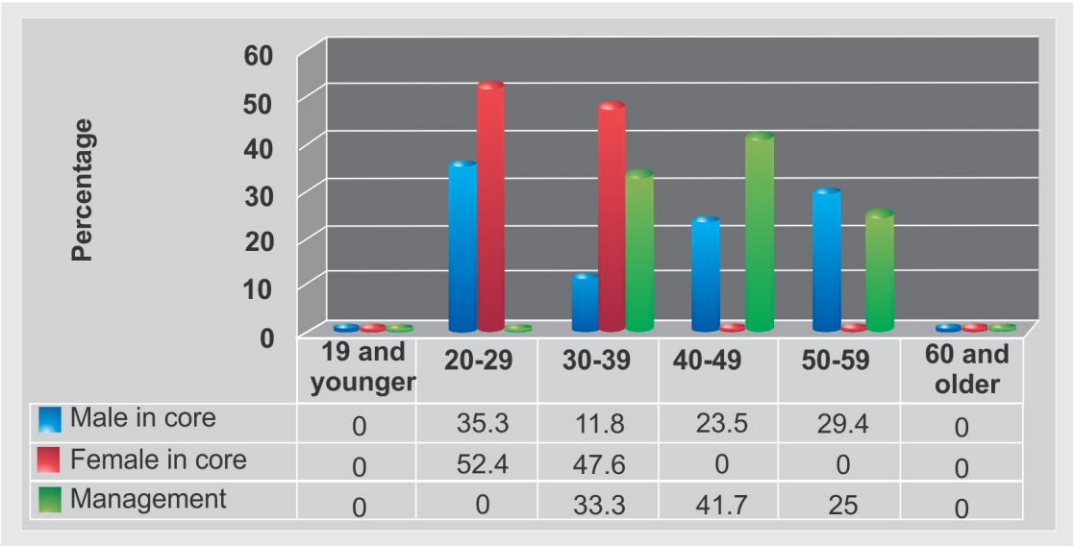
It is clear from the figures below that the majority of the female participants working in core mining activities across all three mines were from the age categories 20–29 and 30–39 (copper mine: 94.1%; phosphate mine: 100%; platinum mine: 86.3%). A large number of the male participants working in core mining activities of the copper mine (76.5%) as well as the platinum mine (75.1%) were from the age categories 20–29 and 30–39, while male participants working in core mining activities of the phosphate mine were mainly spread between the age categories 20–29 (35.3%), 40–49 (23.5%) and 50–59 (29.4%). Close to two-thirds of the participants (64.7%) of the management target group from the copper mine were relatively young and were from the age category 30–39. Management participants of the phosphate mine were mainly spread between the age categories 30–39 (33.3%), 40–49 (41.7%) and 50–59 (25%).



	19 and younger	20-29	30-39	40-49	50-59	60 and older
Male in core	0	11.8	64.7	5.9	11.8	5.9
Female in core	0	58.8	35.3	5.9	0	0
Management	0	5.9	64.7	11.8	11.8	5.9

Figure 5.4 (a): Age distribution of research participants – copper mine

Source: Constructed by author (2013)



	19 and younger	20-29	30-39	40-49	50-59	60 and older
Male in core	0	35.3	11.8	23.5	29.4	0
Female in core	0	52.4	47.6	0	0	0
Management	0	0	33.3	41.7	25	0

Figure 5.4 (b): Age distribution of research participants – phosphate mine

Source: Constructed by author (2013)

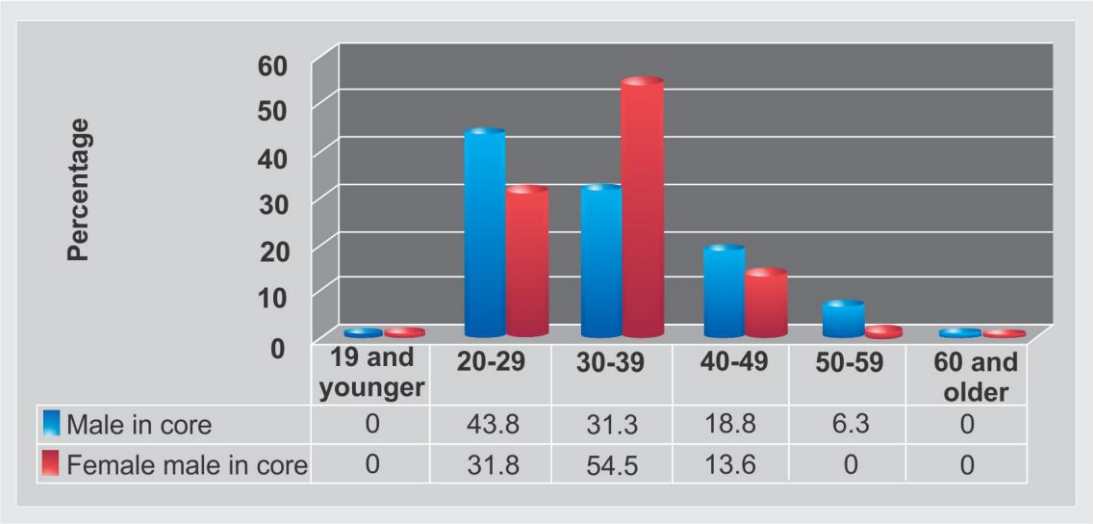


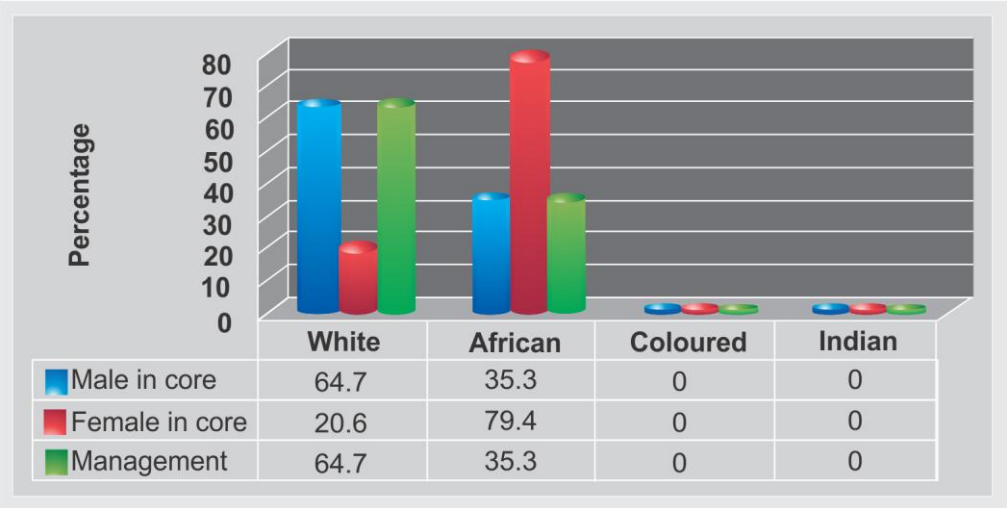
Figure 5.4 (c): Age distribution of research participants – platinum mine

Source: Constructed by author (2013)

5.2.2.3 Race

As indicated in the figures below, the vast majority of the female participants working in core mining activities across all three mines belong to the African[4] category (copper mine: 79.4%; phosphate mine: 95.2%; platinum mine: 86.4%). The remaining female participants are white. A vast majority of the male participants working in core mining activities of the phosphate (94.1%) and platinum mine (87.5%) are Africans, while the majority of the male participants of the copper mine (64.7%) in core mine activities are white. Management participants of the copper (64.7%) and phosphate (50%) mines belong largely to the white category.

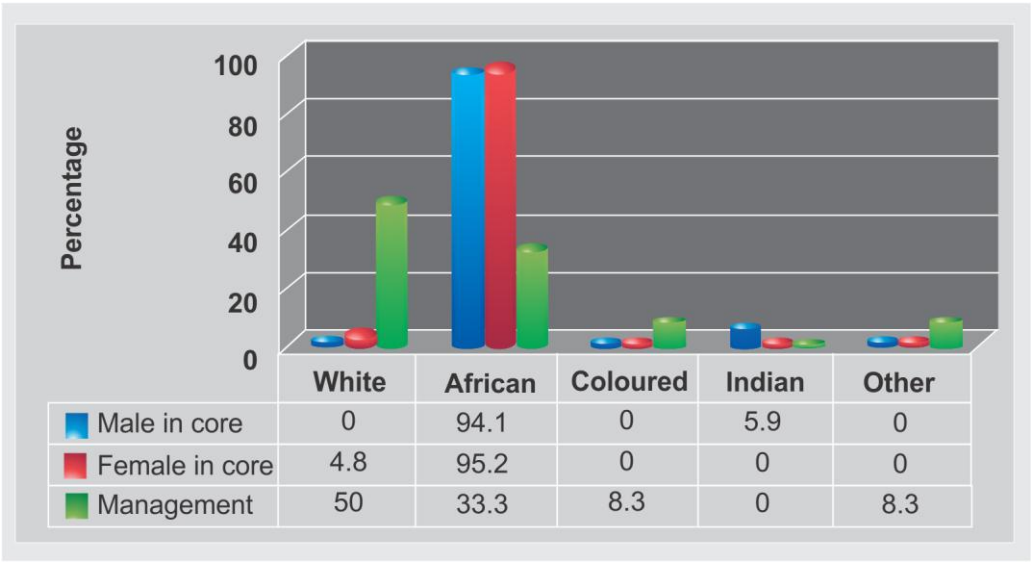
[4] African refer to black citizens of any African country.



	White	African	Coloured	Indian
Male in core	64.7	35.3	0	0
Female in core	20.6	79.4	0	0
Management	64.7	35.3	0	0

Figure 5.5 (a): Distribution of research participants by race – copper mine

Source: Constructed by author (2013)



	White	African	Coloured	Indian	Other
Male in core	0	94.1	0	5.9	0
Female in core	4.8	95.2	0	0	0
Management	50	33.3	8.3	0	8.3

Figure 5.5 (b): Distribution of research participants by race – phosphate mine

Source: Constructed by author (2013)

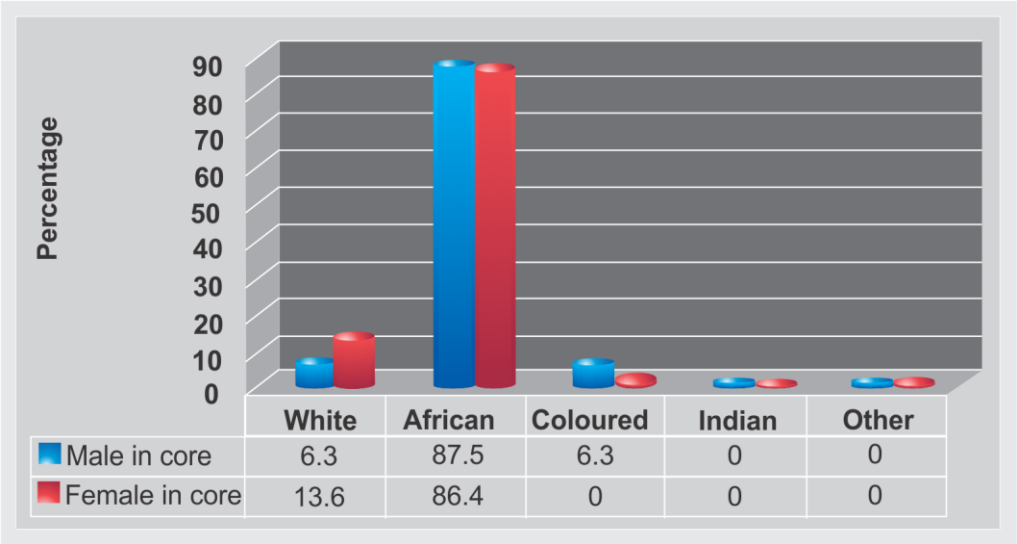
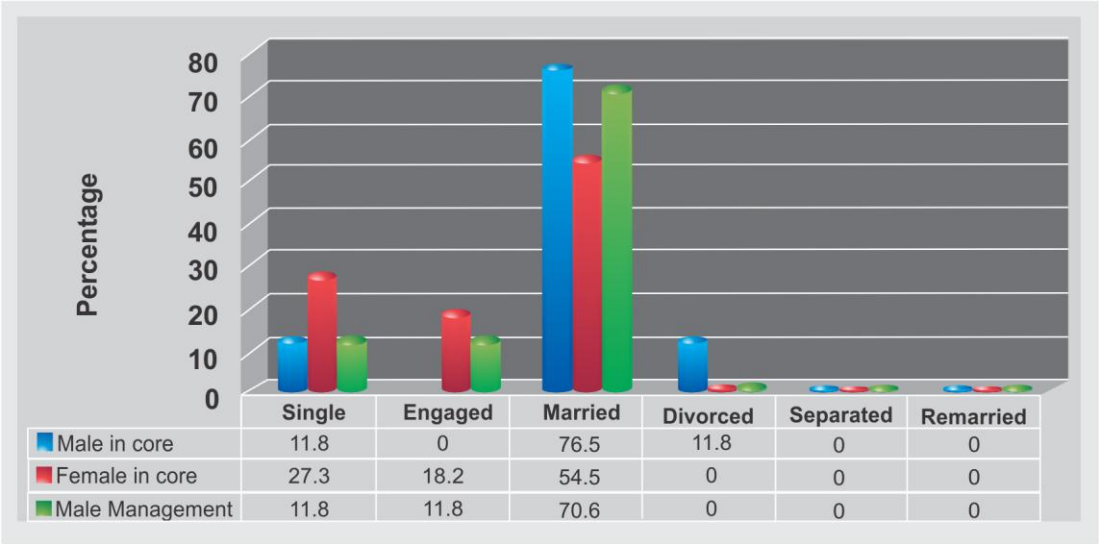


Figure 5.5 (c): Distribution of research participants by race – platinum mine

Source: Constructed by author (2013)

5.2.2.4 Marital status

From the figures below it is evident that the majority of the female participants working in core mining activities of the phosphate mine (65%) as well as a meaningful percentage of the female participants of the platinum mine (45.5%) have a single status. More than half of the female participants working in core mining activities of the copper mine (54.5%) are married. The majority of the male participants working in core mining activities across all three mines are married (copper mine: 76.5%; phosphate mine: 64.7%; platinum mine: 43.8%). An overwhelming majority of the participants from the management target group have a married status (copper mine: 70.6%; phosphate mine: 83.3%).



	Single	Engaged	Married	Divorced	Separated	Remarried
Male in core	11.8	0	76.5	11.8	0	0
Female in core	27.3	18.2	54.5	0	0	0
Male Management	11.8	11.8	70.6	0	0	0

Figure 5.6 (a): Marital status of research participants – copper mine

Source: Constructed by author (2013)

	Single	Engaged	Married	Divorced	Separated	Remarried
Male in core	23.5	5.9	64.7	5.9	0	0
Female in core	65	15	20	0	0	0
Management	0	8.3	83.3	0	0	8.3

Figure 5.6 (b): Marital status of research participants – phosphate mine

Source: Constructed by author (2013)

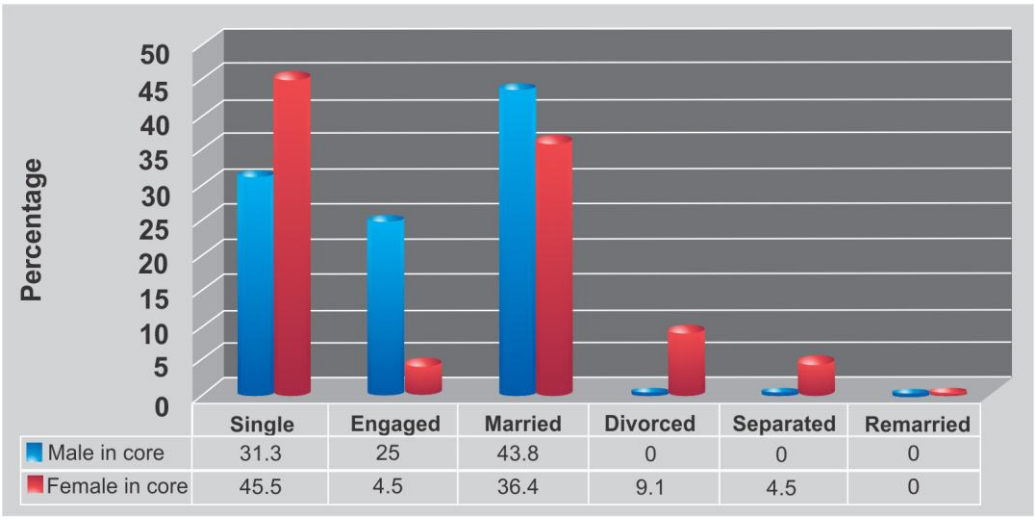


Figure 5.6 (c): Marital status of research participants – platinum mine

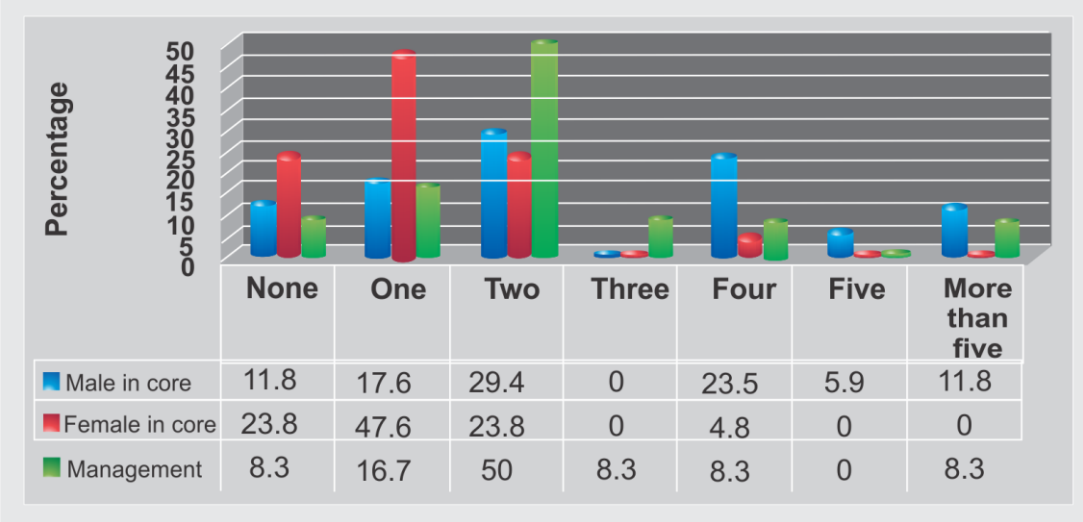
Source: Constructed by author (2013)

5.2.2.6 Children

The majority of the female participants working in core mining activities across all three mines indicated that they have one or two children (copper mine: 53%; phosphate mine: 71.4%; platinum mine: 72.7%). Only a few female participants working in core mining activities across all three mines do not have any children (copper mine: 32.4%; phosphate mine: 23.8%; platinum mine: 18.2%). The majority of the male participants working in core mining activities as well as participants from the management target group indicated that they have children, as detailed in the figures below.

Figure 5.7 (a): Child status of research participants – copper mine

Source: Constructed by author (2013)



	None	One	Two	Three	Four	Five	More than five
Male in core	11.8	17.6	29.4	0	23.5	5.9	11.8
Female in core	23.8	47.6	23.8	0	4.8	0	0
Management	8.3	16.7	50	8.3	8.3	0	8.3

Figure 5.7 (b): Child status of research participants – phosphate mine

Source: Constructed by author (2013)

	None	One	Two	Three	Four	Five	More than five
Male in core	12,5	37.5	25	18.8	0	6.3	0
Female in core	18.2	31.8	40.9	4.5	4.5	0	0

Figure 5.7 (c): Child status of research participants – platinum mine

Source: Constructed by author (2013)

5.2.2.7 Home language

The figures below indicate the home language spoken by the participants. It is evident that each of the mines included in the study have a largely diversified workforce in terms of racial and cultural background.

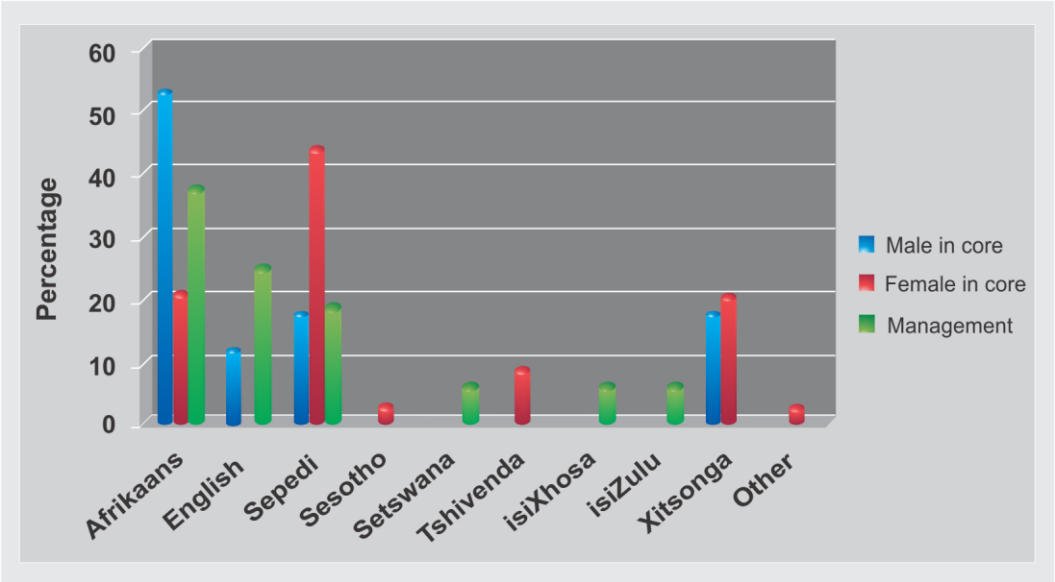


Figure 5.8 (a): Home language spoken by research participants – copper mine

Source: Constructed by author (2013)

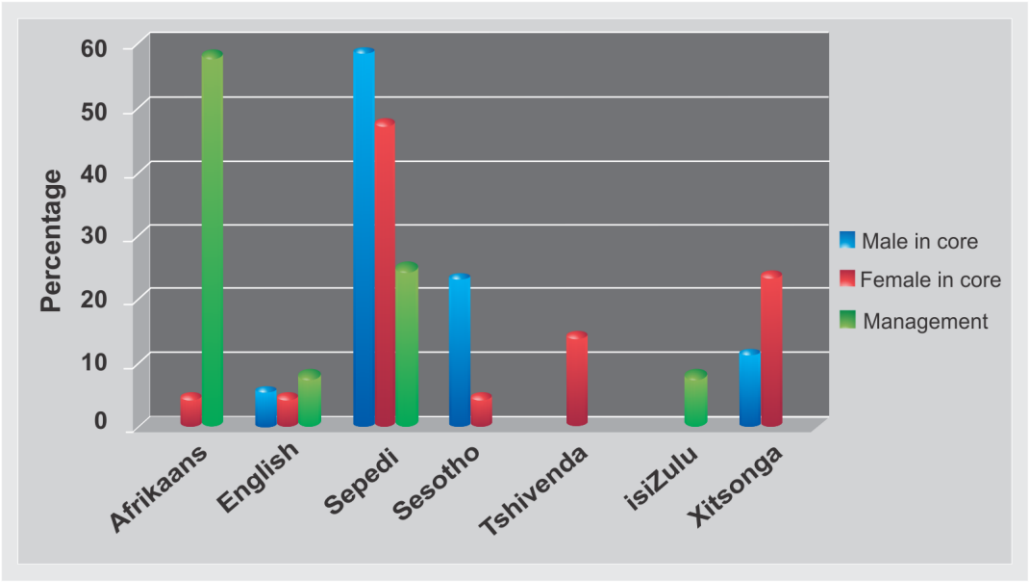


Figure 5.8 (b): Home language spoken by research participants – phosphate mine

Source: Constructed by author (2013)

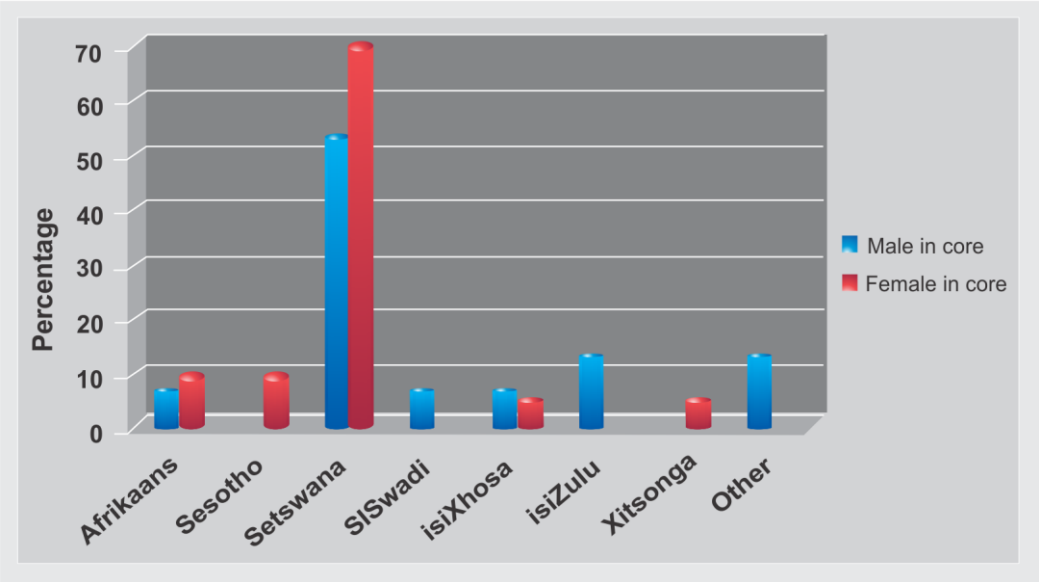
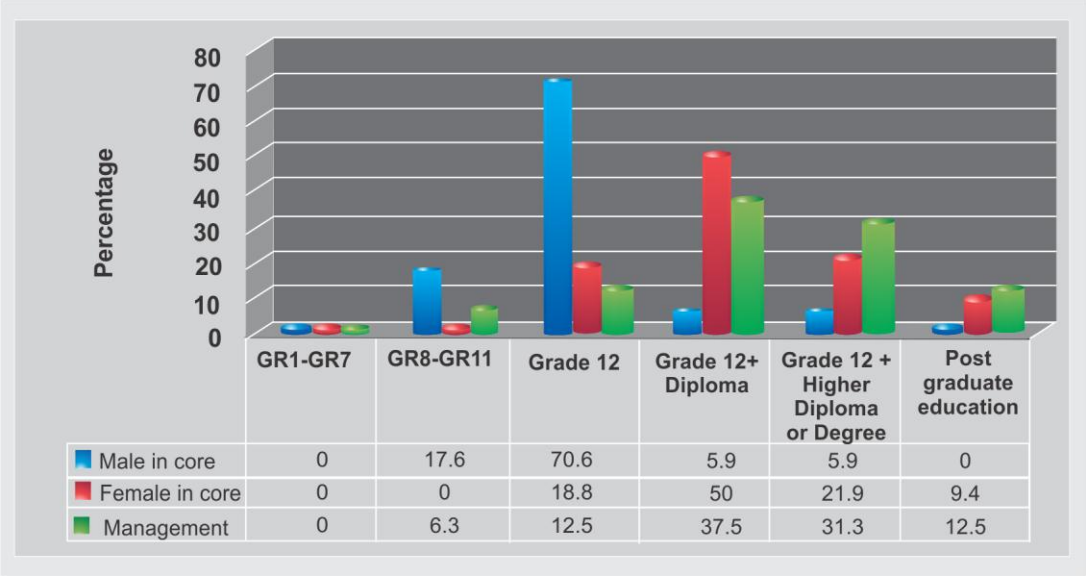


Figure 5.8 (c): Home language spoken by research participants – platinum mine

Source: Constructed by author (2013)

5.2.2.8 Highest qualification

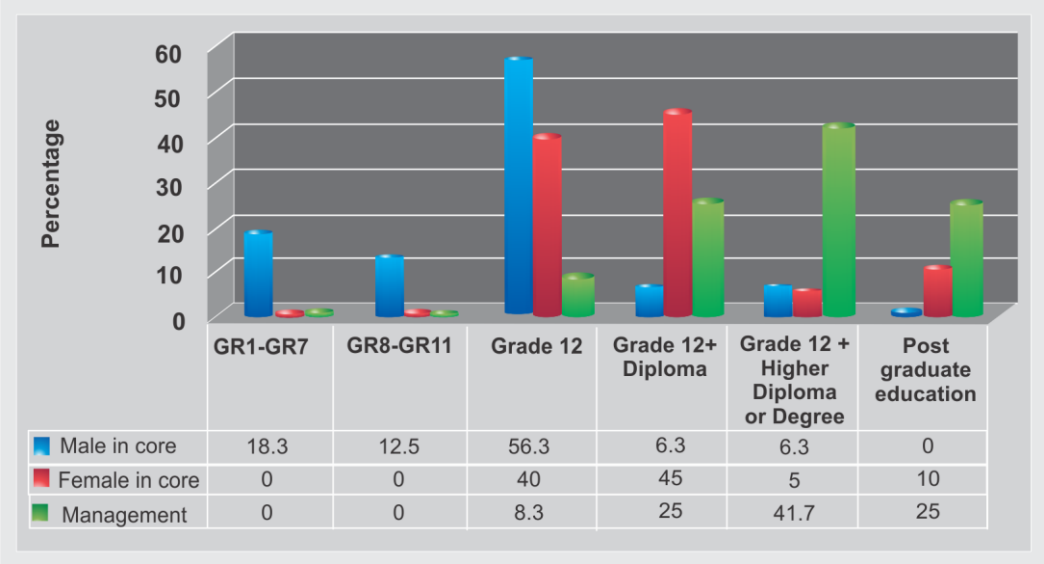
As reflected in the figures below, it is clear that a vast majority of the female participants working in core mining activities across all three mine have a Grade 12 qualification as well as a diploma (copper mine: 68.8%; phosphate mine: 85%; platinum mine: 85.7%). The majority of the male participants working in core mining activities of the copper (70.6%) and phosphate (56.3%) mines have a Grade 12 qualification. More than half of the male participants working in core mining activities of the platinum mine (81.3%) have a Grade 12 qualification as well as a diploma. More than four-fifths of the participants from the management target group have a qualification higher than Grade 12 (copper mine: 81.3%; phosphate mine: 91.7%).



	GR1-GR7	GR8-GR11	Grade 12	Grade 12+ Diploma	Grade 12 + Higher Diploma or Degree	Post graduate education
Male in core	0	17.6	70.6	5.9	5.9	0
Female in core	0	0	18.8	50	21.9	9.4
Management	0	6.3	12.5	37.5	31.3	12.5

Figure 5.9 (a): Qualification distribution of research participants – copper mine

Source: Constructed by author (2013)



	GR1-GR7	GR8-GR11	Grade 12	Grade 12+ Diploma	Grade 12 + Higher Diploma or Degree	Post graduate education
Male in core	18.3	12.5	56.3	6.3	6.3	0
Female in core	0	0	40	45	5	10
Management	0	0	8.3	25	41.7	25

Figure 5.9 (b): Qualification distribution of research participants – phosphate mine

Source: Constructed by author (2013)

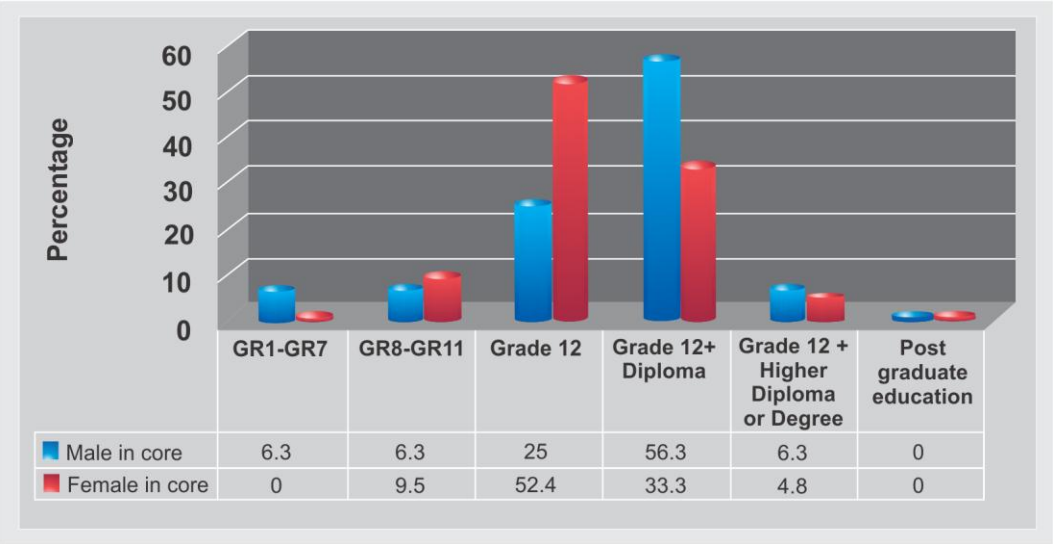


Figure 5.9 (c): Qualification distribution of research participants – platinum mine

Source: Constructed by author (2013)

5.2.2.9 Job specification

The following tables indicate the job specification of each participant. It is clear that the participants are fulfilling various positions within the core business of the mining industry. Due to the nature of the question (open-ended), many participants did not respond to this question.

Table 5.3 (a): Job specification of research participants – copper mine

Male in core		**Female in core**		**Management**	
Job specification	**No.**	**Job specification**	**No.**	**Job specification**	**No.**
Onsetter	2	Winder electrician	1	Supervisor: Underground	1
Boilermaker	2	Winding engine driver	1	Superintendent	3
Electrician	2	Hoist driver	1	292 Engineering	1
Ore-handling operator	1	Data clerk	1	Boilermaker	1
Fitter	2	Data capturer	1	Technician	1
Artisan	1	Scheduler	1	Fitter/Assessor	1
Maintenance scheduler	1	Contracts administrator	1	Supervisor	2

Male in core		Female in core		Management	
Job specification	**No.**	**Job specification**	**No.**	**Job specification**	**No.**
Planner	1	Senior geologist	1	Manager: Mining	1
Secondary equipment shift supervisor	1	Geologist	1	Manager: Technical	1
Operator	1	Superintendent	1	Mining specialist	1
Supervisor	4	Superintendent internal audit	1	Technical training officer	1
Acting supervisor	1	Instrumentation technician	1	Employment equity coordinator	1
		Operator	4		
		Crusher operator	1		
		Plant operator	1		
		Dump truck operator	1		
		Lab assistant	1		
		Electrician	3		
		Electrical apprentice	2		
		Mining engineer	1		
		Engineer in training	1		
		Ventilation officer	1		
		Fitter and turner	1		
		Fitter and turner apprentice	1		
		Public relations officer	1		
		Apprentice boilermaker	1		
		Training specialist	1		
		Nickel plant superintendent (Metallurgist)	1		

Source: Constructed by author (2013)

Table 5.3 (b): Job specification of research participants – phosphate mine

Male in core		Female in core		Management	
Job specification	**No.**	**Job specification**	**No.**	**Job specification**	**No.**
Driver haulpack	1	Locomotive driver	1	Manager: Safety, Health, Environment and Quality (SHEQ)	1
Shunter	1	Reclaimer attendant	1	Information resources manager	1
Stoker attendant	2	Storeman (lady)	1	Production manager	1
Reclaimer attendant	2	Attendant pumpstation	1	Senior manager: Technical support service	1
Production superintendent	1	Controller operator	1	Specialist: Remuneration and benefits	1
Driver and crusher operator	1	Operator	1	Vice-president: Mining	1
Dozer operator	1	Stoker attendant	1	Enterprises manager	1
Conveyor belt attendant	3	Super attendant tailings and rehabilitation	1	Senior manager: Production	1
Extra heavy truck driver	1	Dozer operator	1	Finance manager	1
Plant operator	1	Multi-skill operator	2	Manager	1
Chemist	1	Operator	1	Procurement manager	1
		Process controller	1		
		Conveyor belt attendant	5		
		Operator/driver	1		

Source: Constructed by author (2013)

Table 5.3 (c): Job specification of research participants – platinum mine

Male in core		Female in core	
Job specification	**No.**	**Job specification**	**No.**
Production manager	1	Diesel attendant	3
Bonus coordinator	1	Service crew member	1
Safety practitioner	1	General worker	2
Underground electrician	1	Mine captain	1
Mine overseer	1	Safety team leader	1
Safety officer	1	Winch operator	1
Electrician	1	Admin clerk	1
Construction helper	1	Human capital administrator	2
Research and development administrator	2	Mine overseer clerk	1
Technical evaluating administrator	1	Contractor fincance manager	1
General worker	1	Human capital administrator	1
Winch operator	1	Engineering clerk	1
Contractor	1	Human capital administrator	1
Engineering	1	Finance data-capture clerk	2
Lamp attendant	1		
Chairlift operator	1		
Evaluation clerk	1		

Source: Constructed by author (2013)

5.2.2.10 Occupational strata of management

The following figure indicates the occupational strata of the management target group. The management participants of the copper mine were mainly concentrated in middle (53.3%) and junior (46.7%) management positions, while the management participants of the phosphate mine were mainly spread over middle (45.5%) and senior (36.4%) management positions.

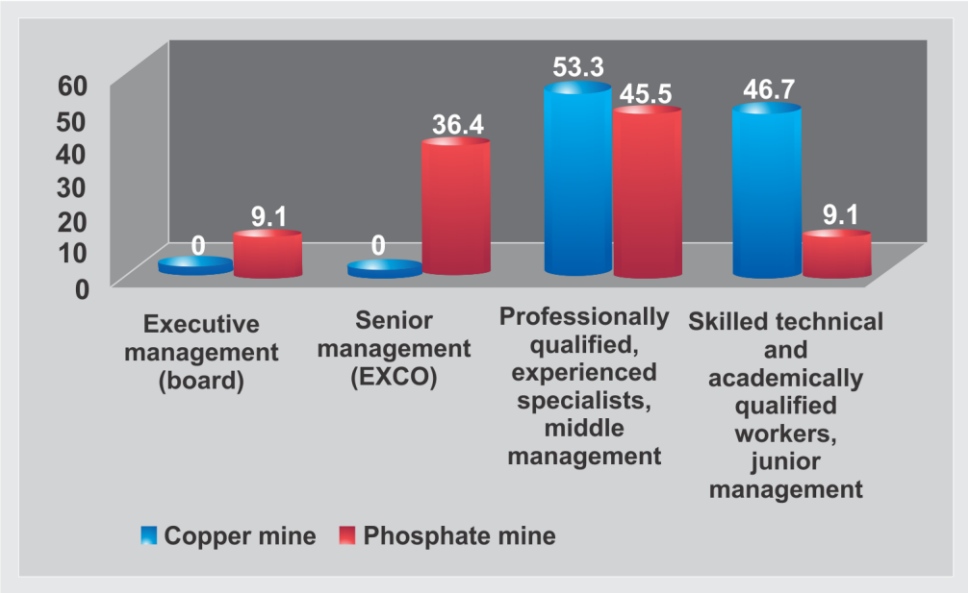


Figure 5.10: Occupational strata of management participants

Source: Constructed by author (2013)

5.2.2.11 Employment: Underground vs surface (all target groups)

Due to the nature of the copper and platinum mines, the participants of these targets groups are employed in positions underground as well as on the surface (see figures 5.11 (a) and (c)). The phosphate mine is an open-cast mine, therefore participants only work on the surface (see Figure 5.11 (b)).

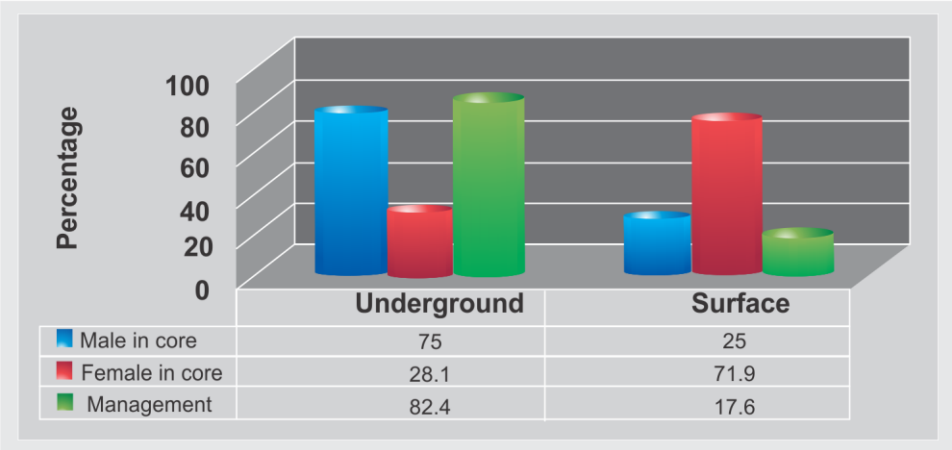


Figure 5.11 (a): Distribution or research participants according to employment underground or surface – copper mine

Source: Constructed by author (2013)

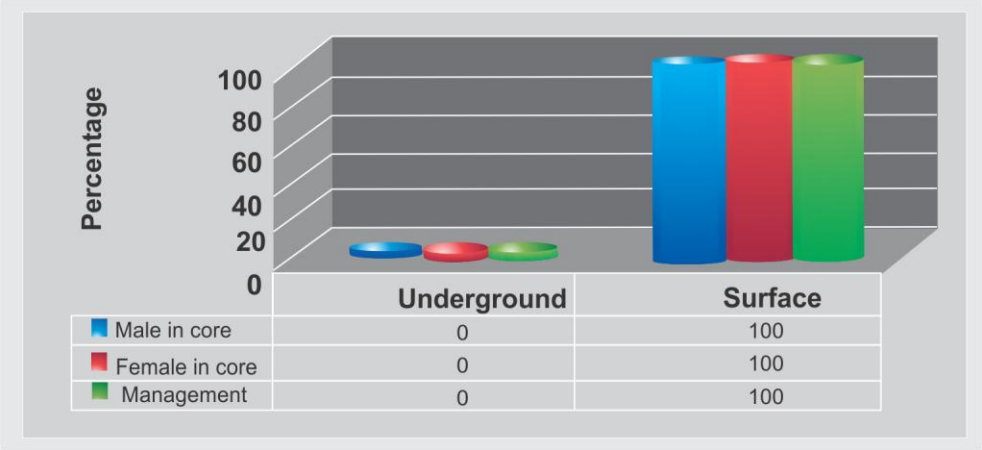


Figure 5.11 (b): Distribution or research participants according to employment underground or surface – phosphate mine

Source: Constructed by author (2013)

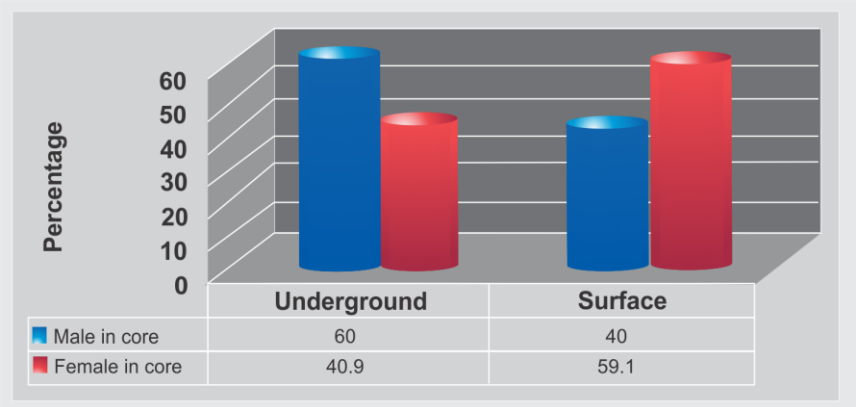


Figure 5.11 (c): Distribution or research participants according to employment underground or surface – platinum mine

Source: Constructed by author (2013)

5.2.2.12 Shift work

A vast majority of the women working in core mining activities of the phosphate mine (81%) indicated that they are required to work shifts, while the majority of the female participants working in core mining activities of the copper (64.7%) and platinum (66.7%) mines responded negatively to this question (see Figure 5.12). Employees work shifts on a rotational basis. Each shift (morning, afternoon and night) lasts for seven days. The

duration of the shifts is eight hours. The starting times of shifts for each mine differ, as reflected in Table 5.4. A detailed discussion of the impact of shift work on women working in core mining activities follows in Chapter Seven under 7.3.1.2.1.

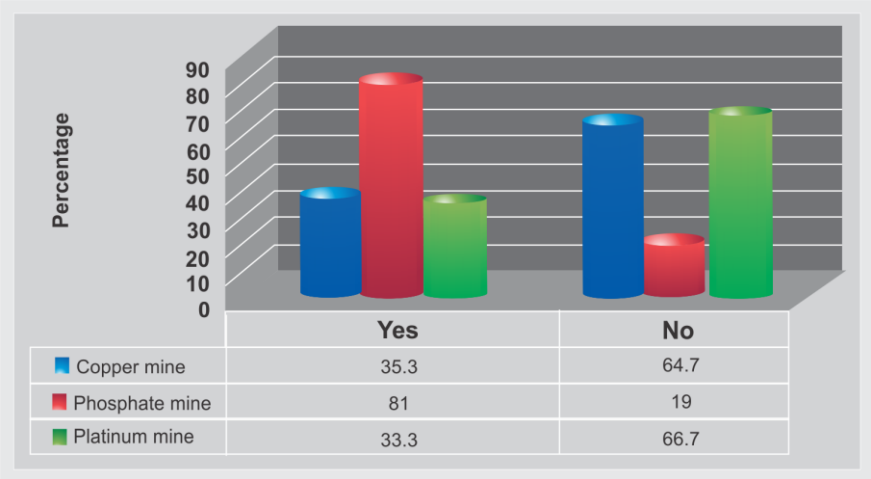


Figure 5.12: Women that are required to work shifts

Source: Constructed by author (2013)

Table 5.4: Duration of shifts by mine

Shift	Copper mine	Phosphate mine	Platinum mine
Morning	06:30–14:30	05:00–13:50	*8-hour shift
Afternoon	14:30–22:30	13:00–20:50	*8-hour shift
Night	22:30–06:30	21:00–04:50	*8-hour shift

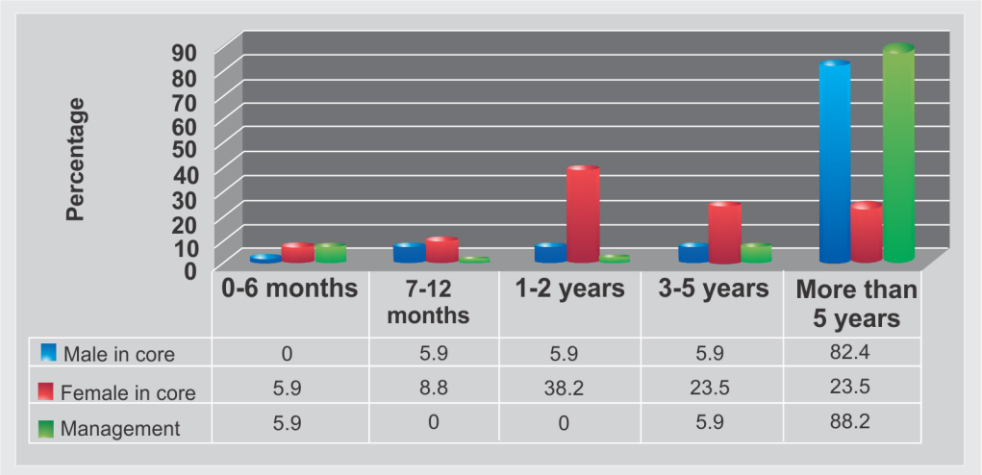
*The starting times of shifts for each shaft differ at the platinum mine.

Source: Constructed by author (2013)

5.2.2.13 Period employed in the mining environment

The figures below highlight the period for which participants are employed in the respective mines. The majority of the women working in core mining activities across all three mines were employed for a period of between one and five years (copper mine:

61.7%; phosphate mine: 71.4%; platinum mine: 54.6%). Only a few women working in core mining activities were employed for longer than five years (copper mine: 23.5%; phosphate mine: 4.8%; platinum mine: 22.7%). The majority of the male participants working in core mining activities across all three mines were employed for a period of longer than three years (copper mine: 88.3%; phosphate mine: 64.7%; platinum mine: 80%). Four-fifths of the participants from the management target group were employed for a period of longer than five years (copper mine: 88.2%; phosphate mine: 83.3%). As discussed in Chapter Four under 4.4.6.2, mining companies face numerous challenges in retaining women employed in the core business of the mine; it could thus be an explanation for why the majority of the participants in this research indicated that they were employed for a period of between one and five years. Furthermore, the participation of women in core mining activities was enforced only as from 2009, and could also be an explanation for why a limited number of the female participants indicated that they are employed for a period of longer than five years.



	0-6 months	7-12 months	1-2 years	3-5 years	More than 5 years
Male in core	0	5.9	5.9	5.9	82.4
Female in core	5.9	8.8	38.2	23.5	23.5
Management	5.9	0	0	5.9	88.2

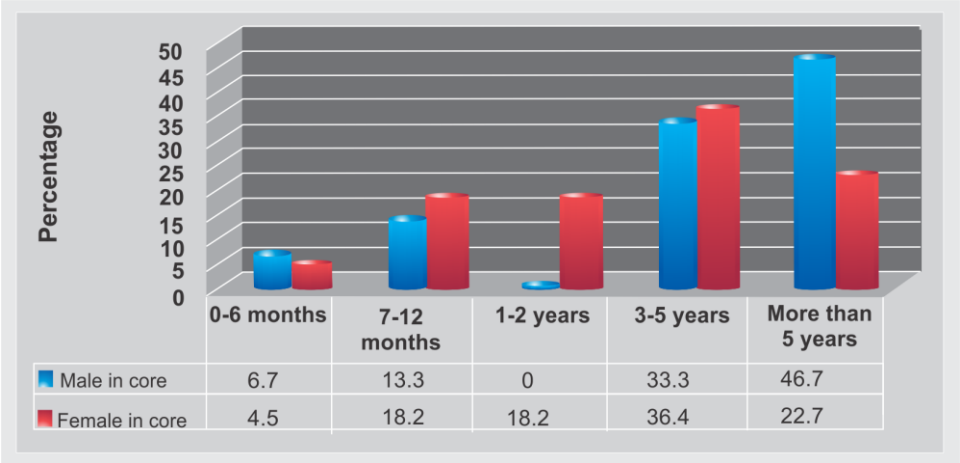
Figure 5.13 (a): Period employed in the mining environment – copper mine

Source: Constructed by author (2013)

	0-6 months	7-12 months	1-2 years	3-5 years	More than 5 years
Male in core	0	5.9	29.4	23.5	41.2
Female in core	0	23.8	61.9	9.5	4.8
Management	0	0	0	16.7	83.3

Figure 5.13 (b): Period employed in the mining environment – phosphate mine

Source: Constructed by author (2013)



	0-6 months	7-12 months	1-2 years	3-5 years	More than 5 years
Male in core	6.7	13.3	0	33.3	46.7
Female in core	4.5	18.2	18.2	36.4	22.7

Figure 5.13 (c): Period employed in the mining environment – platinum mine

Source: Constructed by author (2013)

The first relevant theme is presented in the next section.

5.3 COMPANY PROCEDURES AND POLICIES

As highlighted in Chapter Three under 3.2.2, the labour legislation framework of South Africa regulates all facets of the labour relationship. The following four acts are regarded as the four bastions of the framework: the Labour Relations Act (66 of 1995) (LRA), the

Basic Conditions of Employment Act (75 of 1997) (BCEA), the Employment Equity Act (55 of 1998) (EEA) and the Skills Development Act (97 of 1998) (SDA). Furthermore, company policies and procedures are the elements that provide direction and regulate the activities of an organisation and its members. They also co-ordinate and regulate the labour relationship (Levy *et al.*, 2009:20). This section aims to investigate the benefits provided to women employed in core mining activities. Furthermore, this section aims to verify whether specific company policies are in place, whether employees have sufficient knowledge of these company policies and whether the policies are sufficient.

5.3.1 Employee benefits

Employee benefits refer to items in the total package offered to employees, over and above their salary, to increase their wealth or wellbeing at some cost to the employer. A differentiation is made between mandatory benefits and voluntary benefits. Mandatory benefits refer to employee benefits that are regulated by government, such as unemployment insurance and compensation for injuries and diseases. Employers are compelled to make these benefits available to employees. Other benefits are offered to employees voluntarily, such as vacation leave, sick leave, maternity leave, paid public holidays, and contributions to pension funds and medical aid schemes. Some of these benefits have certain legislated minimums and are legislated in the BCEA (Nel *et al.*, 2011:249). The section on employee benefits was included in the questionnaire to determine whether the participants are fully aware of the benefits that the mining companies are providing and, furthermore, to determine gaps in the benefits provided, with specific reference to women employed in core mining positions.

5.3.1.1 Descriptive statistics and frequencies

Table 5.5 provides an indication of the participants' knowledge of the existence of benefits provided by the mining companies; discrepancies exist with regard to data obtained from the three mines. The majority of the participants of the copper and phosphate mines positively indicated that the listed benefits (in the questionnaire) are provided by the respective mines. However, the same sentiment is not shared by the participants of the platinum mine. Male and female participants responded negatively towards almost all the indicators, with the exception of the following: bonuses, medical aid, maternity benefits, and annual and sick leave. Furthermore, a main concern is that less than half of the female participants working in core mining positions of the copper mine (41.18%) and slightly more than half of the female participants of the platinum mine (54.55%) reported

that educational benefits are provided. Throughout the research it became clear that women want to be developed and a great need was detected for assistance in the form of bursaries and study leave (also see 5.4.3).

As clearly indicated in Chapter Four under 4.4.6.3, training and development are important for both employers and employees. Effective training and development could enhance productivity, personal satisfaction and job enrichment (Nel *et al.*, 2012:380). Training and development are also enforced by the EEA and the SDA (see Chapter Three under 3.2.2.3 and 3.2.2.4). Furthermore, human resource development is also a prerequisite of the revised Mining Charter and mining companies are encouraged to educate and develop their personnel (see Chapter Three under 3.2.3.6.4 (a)). In addition, mining companies are obliged by legislation to submit an SLP to the DMR as a prerequisite for the granting of mining or production rights. In the SLP they should, among other things, provide for a bursary and internship plan (providing the targets, timeframes and budgets) as well as a career path plan to develop employees (RSA, 2010b:13).

From Table 5.5 it is also evident that a large number of the participants (men and women) of the platinum mine indicated that housing benefits are not provided. Mining companies are obliged by the Mining Charter to improve the standard of housing and living conditions for mine workers (see Chapter Three under 3.2.3.6.4 (e)). They should also indicate the measures that they are taking to address housing and living conditions, as required by the Mining Charter, in the SLP that they are obliged to submit to the DMR (RSA, 2010b:22). Further findings with regard to housing needs are revealed and discussed in Chapter Six under 6.2.3.4. The next section reveals the findings obtained from the qualitative inquiry.

Table 5.5: Frequency table of employee benefits for which staff qualifies

Employee benefits		Copper mine						Phosphate mine						Platinum mine			
		Male in core		Female in core		Manage-ment		Male in core		Female in core		Manage-ment		Male in core		Female in core	
		F	N	F	N	F	N	F	N	F	N	F	N	F	N	F	N
1.	Bonuses	16	17	26	34	17	17	15	17	20	21	12	12	12	16	17	22
2.	Housing	13	17	25	34	16	17	14	17	19	21	10	12	07	16	13	22
3.	Medical aid	16	17	30	34	17	17	16	17	21	21	12	12	13	16	18	22
4.	Employee insurance	12	17	17	34	15	17	13	17	14	21	11	12	08	16	08	22
5.	Education	14	17	14	34	15	17	14	17	16	21	12	12	06	16	12	22
6.	Retirement benefits	15	17	23	34	15	17	16	17	18	21	12	12	08	16	14	22
7.	Maternity benefits	15	17	27	34	15	17	16	17	19	21	12	12	11	16	17	22
8.	Overtime compensation	16	17	17	34	15	17	15	17	20	21	12	12	08	16	14	22
9.	Annual leave	16	17	28	34	17	17	16	17	20	21	12	12	14	16	19	22
10.	Sick leave	16	17	32	34	17	17	16	17	20	21	12	12	14	16	20	22
11.	Procedures regarding termination of contract (e.g. length of notice periods)	12	17	19	34	14	17	10	17	10	21	09	12	07	16	05	22
12.	Other	1	17	1	34	01	17	5	17	1	21		12	07	16	00	22

	A vast majority of the participants indicated that the benefit is provided by the mining company.
	Half and/or slightly more than half of the participants indicated that the benefit is provided by the mining company.
	Less than half of the participants (below 50%) indicated that the benefit is provided by the mining company.

Source: Constructed by author (2013)

5.3.1.2 Qualitative data on benefits provided

Data obtained from the qualitative enquiry (interviews and focus group discussions) as well as open-ended sections of the questionnaire are discussed below. Firstly, additional benefits (not indicated in the questionnaire) that are provided by mining companies are listed. Secondly, gaps in benefits provided to women employed in core mining activities are reported.

5.3.1.2.1 Additional employee benefits provided by mining companies

The participants indicated that the mining companies also provide for the following benefits:

- Travelling allowance
- Cell phone allowance
- Remoteness leave
- 24-hour on-site childcare centre (one of the mines included in the study provides such a facility) (also see 6.2.3.2)
- HIV/Aids support and counselling
- Employee ownership plan
- Occupational medical testing
- Bursaries
- Bursary assistance for employees' children
- Performance bonus.

5.3.1.2.2 Gaps in benefits provided to women employed in core mining activities

Qualitative data obtained from open-ended questions (questionnaire) as well as interviews and focus group discussions revealed a need for the following additional benefits that should be provided to women working in core mining positions:

- More training opportunities
- Study assistance in the form of leave and bursaries

- Housing for all employees and not for officials only (also see 6.2.3.4)
- Day shift work for women with newborn babies until the baby is one year old
- PPE designed for women (also see 6.4.3.1 for a comprehensive discussion on PPE deficiencies)
- Transport allowance, as women working in core mining activities are often required to work overtime during night hours
- Shift allowance to enable women to work shifts; a shift allowance will provide assistance to women in terms of transport and childcare
- Twenty-four-hour crèche facility (one of the mines included in the study provides such a facility) (also see 6.2.3.2)
- Light duty for pregnant women.

From the section on employee benefits it can be deducted that although mining companies do provide benefits to employees, not all women employed in core positions are fully aware of the benefits provided. Furthermore, women employed in core positions have specific needs in terms of benefits provided, as indicated in 5.3.1.2.2. To ensure sustainability in the employment of women in the core business of mining, it is therefore recommended that mining companies seriously take note of these specific needs and aim to create a conducive work environment for female employees. The section to follow presents the findings regarding company policies.

5.3.2 Company policies

Policies and procedures are regarded as the elements that provide direction and regulate the activities of an organisation and its members. Policies refer to the plans of action that set the course for achieving objectives, while procedures are the manner (game plan) in which the organisation will go about to achieve its objectives (Venter *et al*., 2009:20). To give effect to good labour relations within the organisation, it needs to establish a general policy, usually referred to as the labour relation policy (Pons & Deale, 2010: ch 1, p. 26). A labour relation policy serves as a framework for managerial behaviour towards employees, results in the establishment of systems and procedures and is used as a guideline in decision-making processes. This general policy is followed by policies and procedures dealing with particular aspects, such as employment equity and sexual

harassment (Bendix, 2005:299). These policies and procedures further co-ordinate and regulate the labour relationship.

The section on company policies was included in the survey to:

- determine whether the participants are fully aware of the policies provided by the mining companies;
- establish whether women working in core mining activities have sufficient knowledge of the content and operational procedures of the policies;
- verify whether the policies are sufficient; and
- determine gaps in the policies provided.

This section presents and discusses quantitative and qualitative findings regarding mining companies' policies. The following main themes were attended to: *Range of policies in place*, *Sufficient knowledge of company policies* and *Sufficiency of company policies*. Descriptive statistics and frequencies, according to the mentioned themes, are provided and discussed. In addition, a factor analysis was conducted on the sections *Sufficient knowledge of company policies* and *Sufficiency of company policies* to explore the factorial structure of these sections; these findings are also presented and discussed. Lastly, findings from the qualitative inquiry (semi-structured interviews and focus group discussions) are reported.

5.3.2.1 Range of policies in place

The section below presents the descriptive statistics and frequencies of the range of policies in place at the mines included in the study.

5.3.2.1.1 Descriptive statistics and frequencies

The participants were asked to express their views via the questionnaire on whether company policies regarding different facets are in place; Table 5.6 gives a summary thereof. From the table it is evident that the majority of the participants across all three mines positively reported that the various policies are in place, with the exception of the mine closure policy. As indicated in Chapter Three under 3.2.3.3, mining companies are obliged by legislation to submit an SLP to the DMR as a pre-requisite for the granting of mining or production rights. In the SLP, they should also develop and implement

processes to save jobs and manage downscaling and/or closure (RSA, 2010b:4). The content of the SLP should be communicated to employees (RSA, 2010b:25).

Table 5.6: Participants' awareness of company policies in place

Policies		Copper mine						Phosphate mine						Platinum mine			
		Male in core		Female in core		Manage-ment		Male in core		Female in core		Manage-ment		Male in core		Female in core	
		F	N	F	N	F	N	F	N	F	N	F	N	F	N	F	N
1.	Employment equity	17	17	31	34	16	17	15	17	16	21	12	12	13	16	15	22
2.	Skills development policy	17	17	19	34	16	17	15	17	16	21	11	12	12	16	16	22
3.	Pregnancy policy	16	17	25	34	14	17	16	17	18	21	10	12	08	16	19	22
4.	HIV/Aids policy	16	17	26	34	16	17	11	17	20	21	12	12	17	16	19	22
5.	Sexual harassment policy	16	17	29	34	16	17	12	17	20	21	11	12	16	16	19	22
6.	Remuneration policy	14	17	20	34	15	17	14	17	15	21	12	12	08	16	12	22
7.	Recruitment and retrenchment policy	16	17	19	34	16	17	10	17	17	21	12	12	15	16	17	22
8.	Health and safety policy	17	17	29	34	16	17	17	17	21	21	12	12	12	16	20	22
9.	Mine closure policy	13	17	17	34	13	17	09	17	10	21	08	12	03	16	08	22
10.	Other	01	17	00	34	01	17	03	17	00	21	02	12	00	16	00	22

	A vast majority of the participants indicated that the policy is provided by the mining company.
	Half and/or slightly more than half of the participants indicated that the policy is provided by the mining company.
	Less than half of the participants (below 50%) indicated that the policy is provided by the mining company.

Source: Constructed by author (2013))

5.3.2.2 Sufficient knowledge of policies

This section presents the findings of participants' opinions regarding sufficient knowledge of mining companies' policies.

5.3.2.2.1 Descriptive statistics and frequencies

From tables 5.7 (a–c) below it can be seen that discrepancies exist between data obtained from the three mines included in the study. The findings are presented differentially in terms of the three mines.

Copper mine

Table 5.7 (a) shows that a vast majority of the participants from the management target group (68.8–100%) of the copper mine held the opinion that women working in core mining activities have sufficient knowledge of the content and operational procedures of all the policies listed in the questionnaire. The same sentiment is shared by a large number of male employees working in core mining activities (62.5–82.4%). The mean scores calculated for these target groups for almost all the policies in this section are above 3. Although the majority of the women employed in core mining activities positively reported that they have sufficient knowledge of the content and operational procedures of most of the listed policies, the mean scores calculated were lower than scores given by the male and management target group. As indicated in the Introduction, ratings of 2.5 and lower were regarded as 'low' and indicate that compliance with the specific statement is none or very limited. Although the mean score of the female target group was calculated at 2.55 for the skills development policy, it could point towards a problem area, indicating that female participants do not have sufficient knowledge of the policy.

Phosphate mine

Agreement was found in the responses obtained from the participants across all three target groups of the phosphate mine, as a large number of the participants reacted positively to all the listed policies (almost all the policies calculated a mean above 2.6), with the exception of the mine closure policy (see Table 5.7 (b)). Only 20% of the participants of the management target group thought that women employed in core mining positions have sufficient knowledge of the content and operational procedures of the mine closure policy. The mean score calculated at 2.10. Sixty per cent of female and 66.6% of the male participants employed in core mining activities were in agreement with this

statement. As indicated earlier on (see 5.3.2.1.1), mining companies are obliged by legislation to communicate the content of the Mine Closure Policy to employees (RSA, 2010b:25).

Platinum mine

The majority of the male participants of the platinum mine responded positively to almost all the indicators, with the exception of the mine closure policy (see Table 5.7 (c)). The same sentiment was not shared by the majority of the female participants of the platinum mine. Although the majority of the female participants reacted positively to some of the listed policies, negative responses were obtained for the following policies: employment equity, skills development, remuneration and mine closure. The mean scores for these policies, according to the female participants, calculated at 2.5 and lower, which indicates that female employees working in core mining positions of the platinum mine demonstrate a lack of knowledge of the content and operational procedures of these policies.

Although discrepancies exist between findings of the different mines included in the study, it can be deducted that the majority of women employed in core mining positions of the copper and phosphate mines have partially to complete knowledge of most of the mining company policies. However, this view is not shared by the majority of the female participants of the platinum mine. Although the quantitative findings revealed considerably positive results, the qualitative data revealed some loopholes. A discussion of the main concerns regarding mining companies' policies follows in 5.3.2.4.

Table 5.7 (a): Participants' perceptions regarding sufficient knowledge of mining companies' policies – copper mine

	Policies	Male in core						Female in core						Management					
		Not at all	Seldom	Partially	Completely	Mean	Standard deviation	Not at all	Seldom	Partially	Completely	Mean	Standard deviation	Not at all	Seldom	Partially	Completely	Mean	Standard deviation
1.	Employment equity	0.0	0.0	29.4	70.6	3.71	0.47	12.9	22.6	41.9	22.6	2.74	0.96	0.0	0.0	31.3	68.8	3.69	0.48
2.	Skills development	0.0	0.0	52.9	47.1	3.47	0.51	10.3	34.5	44.8	10.3	2.55	0.83	0.0	6.3	12.5	81.3	3.75	0.58
3.	Pregnancy	0.0	5.9	11.8	82.4	3.76	0.56	10.0	13.3	33.3	43.3	3.10	0.99	0.0	0.0	6.7	93.3	3.93	0.26
4.	HIV/Aids	0.0	5.9	17.6	76.5	3.71	0.59	6.7	13.3	23.3	56.7	3.30	0.95	0.0	0.0	6.7	93.3	3.93	0.26
5.	Sexual harassment	0.0	0.0	29.4	70.6	3.71	0.47	6.7	6.7	30.0	56.7	3.37	0.89	0.0	0.0	6.7	93.3	3.93	0.26
6.	Remuneration	0.0	11.8	23.5	64.7	3.53	0.72	14.8	22.2	25.9	37.0	2.85	1.09	0.0	0.0	0.0	100.0	4.00	0.00
7.	Recruitment and retrenchment	0.0	18.8	18.8	62.5	3.44	0.81	16.7	23.3	33.3	26.7	2.70	1.06	0.0	6.3	0.0	93.8	3.88	0.50
8.	Health and safety	0.0	5.9	29.4	64.7	3.59	0.62	6.5	0.0	35.5	58.1	3.45	0.81	0.0	0.0	0.0	100.0	4.00	0.00
9.	Mine closure	7.1	21.4	42.9	28.6	2.93	0.92	21.4	21.4	25.0	32.1	2.68	1.16	6.7	6.7	6.7	80.0	3.60	0.91

	A vast majority of the participants (above 62.5%) reacted positively by indicating 3 (partially) and 4 (completely).
	Slightly more than half (51–62.5%) reacted positively by indicating 3 (partially) and 4 (completely).
	Half of the participants (50%) reacted positively by indicating 3 (partially) and 4 (completely).
	Less than half of the participants reacted positively by indicating 3 (partially) and 4 (completely).
	Mean scores of 2.5 and lower were regarded as 'low' and indicate that compliance with the specific statement is none or very limited.

Source: Constructed by author (2013)

Table 5.7 (b): Participants' perceptions regarding sufficient knowledge of mining companies' policies – phosphate mine

	Policies	Male in core						Female in core						Management					
		Not at all	Seldom	Partially	Completely	Mean	Standard deviation	Not at all	Seldom	Partially	Completely	Mean	Standard deviation	Not at all	Seldom	Partially	Completely	Mean	Standard deviation
1.	Employment equity	12.5	0.0	31.3	56.3	3.31	1.01	15.0	5.0	30.0	50.0	3.15	1.09	0.0	0.0	50.0	50.0	3.50	0.52
2.	Skills development	15.4	0.0	38.5	46.2	3.15	1.07	14.3	19.0	23.8	42.9	2.95	1.12	8.3	0.0	41.7	50.0	3.33	0.89
3.	Pregnancy	6.3	12.5	18.8	62.5	3.38	0.96	10.0	0.0	50.0	40.0	3.20	0.89	9.1	0.0	18.2	72.7	3.55	0.93
4.	HIV/Aids	0.0	18.8	12.5	68.8	3.50	0.82	0.0	10.0	15.0	75.0	3.65	0.67	0.0	0.0	16.7	83.3	3.83	0.39
5.	Sexual harassment	0.0	12.5	25.0	62.5	3.50	0.73	0.0	21.1	21.1	57.9	3.37	0.83	0.0	0.0	36.4	63.6	3.64	0.50
6.	Remuneration	14.3	0.0	28.6	57.1	3.29	1.07	0.0	10.0	40.0	50.0	3.40	0.68	0.0	0.0	33.3	66.7	3.67	0.49
7.	Recruitment and retrenchment	6.7	0.0	33.3	60.0	3.47	0.83	10.0	10.0	20.0	60.0	3.30	1.03	0.0	8.3	50.0	41.7	3.33	0.65
8.	Health and safety	0.0	6.3	31.3	62.5	3.56	0.63	0.0	4.8	42.9	52.4	3.48	0.60	0.0	0.0	25.0	75.0	3.75	0.45
9.	Mine closure	25.0	8.3	33.3	33.3	2.75	1.22	30.0	10.0	10.0	50.0	2.80	1.36	10.0	70.0	20.0	0.0	2.10	0.57

	A vast majority of the participants (above 62.5%) reacted positively by indicating 3 (partially) and 4 (completely).
	Slightly more than half (51–62.5%) reacted positively by indicating 3 (partially) and 4 (completely).
	Half of the participants (50%) reacted positively by indicating 3 (partially) and 4 (completely).
	Less than half of the participants reacted positively by indicating 3 (partially) and 4 (completely).
	Mean scores of 2.5 and lower were regarded as 'low' and indicate that compliance with the specific statement is none or very limited.

Source: Constructed by author (2013)

Table 5.7 (c): Participants' perceptions regarding sufficient knowledge of mining companies' policies – platinum mine

	Policies	Male in core						Female in core					
		Not at all	Seldom	Partially	Completely	Mean	Standard deviation	Not at all	Seldom	Partially	Completely	Mean	Standard deviation
1.	Employment equity	6.7	26.7	66.7	0.0	2.60	0.63	27.8	11.1	44.4	16.7	2.50	1.09
2.	Skills development	20.0	20.0	46.7	13.3	2.53	0.99	0.0	15.0	45.0	10.0	2.35	1.04
3.	Pregnancy	13.3	6.7	26.7	53.3	3.20	1.08	10.5	5.3	26.3	57.9	3.32	1.00
4.	HIV/Aids	6.7	13.3	20.0	60.0	3.33	0.98	0.0	5.0	30.0	65.0	3.60	0.59
5.	Sexual harassment	0.0	23.1	38.5	38.5	3.15	0.80	0.0	26.3	36.8	36.8	3.11	0.81
6.	Remuneration	0.0	14.3	50.0	35.7	3.21	0.69	15.8	31.6	42.1	10.5	2.47	0.90
7.	Recruitment and retrenchment	0.0	25.0	50.0	25.0	3.00	0.74	11.1	38.9	27.8	22.2	2.61	0.98
8.	Health and safety	0.0	8.3	50.0	41.7	3.33	0.65	0.0	10.0	40.0	50.0	3.40	0.68
9.	Mine closure	50.0	10.0	20.0	20.0	2.10	1.29	21.1	31.6	26.3	21.1	2.47	1.07

	A vast majority of the participants (above 62.5%) reacted positively by indicating 3 (partially) and 4 (completely).
	Slightly more than half (51–62.5%) reacted positively by indicating 3 (partially) and 4 (completely).
	Half of the participants (50%) reacted positively by indicating 3 (partially) and 4 (completely).
	Less than half of the participants reacted positively by indicating 3 (partially) and 4 (completely).
	Mean scores of 2.5 and lower were regarded as 'low' and indicate that compliance with the specific statement is none or very limited.

Source: Constructed by author (2013)

The factor analysis of the section *Sufficient knowledge of company policies* is presented in the next section.

5.3.2.2.2 Factor analysis

A factor analysis was conducted of the nine policies listed in the questionnaire. The results of the Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) and Bartlett's test of sphericity are presented in Table 5.8 (a).

Table 5.8 (a): KMO and Bartlett's test of sphericity

KMO and Bartlett's test of sphericity		Value
KMO		0.843
P-value of Bartlett's test of sphericity	Approx. chi-sq	447.298
	df	36
	Sig.	0.000

Source: Constructed by author (2013)

The KMO measured 0.843 and indicates that the sample size is adequate for factor analysis. According to Field (2005:640), values between 0.7 and 0.8 are excellent. The p-value of Bartlett's test of sphericity returned a value smaller than 0.05, suggesting that the correlation between statements is sufficient for factor analysis (Field, 2005:652). The results of the factor analysis are reported in Table 5.8 (b).

Table 5.8 (b): Pattern matrix[a]

Company policies: Sufficient knowledge of policies				
No.	**Question statement**	**Factor 1**	**Factor 2**	**Communalities**
		Instrumental policies	**Expressive policies**	
C2.2	Skills development	0.794		0.546
C2.1	Employment equity	0.785		0.588
C2.7	Recruitment and retrenchment	0.728		0.613
C2.6	Remuneration	0.651		0.544
C2.9	Mine closure	0.480		0.462
C2.4	HIV/Aids		0.902	0.674
C2.8	Health and safety		0.757	0.640
C2.5	Sexual harassment		0.642	0.622
C2.3	Pregnancy		0.487	0.373
	Cronbach's alpha	**0.84**	**0.83**	
	Factor mean	**2.89**	**3.41**	
	Factor standard deviation	**0.86**	**0.65**	

Source: Constructed by author (2013)

Two factors were extracted by Kaiser's criteria (Field, 2005:652) that explain 56.2% of the total variance in the section on *Sufficient knowledge of company policies*. The statements all loaded above 0.4 on the two identified factors.

a) Factor 1: Instrumental policies

Questions C2.1, C2.2, C2.6, C2.7 and C2.9 loaded on Factor 1, *Instrumental policies*. Questions C2.1, C2.2 and C2.7 have factor loadings of above 0.7. The remaining two questions, C2.6 and C2.9, loaded satisfactorily with a factor loading of above 0.4. The communalities for all the questions are above 0.4.

The factor mean calculated at 2.89, which indicates that on average women employed in core mining positions have partial knowledge of the following policies: employment equity,

skills development, remuneration, recruitment and retrenchment and mine closure. Factor 1 shows good reliability with a Cronbach's alpha coefficient of 0.84, which is well above the required 0.7, and shows high reliability and internal consistency.

b) Factor 2: Expressive policies

Questions C2.3, C2.4, C2.5 and C2.8 loaded on Factor 2, *Expressive policies*. Question C2.4 loaded heavily on the factor with a factor loading of 0.902. The remaining questions (C2.3, C2.5 and C2.8) loaded satisfactorily with a factor loading of above 0.4. The communalities for all the questions are above 0.3.

The factor mean calculated at 3.41, which indicates that on average women employed in core mining positions have partial to sufficient knowledge of the following policies: pregnancy, HIV/Aids, sexual harassment and health and safety. Factor 2 shows good reliability with a Cronbach's alpha coefficient of 0.83, which is well above the required 0.7, and shows high reliability and internal consistency.

From the means in Table 5.8 (b) it can be derived that there is a perception that female participants working in core mining positions demonstrate more knowledge of policies related to the *Expressive policies* factor (Factor 2) than the *Instrumental policies* factor (Factor 1). It can therefore be deducted that mining companies are successful in communicating aspects regarding pregnancy, HIV/Aids, sexual harassment and health and safety to employees. Furthermore, there is a perception that policies related to the *Instrumental policies* factor do not receive the same attention and mining companies need to be more transparent about the details of these policies. Communication is an important aspect in any organisation and is "the glue that binds various elements, coordinates activities, allows people to work together and produce results" (Grobler *et al.*, 2006:14). To be maximally effective, policies should be in writing and should be communicated to all employees. Policies can be communicated to employees by using downward and/or upward communication methods. Downward communication methods include orientation sessions, bulletin boards, newsletters and employee handbooks. Upward communication methods usually include suggestion programmes, complaint procedures, electronic mail, attitude surveys and open-door meetings (Grobler *et al.*, 2006:14).

c) Factor correlation matrix

The Pearson correlations between the extracted factors for the section *Sufficient knowledge of company policies* are reported in Table 5.8 (c) below.

Table 5.8 (c): Factor correlation matrix

No.	Factors: Company policies: Sufficient knowledge of policies	1	2
1.	Factor 1: Instrumental policies	1.000	0.595
2.	Factor 2: Expressive policies	0.595	1.000

Source: Constructed by author (2013)

The correlation coefficient between the factors was greater than 0.5, indicating that there is a strong relationship between the instrumental and expressive policies.

d) Comparison of the three target groups of the different mines regarding sufficient knowledge of company policies

The descriptive statistics together with effect sizes of the different target groups regarding the section *Sufficient knowledge of company policies* are reported in Table 5.8 (d) below. Because an availability sample was used, p-values are not relevant and differences between means are examined for practical significance with effect sizes.

Table 5.8 (d): Comparison of the three target groups of the different mines regarding sufficient knowledge of company policies

		Men		Women		Management		Effect sizes	
Factor	**Mine**	**Mean**	**Standard deviation**	**Mean**	**Standard deviation**	**Mean**	**Standard deviation**	**Women vs Men**	**Women vs Management**
Factor 1: Instrumental policies	Phosphate	3.35	0.89591	3.08	0.89	3.24	0.39	0.31	0.18
	Copper	3.44	0.51	2.68	0.78	3.79	0.36	**0.98**	**1.43**
	Platinum	2.60	0.70	2.44	0.87			0.17	
Factor 2: Expressive policies	Phosphate	3.48	0.70	3.39	0.58	3.71	0.35	0.13	**0.55**
	Copper	3.69	0.43	3.31	0.81	3.94	0.17	**0.47**	**0.77**
	Platinum	3.30	0.59	3.35	0.59			0.07	

(a) small effect: d=0.2, (b) medium effect: d=0.5 and (c) large effect: d=0.8

Source: Constructed by author (2013)

From Table 5.8 (d) it follows that the effect sizes of the different target groups of the phosphate and platinum mine for the *Instrumental policies* factor yielded a d-value smaller than 0.5, indicating that the difference between the means of the different target groups is not practically significant. However, the effect sizes of the three target groups of the copper mine are larger than 0.8, indicating that the difference between the means of the different target groups has a large effect and is practically significant. It could thus be derived that on average, the participants of the male and management target groups of the copper mine thought that women have more knowledge of policies related to the *Instrumental policies* factor than the female target group themselves.

The effect sizes of the female versus the male target groups of the phosphate and platinum mines for the *Expressive policies* factor are smaller than 0.2, indicating that the

difference between the means of the different target groups has a small effect and is not practically significant. Furthermore, the d-value of the female versus male (copper mine) and female versus management (phosphate mine) target groups indicates that the difference between the means of the different target groups for the *Expressive policies* factor has a medium effect. A large effect is evident from the female versus management target group of the copper mine, as the d-value calculated at 0.77. It can therefore be deducted that on average, the male target group of the copper mine and the management target groups of the copper and phosphate mines thought that women have more knowledge of the policies related to the *Expressive policies* factor than the female target group themselves.

The next section presents the findings on the section on *Sufficiency of company policies*.

5.3.2.3 Sufficiency of company policies

Although the intention of specific company policies is to coordinate and regulate particular aspects of the employment relationship, a gap often exists between policies and the implementation thereof. The section to follow presents the findings of the participants' opinions regarding the sufficiency of mining companies' policies. The findings are presented differentially, in terms of the three mines.

5.3.2.3.1 Descriptive statistics and frequencies

Discrepancies are evident in the data obtained from the three mines included in the study.

Copper mine

As reflected in Table 5.9 (a), a similarity exists between data obtained from participants of the male and management target groups of the copper mine, as a large number of participants react positively to all the listed policies. All the policies calculated a mean above 2.8. A vast majority of the female participants employed in core mining positions supported this opinion by positively indicating that the listed policies are sufficient (almost all the policies calculated a mean above 2.8), with the exception of the skills development (mean = 2.53) and employment equity (mean = 2.58) policies. Although the means calculated above 2.5, it is still regarded as low, and indicates that the policies are not effective and sufficient.

Phosphate mine

Agreement in the responses of all three target groups of the phosphate mine was found (see Table 5.9 (b)). A vast majority of the participants indicated that the listed policies are effective and functioning well. All the listed policies calculated a mean above 2.8.

Platinum mine

Pronounced similarities were expressed in the survey data obtained from the male and female employees working in core mining activities of the platinum mine (see Table 5.9 (c)). The participants reacted positively to most of the listed policies (almost all the policies calculated a mean above 2.6), with the exception of policies on employment equity, skills development and mine closure. Only 52.4% of the female participants and half (50%) of the male participants working in core mining positions reported that the skills development policy is effective (calculated a mean below 2.5). The male participants reacted negatively to the policies on employment equity and mine closure, as a limited number (employment equity: 46.6%; mine closure: 50%) indicated that these policies are effective (calculated a mean below 2.5).

Although discrepancies exist between the findings of the three mines in terms of policy implementation, on average, the participants were in agreement that much still needs to be done with regard to the implementation of employment equity and skills development policies. This statement is supported by findings of the 2011–2012 Commission for Employment Equity Annual Report (DoL, 2012). According to the report, the equitable representation of Africans, coloured people, black women and people with disabilities remains a main concern, as the allocation, recruitment, promotion and skills development opportunities still favour white people (according to reports received from employers in the 2011 reporting period). Mpho Nkeli, Chairperson of the Commission for Employment Equity, states that “[w]hites and males will continue to dominate in the middle-to-upper levels for the next 127 years as long as employers are caught up with the vicious cycle of continuing to employ people with mainly the same race and gender profile that exited their organisations”. She urged employers to effectively implement the EEA and to align their employment equity interventions, including skills and succession planning, with their employment equity objectives. Furthermore, as indicated earlier on (5.3.1.1), training and development in the mining sector are enforced and regulated by the EEA, the SDA (see Chapter Three under 3.2.2.3 and 3.2.2.4) as well as the revised Mining Charter (3.2.3.6.4 (a)).

Table 5.9 (a): Participants' perceptions regarding the sufficiency of mining companies' policies – copper mine

	Policies	Male incore						Female in core						Management					
		Not at all	Seldom	Partially	Completely	Mean	Standard deviation	Not at all	Seldom	Partially	Completely	Mean	Standard deviation	Not at all	Seldom	Partially	Completely	Mean	Standard deviation
1.	Employment equity	17.6	11.8	35.3	35.3	2.88	1.11	19.4	29.0	25.8	25.8	2.58	1.08	6.3	12.5	43.8	37.5	3.13	0.89
2.	Skills development	0.0	17.6	47.1	35.3	3.18	0.73	16.7	36.7	23.3	23.3	2.53	1.04	0.0	6.3	43.8	50.0	3.44	0.63
3.	Pregnancy	0.0	5.9	23.5	70.6	3.65	0.61	6.7	3.3	53.3	36.7	3.20	0.81	0.0	0.0	40.0	60.0	3.60	0.51
4.	HIV/Aids	0.0	5.9	23.5	70.6	3.65	0.61	0.0	6.5	32.3	61.3	3.55	0.62	0.0	0.0	25.0	75.0	3.75	0.45
5.	Sexual harassment	0.0	5.9	29.4	64.7	3.59	0.62	3.3	6.7	46.7	43.3	3.30	0.75	0.0	0.0	31.3	68.8	3.69	0.48
6.	Remuneration	0.0	29.4	23.5	47.1	3.18	0.88	7.1	32.1	32.1	28.6	2.82	0.94	0.0	6.3	43.8	50.0	3.44	0.63
7.	Recruitment and retrenchment	0.0	12.5	43.8	43.8	3.31	0.70	3.7	25.9	37.0	33.3	3.00	0.88	0.0	18.8	31.3	50.0	3.31	0.79
8.	Health and safety	0.0	5.9	23.5	70.6	3.65	0.61	0.0	3.2	19.4	77.4	3.74	0.51	0.0	0.0	25.0	75.0	3.75	0.45
9.	Mine closure	0.0	13.3	33.3	53.3	3.40	0.74	20.7	17.2	20.7	41.4	2.83	1.19	0.0	7.1	35.7	57.1	3.50	0.65

	A vast majority of the participants (above 62.5%) reacted positively by indicating 3 (partially) and 4 (completely).
	Slightly more than half (51–62.5%) reacted positively by indicating 3 (partially) and 4 (completely).
	Half of the participants (50%) reacted positively by indicating 3 (partially) and 4 (completely).
	Less than half of the participants reacted positively by indicating 3 (partially) and 4 (completely).
	Mean scores of 2.5 and lower were regarded as 'low' and indicate that compliance with the specific statement is none or very limited.

Source: Constructed by author (2013)

Table 5.9 (b): Participants' perceptions regarding the sufficiency of mining companies' policies – phosphate mine

	Policies	Male in core						Female in core						Management					
		Not at all	Seldom	Partially	Completely	Mean	Standard deviation	Not at all	Seldom	Partially	Completely	Mean	Standard deviation	Not at all	Seldom	Partially	Completely	Mean	Standard deviation
1.	Employment equity	14.3	14.3	14.3	57.1	3.14	1.17	20.0	0.0	15.0	65.0	3.25	1.21	0.0	0.0	41.7	58.3	3.58	0.51
2.	Skills development	0.0	8.3	33.3	58.3	3.50	0.67	19.0	19.0	23.8	38.1	2.81	1.17	0.0	0.0	25.0	75.0	3.75	0.45
3.	Pregnancy	0.0	20.0	20.0	60.0	3.40	0.83	5.0	5.0	40.0	50.0	3.35	0.81	9.1	9.1	9.1	72.7	3.45	1.04
4.	HIV/Aids	0.0	11.8	11.8	76.5	3.65	0.70	0.0	19.0	14.3	66.7	3.48	0.81	0.0	8.3	8.3	83.3	3.75	0.62
5.	Sexual harassment	0.0	18.8	6.3	75.0	3.56	0.81	9.5	14.3	14.3	61.9	3.29	1.06	0.0	0.0	16.7	83.3	3.83	0.39
6.	Remuneration	6.7	13.3	20.0	60.0	3.33	0.98	9.5	4.8	28.6	57.1	3.33	0.97	0.0	0.0	25.0	75.0	3.75	0.45
7.	Recruitment and retrenchment	0.0	6.3	25.0	68.8	3.63	0.62	4.8	9.5	19.0	66.7	3.48	0.87	0.0	8.3	33.3	58.3	3.50	0.67
8.	Health and safety	0.0	18.8	18.8	62.5	3.44	0.81	0.0	9.5	28.6	61.9	3.52	0.68	0.0	0.0	33.3	66.7	3.67	0.49
9.	Mine closure	15.4	23.1	15.4	46.2	2.92	1.19	20.0	5.0	20.0	55.0	3.10	1.21	0.0	25.0	25.0	50.0	3.25	0.87

	A vast majority of the participants (above 62.5%) reacted positively by indicating 3 (partially) and 4 (completely).
	Slightly more than half (51–62.5%) reacted positively by indicating 3 (partially) and 4 (completely).
	Half of the participants (50%) reacted positively by indicating 3 (partially) and 4 (completely).
	Less than half of the participants reacted positively by indicating 3 (partially) and 4 (completely).
	Mean scores of 2.5 and lower were regarded as 'low' and indicate that compliance with the specific statement is none or very limited.

Source: Constructed by author (2013)

Table 5.9 (c): Participants' perceptions regarding the sufficiency of mining companies' policies – platinum mine

	Policies	Male in core						Female in core					
		Not at all	Seldom	Partially	Completely	Mean	Standard deviation	Not at all	Seldom	Partially	Completely	Mean	Standard deviation
1.	Employment equity	6.7	46.7	33.3	13.3	2.53	0.83	21.1	15.8	36.8	26.3	2.68	1.11
2.	Skills development	28.6	21.4	35.7	14.3	2.36	1.08	28.6	19.0	38.1	14.3	2.38	1.07
3.	Pregnancy	0.0	21.4	28.6	50.0	3.29	0.83	5.3	0.0	36.8	57.9	3.47	0.77
4.	HIV/Aids	0.0	7.7	23.1	69.2	3.62	0.65	5.0	5.0	25.0	65.0	3.50	0.83
5.	Sexual harassment	0.0	7.7	38.5	53.8	3.46	0.66	5.3	5.3	36.8	52.6	3.37	0.83
6.	Remuneration	8.3	16.7	41.7	33.3	3.00	0.95	15.8	15.8	42.1	26.3	2.79	1.03
7.	Recruitment and retrenchment	6.7	20.0	33.3	40.0	3.07	0.96	21.1	5.3	42.1	31.6	2.84	1.12
8.	Health and safety	0.0	0.0	42.9	57.1	3.57	0.51	0.0	5.3	26.3	68.4	3.63	0.59
9.	Mine closure	30.0	20.0	20.0	30.0	2.50	1.27	16.7	16.7	33.3	33.3	2.83	1.09

	A vast majority of the participants (above 62.5%) reacted positively by indicating 3 (partially) and 4 (completely).
	Slightly more than half (51–62.5%) reacted positively by indicating 3 (partially) and 4 (completely) .
	Half of the participants (50%) reacted positively by indicating 3 (partially) and 4 (completely).
	Less than half of the participants reacted positively by indicating 3 (partially) and 4 (completely).
	Mean scores of 2.5 and lower were regarded as 'low' and indicate that compliance with the specific statement is none or very limited.

Source: Constructed by author (2013)

5.3.2.3.2 Factor analysis

A factor analysis was conducted of the nine policies listed in the questionnaire. The results of the KMO and Bartlett's test of sphericity are presented in Table 5.10 (a).

Table 5.10 (a): KMO and Bartlett's test of sphericity

KMO and Bartlett's test of sphericity		Value
KMO		0.880
P-value of Bartlett's test of sphericity	Approx. chi-sq	526.457
	df	36
	Sig.	0.000

Source: Constructed by author (2013)

The KMO measured 0.880 and indicates that the sample size is adequate for factor analysis. The p-value of Bartlett's test of sphericity returned a value smaller than 0.05, suggesting that the correlation between statements is sufficient for factor analysis (Field, 2005:652). The results of the factor analysis are reported in Table 5.10 (b).

Table 5.10 (b): Pattern matrix[a]

Company policies: Sufficiency of policies				
No.	**Question statement**	**Factor 1**	**Factor 2**	**Communalities**
		Instrumental policies	**Expressive policies**	
C3.1	Employment equity	0.811		0.650
C3.2	Skills development	0.783		0.508
C3.6	Remuneration	0.751		0.750
C3.9	Mine closure	0.690		0.598
C3.7	Recruitment and retrenchment	0.517		0.576

Company policies: Sufficiency of policies				
No.	**Question statement**	**Factor 1**	**Factor 2**	**Communalities**
		Instrumental policies	**Expressive policies**	
C3.4	HIV/Aids		-0.921	0.782
C3.8	Health and safety		-0.794	0.631
C3.3	Pregnancy		-0.696	0.496
C3.5	Sexual harassment		-0.610	0.624
	Cronbach's alpha	**0.88**	**0.86**	
	Factor mean	**2.92**	**3.49**	
	Factor standard deviation	**0.90**	**0.61**	

Source: Constructed by author (2013)

Two factors were extracted by Kaiser's criteria (Field, 2005:652) that explain 62.4% of the total variance in the section on *Sufficiency of company policies*. The statements all loaded above 0.5 on the two identified factors.

a) Factor 1: Instrumental policies

Questions C3.1, C3.2, C3.6, C3.7 and C3.9 loaded on Factor 1, *Instrumental policies*. Questions C3.1, C3.2 and C3.6 have factor loadings of above 0.7. The remaining two questions, C3.7 and C3.9, loaded satisfactorily with a factor loading of above 0.5. The communalities for all the questions are above 0.5.

The factor mean calculated at 2.92, which indicates that on average, women employed in core mining positions found these policies partially effective and efficient. The following policies are related to Factor 1: employment equity, skills development, remuneration, recruitment and retrenchment and mine closure. Factor 1 shows good reliability with a Cronbach's alpha coefficient of 0.88, which is well above the required 0.7, and shows high reliability and internal consistency.

b) Factor 2: Expressive policies

Questions C3.3, C3.4, C3.5 and C3.8 loaded on Factor 2, *Expressive policies*. Questions C3.4 loaded heavily on the factor with a factor loading of 0.921. The remaining questions, C3.3, C3.5 and C3.8, loaded satisfactorily with a factor loading of above 0.6. The communalities for all the questions are above 0.4.

The factor mean calculated at 3.49, which indicates that the participants regarded these policies partially to completely effective and sufficient. Policies related to Factor 2 are the following: pregnancy, HIV/Aids, sexual harassment and health and safety. Factor 2 shows good reliability with a Cronbach's alpha coefficient of 0.86, which is well above the required 0.7, and shows high reliability and internal consistency.

c) Factor correlation matrix

The Pearson correlations between the extracted factors for the section *Sufficiency of company policies* are reported in Table 5.10 (c) below.

Table 5.10 (c): Factor correlation matrix

No.	Factors: Company policies: Sufficiency of policies	1	2
1.	Factor 1: Instrumental policies	1.000	-0.564
2.	Factor 2: Expressive policies	-0.564	1.000

Source: Constructed by author (2013)

Both factors have a correlation coefficient greater than 0.5, indicating that there is a strong relationship between the instrumental and expressive policies.

d) Comparison of the three target groups of the different mines regarding the sufficiency of company policies

The descriptive statistics together with effect sizes of the different target groups regarding the section *Sufficiency of company policies* are reported in Table 5.10 (d) below.

Table 5.10 (d): Comparison of the three target groups of the different mines regarding the sufficiency of company policies

		Men		Women		Management		Effect sizes	
Factor	**Mine**	**Mean**	**Standard deviation**	**Mean**	**Standard deviation**	**Mean**	**Standard deviation**	**Women vs Men**	**Women vs Management**
Factor 1: Instrumental policies	Phosphate	3.38	0.82	3.20	0.86	3.61	0.39	0.22	**0.48**
	Copper	3.15	0.76	2.71	0.91	3.36	0.53	**0.49**	**0.71**
	Platinum	2.54	0.77	2.76	0.97			-0.23	
Factor 2: Expressive policies	Phosphate	3.54	0.72	3.41	0.67	3.69	0.44	0.19	**0.41**
	Copper	3.63	0.57	3.46	0.56	3.70	0.44	0.30	**0.44**
	Platinum	3.34	0.69	3.63	0.45			**-0.41**	

(a) small effect: d=0.2, (b) medium effect: d=0.5 and (c) large effect: d=0.8

Source: Constructed by author (2013)

From Table 5.10 (d) it follows that the effect sizes of the female versus male target groups of the phosphate and platinum mine for the *Instrumental Policies* factor yield a d-value smaller than 0.5, indicating that the difference between the means of the different target groups is not practically significant. Furthermore, the d-value of the female versus male (copper mine) and female versus management (phosphate mine) target groups shows that the difference between the means of the different target groups for the *Instrumental policies* factor has a medium effect. However, the d-value of the female versus management target groups of the copper mine is 0.71, indicating that the difference

between the means of the target groups has a large effect and is practically significant. It can therefore be deducted that on average, the participants of the male target group of the copper mine as well as the management target groups of the copper and phosphate mines are more in agreement with the effectiveness of policies than the female target group themselves.

The effect sizes of the female versus male target group of the phosphate (0.19) and copper (0.30) mines for the *Expressive policies* factor indicate that the difference between the means of the different target groups has a small effect and is not practically significant. Furthermore, the d-value of the female versus management target groups of the phosphate and copper mine and female versus male target groups of the platinum mine shows that the difference between the means of the different target groups for the *Expressive policies* factor has a medium effect. It could be said that on average, the participants of the male target group of the platinum mine as well as the management target groups of the copper and phosphate mines thought that policies related to the *Instrumental policies* factor are more effectively implemented than the female target group themselves.

Against the background of the quantitative findings, it can be stated that some mines are faring better than others with regard to policy implementation (see 5.3.2.3.1). Furthermore, employment equity and skills development remain major challenges for mining companies and should be addressed, not only to comply with legislation requirements, but also to ensure an equitable and skilled mining workforce. Specific issues related to these aspects are further discussed in 5.4.3 and in Chapter Seven under 7.2.3.

Qualitative data pertaining to mining company policies are discussed in the following section.

5.3.2.4 Main concerns regarding mining companies' policies

Although the quantitative findings revealed relatively positive results, the qualitative enquiry revealed loopholes as well as limitations regarding policies. From the interviews and focus group discussions held, as well as the qualitative data derived from the open-ended questions of the questionnaire, the following main concerns regarding mining companies' policies were identified:

5.3.2.4.1 Lack of knowledge

Although the quantitative findings revealed that the female participants working in the core business of mining demonstrate partial knowledge of the content and operational procedures of most of the company's policies (see 5.3.2.2), a serious need for workshops and continuous training on policies was detected. This statement is reinforced by the following quotes made by participants:

"Women do not have sufficient knowledge of the content and operational procedures of policies. Policies must be communicated to employees of the mine, on a regular basis. Everybody does not have access to emails." Superintendent Internal Audit (Female – copper mine)

"We don't have much knowledge of the policies, because we are just operators. We just see things in a distance, we are not close to it, and we do not really know what is happening." Operator (Female – copper mine)

"I think each policy should be discussed at least once to get a good understanding of it." Mining engineer (Female – copper mine)

"The only thing that I know is if you are pregnant they move you from underground to give you light duty to be suitable for your pregnancy. You don't have to suffer underground. But other than that, we don't know anything. We have certain questions, for example, what happens to women when they are still busy with breastfeeding? Are we going to work shifts again, or are we going to work straight shifts?" Dozer operator (Female – platinum mine)

"More training or workshops should be given to female workers, as they are still lacking knowledge of these aspects." Diesel bay attendant (Female – platinum mine)

"The mine is self-centred when [it comes] to some or the majority of the outspoken policies. Mine does not do enough for the information to reach employees. There is a loophole between management and employees." Safety officer (Male – platinum mine)

5.3.2.4.2 Lack of transparency

A need for transparency was strongly voiced. The participants indicated that policy documents should be available to each and every employee of the mines. As previously mentioned (see 5.3.2.2.2), in order to be maximally effective, policies should be in writing and should be communicated to all employees (Grobler *et al.*, 2006:14). The quotes

above (under 'Lack of knowledge') are also an indication of the participants' opinions regarding transparency.

5.3.2.4.3 Gaps between policies and policy implementation

Although policies exist, problems are experienced with the actual implementation and application thereof. As highlighted in the discussion of quantitative data (see 5.3.2.3.1), a large number of the female participants working in core mining activities across all three mines are not satisfied with the way the skills development and employment equity policies are implemented and applied. The following quotes provide an indication of some of the participants' opinions regarding the implementation and application of policies:

"A lot of things looks good on paper, but the application thereof is quite a different thing." Fitter and turner (Female – copper mine)

"Implementation of policies by management must be fair, consistent, relevant and valuable." Geologist (Female – copper mine)

"According to me I can say I'm now confused, because the policies are there, but they are not put in practice ... things are happening but they are not going according to policies." Cleaner (Female – platinum mine)

"Skills development policy is very poor, they don't develop people. They rather employ people from outside than to develop people in the company." Mine overseer (Male – platinum mine)

"I have a problem with the pregnancy policy. When I was pregnant they said they could not accommodate me at surface. They sent me home without payment and tell me I can come back after the child is born. But the policy says you must get a space on surface and your full pay to manage your needs." Loco-operator (Female – platinum mine)

"If you are pregnant they said they are going to give light duty, but they are still punishing you because you are supposed to clean the toilets, stoep and offices if you are working underground as general." General haulage maintenance (Female – platinum mine)

From the individual interviews held with management of the phosphate and copper mines included in the study, it appears that no separate pregnancy policy is currently in existence. Pregnancy matters are currently covered in the LRA as well the BCEA. However, the participants of the management target groups of the copper and phosphate mines indicated that they are in the process of developing a separate pregnancy policy.

5.3.2.4.4 Racism

Racism is pointed out as one of the main concerns with regard to the implementation and application of some of the policies. According to the participants', job reservation, especially for the white ethnic group, still exists. Furthermore, the participants voiced the opinion that the skills development policy is passive and more inclined towards the white minority. They feel strongly that white employees benefit the most from the policy. New labour legislation aims to eradicate these inequalities, but the tempo of transformation pertaining to the equitable representation of Africans, coloured people, black women and people with disabilities in South Africa is still slow. The opinions of the participants are also in line with findings of the 2011–2012 Commission for Employment Equity Annual Report (DoL, 2012). According to the report, opportunities in terms of work allocation, recruitment, promotion and skills development still favour people of the white category (also see Chapter Two under 2.5.3). Inequalities that have a racial or ethnic dimension are not related to South Africa only, but can be found around the world. However, there are great variations in the nature and significance of such inequalities. According to Bryan *et al.* (cited in Bilton *et al.*, 2002:186) black women often suffer both racism and sexism. Black women suffer from disadvantages because they are black, because they are women and because they are working class (Brewer, cited in Haralambos & Holborn, 2008:104).

5.3.2.4.5 Nepotism

Nepotism is indicated as another area of concern. The participants stressed the fact that mining companies should avoid reserving positions and promotions for family relatives. One of the participants emphasised that *"all policies should be based on the best interest of the company to ensure productiveness/profit and sustainability". Supervisor (Male – copper mine)*

5.3.2.4.6 Non-compliance with government guidelines

It was indicated that all policies should be revisited in order to comply with government guidelines. Although policies exist and are implemented, the slow progress made in terms of achieving targets set by government leaves the impression with employees that policies do not comply with government guidelines. Policies should be reviewed and updated to ensure compliance with government guidelines. These updates should be communicated to employees, as suggested in 5.3.2.2.2.

5.3.3 Conclusion

From the above it is clear that mining companies included in the study provide the necessary benefits and have policies in place. However, the findings show deficiencies in the benefits provided to women employed in core mining positions; they have specific needs that mining companies should take into account, as pointed out in 5.3.1.2.2. Furthermore, it is evident from the findings that the perception exists that the female participants demonstrate more knowledge of policies related to the *Expressive policies* factor (pregnancy, HIV/Aids, sexual harassment and health and safety) than to the *Instrumental policies* factor (employment equity, skills development, remuneration, recruitment and retrenchment and mine closure). Although it is indicated that policies do exist, the research findings showed a gap between policies and the actual implementation and application thereof, especially with regard to the employment equity, skills development and mine closure policies (policies related to the *Instrumental policies* factor). Employment equity, skills development and mine closure are specifically enforced and regulated by the EEA, the SDA (see Chapter Three under 3.2.2.3 and 3.2.2.4), the revised Mining Charter (see Chapter Three under 3.2.3.6.4 (a)) as well as the requirements of the revised SLP guidelines. The findings from the qualitative enquiry revealed specific concerns regarding policies, such as a lack of knowledge, lack of transparency, racism, nepotism and non-compliance with government guidelines.

The empirical findings of the section *Workplace opportunities* are reported and discussed in the following section.

5.4 WORKPLACE OPPORTUNITIES

As already indicated in Chapter One, mining companies are obliged by mining legislation to increase female participation in the core business of mining. This had and still has numerous implications for mining companies as well as for female employees. On the one hand, mining companies had and still have to find able and capable women to employ in core mining positions and on the other hand, women do not want to be seen as 'quota appointments', but want to be taken seriously in the workplace. Given the numerous concerns that were raised by the participants regarding the development of women employed in core mining positions, it is of the utmost importance to also investigate the opportunities that are available for women in mining. Indicator statements on workplace opportunities were developed by means of a thorough literature study to verify whether women feel empowered to do their jobs effectively. Furthermore, the indicators aimed to

determine whether mining companies are taking women seriously in the workplace and providing opportunities for further development of women in the core business of mining.

The following seven indicators were identified and formulated as statements in order to seek views on workplace opportunities:

- The mining company makes provision for skills development of women.
- The mining company offers training to women on a regular basis.
- The mining company provides specialised training to enable women to move into more technical areas of work.
- Female employees feel adequately trained to perform their jobs effectively.
- The training programmes help to increase chances of promotions for women (for example to move from lower-level jobs into better jobs within the mining company).
- The mining company makes provision for career development of women.
- The mining company makes provision for women to enter managerial positions.

The main findings are presented in the following section.

5.4.1 Descriptive statistics and frequencies

The findings in terms of the indicator statements mentioned above are presented below according to the quantitative responses by the participants of the three mines included in the study.

Copper mine

According to the quantitative responses (detailed in Table 5.11 (a)), a vast majority of the participants of the target groups management (73.3–93.8%) and men working in core mining positions (82.3–100%) of the copper mine positively responded to the indicators mentioned above by answering agree to strongly agree to each of the indicators. The means calculated for these target groups for almost all the statements in this section are above 3. These responses are clearly contradictory to responses obtained from the female participants working in core mining positions. The only positive responses were obtained for the following two indicators: *The mining company makes provision for skills development of women* and *Female employees feel adequately trained to perform their*

jobs effectively. The means calculated for these statements are 2.72 and 2.97 respectively. Furthermore, low responses were obtained for the following two indicators: *The mining company offers training to women on a regular basis* and *The mining company makes provision for career development of women*. Negative responses were obtained for the rest of the indicators. These statements calculated a mean of 2.5 and below, indicating that compliance with these statements are none or very limited. It could therefore be deducted that on average, women employed in core mining positions of the copper mine thought that not enough is being done by the mining company in terms of training, career development and progression of women in core positions.

Phosphate mine

More or less the same results were obtained from the male and management participants of the phosphate mine for indicators on *Workplace opportunities* (see Table 5.11 (b)). More than two-thirds of the participants agreed to strongly agreed with each of the indicators (male employees working in core mining activities: 78–100%; management: 75–100%). All the statements calculated a mean above 3. The female participants working in core mining positions reacted positively to most of the indicators (almost all the statements calculated a mean above 2.5), with the exception of the following indicators: *The mining company offers training to women on a regular basis* (mean = 2.52) and *The mining company provides specialised training to enable women to move into more technical areas of work* (mean = 2.45). These statements calculated a mean of 2.5 and below and could point towards a problem area (see Table 5.11 (b)). On average, it could be deducted that the female participants working in core mining activities of the phosphate mine are more or less satisfied with the workplace opportunities offered by the mining company.

Platinum mine

The responses obtained from the male participants working in core mining activities of the platinum mine were clearly contradictory to the responses obtained from the same target group of the copper and phosphate mines. However, agreement in responses was found between the two target groups (male and female participants working in core mining activities) of the platinum mine (see Table 5.11 (c)). Negative responses were reported for almost all the different indicators on *Workplace opportunities*. These statements calculated a mean of 2.5 and lower, indicating that compliance with these specific statements is none or very limited. The only positive response received from both target groups was for the following indicator: *The training programmes help to increase chances*

of promotions for women (for example to move from lower-level jobs into better jobs within the mining company). This statement calculated a mean of above 2.5. Furthermore, a large number of the female participants (76.2%) working in core mining activities positively reported (mean = 2.86) that *they feel adequately trained to perform their jobs effectively*. The same sentiment was not shared by the male participants working in core mining positions, as only a limited number of participants (56.3%) positively reported (statement calculated a mean of 2.38) that *female employees feel adequately trained to perform their jobs effectively*. From the above, it is evident that both target groups are in agreement that much still needs to be done on the side of the mining company in terms of training, career development and promotion of women employed in core positions.

It is clear from the findings above that discrepancies exist in the results obtained from the three mines as well as from the different target groups at the mines. Positive results were reported for almost all the indicators from the male and management participants of the copper and phosphate mines. The same sentiment was not shared by the male participants working in core mining positions of the platinum mine as well as the female participants working in core mining positions of all three mines. Although the majority of the female participants of the phosphate mine reacted positively to almost all the indicators, the mean calculated for almost all the statements was much lower than the mean calculated for the responses obtained from the male and management target groups. It is clear that in terms of the different statement indicators on *Workplace opportunities*, much still needs to be done on the side of mining companies to enable and empower women to fulfil their jobs effectively. A lack of adequate opportunities and programmes in terms of training, skills and career development is evident.

Human resource development is enforced by the revised Mining Charter (see Chapter Three under 3.2.3.6.4 (a)) and according to the requirements of the revised SLP, mining companies are obliged to provide a detailed skills development plan outlining the "intent to offer employees development of requisite skills in respect of learnerships, bursaries (of core and critical skills), artisans, ABET training (level I, II, III, IV and NQF 1) and other training initiatives" (RSA, 2010b:8). Furthermore, mining companies should provide career development matrices of each discipline, develop individual development plans for employees and identify a talent pool to be fast-tracked in line with the needs (RSA, 2010b:10). Mining companies should also provide a mentorship plan for employees as well as a bursary and internship plan. All these plans should indicate the targets, timeframes and budgets of how the plans will be implemented (RSA, 2010b:13).

Table 5.11 (a): Participants' perceptions regarding workplace opportunities for women working in core mining activities – copper mine

	Workplace opportunities	Male in core						Female in core						Management					
		Strongly disagree	Disagree	Agree	Strongly agree	Mean	Standard deviation	Strongly disagree	Disagree	Agree	Strongly agree	Mean	Standard deviation	Strongly disagree	Disagree	Agree	Strongly agree	Mean	Standard deviation
1.	The mining company makes provision for skills development of women	0.0	0.0	58.8	41.2	3.41	0.51	6.3	28.1	53.1	12.5	2.72	0.77	6.3	0.0	43.8	50.0	3.38	0.81
2.	The mining company offers training to women on a regular basis	0.0	0.0	70.6	29.4	3.29	0.47	13.8	31.0	44.8	10.3	2.52	0.87	6.3	6.3	37.5	50.0	3.31	0.87
3.	The mining company provides specialised training to enable women to move into more technical areas of work	0.0	11.8	64.7	23.5	3.11	0.60	10.0	53.3	30.0	6,7	2.33	0.76	6.3	12.5	37.5	43.8	3.19	0.91
4.	I (female employees) feel adequately trained to perform my (their) job(s) effectively	5.9	11.8	64.7	17.6	2.94	0.75	3.4	17.2	58.6	20.7	2.97	0.73	13.3	13.3	33.3	40.0	3.00	1.07
5.	The training programmes help to increase chances of promotions for women (e.g. to move from lower-level jobs into better jobs within the mining company)	0.0	11.8	64.7	23.5	3.11	0.60	13.3	46.7	23.3	16.7	2.43	0.94	6.3	12.5	37.5	43.8	3.19	0.91
6.	The mining company makes provision for career development of women	0.0	11.8	70.6	17.6	3.06	0.56	13.3	26.7	50.0	10.0	2.57	0.86	6.3	6.3	43.8	43.8	3.25	0.86
7.	The mining company makes provision for women to enter managerial positions	0.0	11.8	52.9	35.3	3.24	0.66	14.3	50.0	28.6	7.1	2.29	0.81	6.3	18.8	31.3	43.8	3.13	0.96

	A vast majority of the participants (above 62.5%) reacted positively by indicating 3 (partially) and 4 (completely).
	Slightly more than half (51–62.5%) reacted positively by indicating 3 (partially) and 4 (completely).
	Half of the participants (50%) reacted positively by indicating 3 (partially) and 4 (completely).
	Less than half of the participants reacted positively by indicating 3 (partially) and 4 (completely).
	Mean scores of 2.5 and lower were regarded as 'low' and indicate that compliance with the specific statement is none or very limited.

Source: Constructed by author (2013)

Table 5.11 (b): Participants' perceptions regarding workplace opportunities for women working in core mining activities – phosphate mine

	Workplace opportunities	Male in core						Female in core						Management					
		Strongly disagree	Disagree	Agree	Strongly agree	Mean	Standard deviation	Strongly disagree	Disagree	Agree	Strongly agree	Mean	Standard deviation	Strongly disagree	Disagree	Agree	Strongly agree	Mean	Standard deviation
1.	The mining company makes provision for skills development of women	0.0	0.0	71.4	28.6	3.29	0.47	14.3	14.3	61.9	9.5	2.67	0.86	0.0	0.0	41.7	58.3	3.58	0.51
2.	The mining company offers training to women on a regular basis	0.0	11.8	64.7	23.5	3.12	0.60	19.0	23.8	42.9	14.3	2.52	0.98	0.0	0.0	33.3	66.7	3.67	0.49
3.	The mining company provides specialised training to enable women to move into more technical areas of work	0.0	21.4	50.0	28.6	3.07	0.73	5.0	50.0	40.0	5.0	2.45	0.69	0.0	25.0	50.0	25.0	3.00	0.74
4.	I (female employees) feel adequately trained to perform my (their) job(s) effectively	0.0	12.5	62.5	25.0	3.13	0.62	0.0	10.5	36.8	52.6	3.42	0.69	0.0	0.0	58.3	41.7	3.42	0.51
5.	The training programmes help to increase chances of promotions for women (e.g. to move from lower-level jobs into better jobs within the mining company)	0.0	6.3	62.5	31.3	3.25	0.58	9.5	23.8	47.6	19.0	2.76	0.89	0.0	0.0	66.7	33.3	3.33	0.49
6.	The mining company makes provision for career development of women	0.0	0.0	75.0	25.0	3.25	0.45	9.5	19.0	57.1	14.3	2.76	0.83	0.0	0.0	58.3	41.7	3.42	0.51
7.	The mining company makes provision for women to enter managerial positions	0.0	12.5	62.5	25.0	3.13	0.62	15.0	20.0	50.0	15.0	2.65	0.93	0.0	0.0	41.7	58.3	3.58	0.51

	A vast majority of the participants (above 62.5%) reacted positively by indicating 3 (partially) and 4 (completely).
	Slightly more than half (51–62.5%) reacted positively by indicating 3 (partially) and 4 (completely).
	Half of the participants (50%) reacted positively by indicating 3 (partially) and 4 (completely).
	Less than half of the participants reacted positively by indicating 3 (partially) and 4 (completely).
	Mean scores of 2.5 and lower were regarded as 'low' and indicate that compliance with the specific statement is none or very limited.

Source: Constructed by author (2013)

Table 5.11 (c): Participants' perceptions regarding workplace opportunities for women working in core mining activities – platinum mine

	Workplace opportunities	Male in core						Female in core					
		Strongly disagree	Disagree	Agree	Strongly agree	Mean	Standard deviation	Strongly disagree	Disagree	Agree	Strongly agree	Mean	Standard deviation
1.	The mining company makes provision for skills development of women	0.0	46.7	53.3	0.0	2.53	0.52	22.7	27.3	50.0	0.0	2.27	0.83
2.	The mining company offers training to women on a regular basis	6.7	53.3	40.0	0.0	2.33	0.62	22.7	50.0	27.3	0.0	2.05	0.72
3.	The mining company provides specialised training to enable women to move into more technical areas of work	20.0	26.7	53.3	0.0	2.33	0.82	23.8	61.9	14.3	0.0	1.90	0.62
4.	I (female employees) feel adequately trained to perform my (their) job(s) effectively	18.8	25.0	56.3	0.0	2.38	0.81	4.8	19.0	61.9	14.3	2.86	0.73
5.	The training programmes help to increase chances of promotions for women (e.g. to move from lower-level jobs into better jobs within the mining company)	13.3	20.0	53.3	13.3	2.67	0.89	14.3	28.6	38.1	19.0	2.62	0.97
6.	The mining company makes provision for career development of women	6.7	40.0	46.7	6.7	2.53	0.74	19.0	33.3	47.6	0.0	2.29	0.78
7.	The mining company makes provision for women to enter managerial positions	20.0	53.3	13.3	13.3	2.20	0.94	19.0	47.6	33.3	0.0	2.14	0.73

	A vast majority of the participants (above 62.5%) reacted positively by indicating 3 (partially) and 4 (completely).
	Slightly more than half (51–62.5%) reacted positively by indicating 3 (partially) and 4 (completely).
	Half of the participants (50%) reacted positively by indicating 3 (partially) and 4 (completely).
	Less than half of the participants reacted positively by indicating 3 (partially) and 4 (completely).
	Mean scores of 2.5 and lower were regarded as 'low' and indicate that compliance with the specific statement is none or very limited.

Source: Constructed by author (2013)

The factor analysis of the section *Workplace opportunities* is presented in the following section.

5.4.2 Factor analysis

A factor analysis was conducted of the seven indicator statements pertaining to *Workplace opportunities* to explore the factorial structure of the section. The results of the KMO and Bartlett's test of sphericity are presented in Table 5.12 (a).

Table 5.12 (a): KMO and Bartlett's test of sphericity

KMO and Bartlett's test of sphericity		Value
KMO		0.870
P-value of Bartlett's test of sphericity	Approx. chi-sq	451.840
	df	21
	Sig.	0.000

Source: Constructed by author (2013)

The KMO measured 0.870 and indicates that the sample size is adequate for factor analysis. The p-value of Bartlett's test of sphericity returned a value smaller than 0.05, suggesting that the correlation between statements is sufficient for factor analysis (Field, 2005:652). The results of the factor analysis are reported in Table 5.12 (b).

Table 5.12 (b): Pattern matrix[a]

Workplace opportunities			
No.	Question statement	Factor 1	Communalities
		Workplace opportunities	
D6	The mining company makes provision for career development of women	0.848	0.720
D3	The mining company provides specialised training to enable women to move into more technical areas of work	0.843	0.711
D1	The mining company makes provision for skills development of women	0.803	0.645

Workplace opportunities			
No.	Question statement	Factor 1 Workplace opportunities	Communalities
D2	The mining company offers training to women on a regular basis	0.770	0.593
D7	The mining company makes provision for women to enter managerial positions	0.752	0.565
D5	The training programmes help to increase chances of promotions for women (e.g. to move from lower-level jobs into better jobs within the mining company)	0.683	0.467
D4	I (female employees) feel adequately trained to perform my (their) job(s) effectively	0.417	0.174
	Cronbach's alpha	**0.89**	
	Factor mean	**2.68**	
	Factor standard deviation	**0.64**	

Source: Constructed by author (2013)

5.4.2.1 Factor 1: Workplace opportunities

Only one factor was extracted by Kaiser's criteria (Field, 2005:652) that explains 55.35% of the total variance in the section on *Workplace opportunities*. The statements all loaded above 0.4 on the identified factor. Questions D6, D3 and D1 have factor loadings of above 0.8, while questions D2 and D7 loaded above 0.7 on this factor. Questions D5 and D4 loaded satisfactorily with a factor loading of 0.683 and 0.417 respectively. The communalities for all the questions are above 0.4, except for Question D4, which is 0.174.

The factor mean calculated at 2.68, just above the required 2.5, which indicates that a slight majority of the participants positively agreed with the factor and its statements. The factor shows good reliability with a Cronbach's alpha coefficient of 0.89, which is well above the required 0.7, and shows high reliability and internal consistency.

5.4.2.2 Comparison of the three target groups of the different mines regarding workplace opportunities

The descriptive statistics together with effect sizes of the different target groups regarding the section on *Workplace opportunities* are reported in Table 5.12 (c) below.

Table 5.12 (c): Comparison of the three target groups of the different mines regarding Workplace opportunities

		Men		Women		Management		Effect sizes	
Factor	**Mine**	**Mean**	**Standard deviation**	**Mean**	**Standard deviation**	**Mean**	**Standard deviation**	**Women vs Men**	**Women vs Management**
Factor 1:	Phosphate	3.17	0.49	2.74	0.66	3.43	0.39	**0.66**	**1.06**
Workplace	Copper	3.17	0.42	2.59	0.63	3.20	0.85	**0.93**	**0.73**
Opportunities	Platinum	2.35	0.62	2.30	0.50			0.08	

(a) small effect: d=0.2, (b) medium effect: d=0.5 and (c) large effect: d=0.8

Source: Constructed by author (2013)

It is evident from Table 5.12 (c) that the effect sizes of the female versus male target group of the platinum mine for the *Workplace opportunity* factor are smaller than 0.2, indicating that the difference between the means of the different target groups has a small effect and is not practically significant. The means for both target groups calculated below 2.5, indicating that compliance with the indicator statements contained in this factor is none or very limited. It could be understood that both target groups are in agreement that women are not provided with adequate opportunities for development in the core business of mining in the platinum mine.

The d-value of the female versus male target groups of the phosphate mine shows that the difference between the means of these target groups has a medium effect (0.66). A large effect is evident from the three target groups of the copper mine as well as from the female versus management target group of the phosphate mine, as the d-value calculated larger than 0.73. It could therefore be deducted that on average, the participants of the male target group of the phosphate mine as well as the management target groups of the

phosphate and copper mines (as well as the male participants of the copper mine) are more in agreement with *Workplace opportunities* than the female target group themselves. They therefore believe that women are provided with adequate opportunities for development in the core business of mining, while this view is not supported by the majority of the participants of the female target group.

It is evident from the quantitative findings that some mining companies are progressing faster than others with regard to development and mainstreaming of women in core positions. Mining companies need to be aware of female employees' needs in terms of training, skills and career development. The development and mainstreaming of women in the core business of mining is critical for reaching employment targets, as prescribed by the Mining Charter, as well as for retaining women for the mining industry.

The following section presents main concerns regarding *Workplace opportunities*, derived from the qualitative enquiry.

5.4.3 Main concerns regarding workplace opportunities

Data obtained from the qualitative inquiry yielded similar results to the quantitative data. From the interviews and focus group discussions it was evident that much still needs to be done in terms of skills and career development and progression of women working in the core business of mining. Although mines started to appoint more women in core mining positions, a lack of adequate training and development programmes for women still exists. The following main concerns were raised:

5.4.3.1 Perceptions

The perception still exists that mining is a man's environment; therefore, the participants felt that skills and career development opportunities are more inclined towards male employees. On the other hand, the male participants were of the opinion that women have more opportunities than men due to the fact that mining companies are forced to employ 10% women in the core business of mining. These different viewpoints are one of the major causes of frustration in the workplace. The following comments were made by some participants in this regard:

"I feel skills development programmes are only provided for male employees." Geologist (Female – copper mine)

"They prefer to send men for skills development. Like for instance, there was this apprenticeship. They didn't give one to a single woman. They took 10 guys, without a woman there. It's difficult for me to progress to the next level." Attendant: Bush pumps and fitters (Female – phosphate mine)

5.4.3.2 Recognition

A serious need for recognition was expressed. Female employees want to be taken seriously in the mining workplace; they want to be heard. Furthermore, the participants indicated a need for approval of women's innovative ideas. They also voiced the opinion that more women should be involved in decision-making processes and should be appointed in management positions, such as shift bosses. The following quotations provide an indication of women's opinions regarding *Recognition*:

"Even that woman who is a miner, she fought to be a miner, it was not easy for her to get through there, she had to fight, it was not a promotion … they never believe in us that we can do a better job or the same job that men can do." Dozer operator (Female – platinum mine)

"They mustn't take the women for granted. Those, the top people, they are the ones who are taking the people for granted and the leaders also." General worker (Female – platinum mine)

"They don't care about us, as an employee. Because if a person is injured you have to put that person on a position, considering the qualification of this person … because the requirement of this shaft before we were hired is matric [Grade 12]. And all these people have got matric and some other qualification, but they don't consider that. We have to be cleaners and there is a subcontract company that provide for cleaners, they are cleaning. So why are they putting us to the cleaning position whereas the cleaners are already in the company?" Cleaner (Female – platinum mine)

"There is no woman shift boss." Diesel bay operator (Female – platinum mine)

5.4.3.3 Lack of training opportunities

It is evident from the quantitative data that, although on average the management participants of mining companies positively indicated that adequate training opportunities are provided to women employed in core mining positions, this sentiment is not shared by a large number of the female participants (see tables 5.11 (a–c)). Data obtained from the

qualitative inquiry revealed similar results. From the viewpoints expressed in interviews and focus group discussions conducted with the female participants working in core mining positions, it was evident that most women want to develop their careers in the mining industry but find it difficult to get adequate support from mining companies. They voiced the opinion that they often have to use their own time for studies, training opportunities are not transparent and communicated to all employees and bursaries are not easily available. Furthermore, it is indicated that female employees are often appointed in certain positions of which they do not necessarily meet the requirements. Others admitted that they do receive on-the-job training and are able to do the work that they are appointed for, but were not sent on training to formally acquire the necessary qualifications. A strong need is expressed for opportunities to obtain formal qualifications. The participants also reported that they do not know with whom to discuss their training needs. A need was detected for clear and effective guidance (an approachable person to assist employees with their training needs). The findings of the impact assessment done by the DMR in 2009 also revealed a definite lack of investment in core and critical skills development in the mining sector (see Chapter Three under 3.2.3.5 (a)). According to Shabangu (2012:5), South African Minister of Mineral Resources, collaboration of government with mining social partners to improve skills development and also to increase the participation of women at all levels is absolutely critical. Examples of women's needs in terms of training opportunities are illustrated in the following comments:

"Want to be taken on courses. Want to visit other mines to see how they operate and learn from them and want to implement at the mining company." Geologist (Female – copper mine)

"The mining company does not provide for career development of women, if I want to be trained in something, it should be done on my own. I want to be supported in the following ways: I would like the mining company to assist me with my studies, to provide bursaries and to provide me with a career development programme and plan." Instrument technician (Female – copper mine)

"Our supervisors, they don't promote our development. If you want to train something, sometimes you have to do it on your own time, so you don't have time to do it at work. If you want to do a refresh, you have to say book me on my off day. Development, you just have to do it on your own time. They are advising us to get developed, to do e-learning. If they see you are interested in something they won't say you are unwelcome to do it, but sometimes you just have to make your own time to do it." Operator (Female – copper mine)

"I am working with explosives, but I don't have certificate. I know what is what, the measurement of the fuses, we know everything, but we don't have the certificate." General worker (Female – platinum mine)

"When you work here it's difficult for you to get information. I had to find out from outside there are study loan forms. I had to surf them on the computer then I printed them myself." Pecker operator (Female – platinum mine)

"We find things for ourselves. Like right now, four of us we are in a learnership. This learnership, I saw it, my brother was working here so he gave me the information because he has access to a computer. Otherwise I wouldn't have known that there is a learnership. But at the shops, they don't put up the advertisements." Learner rock breaker (Female – platinum mine)

"I am studying privately. I went around the shafts, knocking door to door, to seek assistance. I went to HR and they were like 'no, we can't take you to school'… So I went and I enrolled, I paid my money. I realised that I will need 30 days' study leave because that is the only way I could go and study. They said 'no, you can't do that'. Ja, they don't consider women for training." Diesel bay attendant (Female – platinum mine)

Contradictory to the above, one management participant claimed that female employees do not always make use of the opportunities provided by mining companies, as indicated in the quotation below:

"Some of them are typically saying opportunities, but if you look at opportunities, people do not grab opportunities that come their way. We have got the study assistance where we allow you to study. Just to show an indication, this year I got seven applications. Not even one female has applied to study formally further. So it is not that the opportunity is not there, it is them not taking the opportunity and it was quite shocking to see that the females don't want to study further, because the company is paying for them. Because whenever you talk to the females and I do frequently talk to them, you will hear they want to advance, but they do nothing to physically take their advancement." Human resource manager (Female – phosphate mine)

5.4.3.4 Lack of an effective mentoring system

A lack of an effective mentoring system within the mining companies included in the study was also indicated. This finding is supported by the findings of the impact assessment done by the DMR in 2009, which also revealed low scores in terms of the mentoring of

empowerment groups (see Chapter Three under 3.2.3.5 (a)). The participants indicated that more exposure to mentors would assist with career development, as illustrated in the following quotations:

"An effective mentoring system must be in place. More exposure to mentors is required." Rock mechanic (Female – copper mine)

"I intend to develop my career in mining, but the mining company does not provide clear steps for career development. A good mentoring system as well as exposure to mentors will assist with career development." Senior geologist (Female – copper mine)

5.4.3.5 Lack of career guidance

Furthermore, the female participants expressed a need for career guidance in terms of the following:

- Career development programmes should be in place.
- Career paths should be transparent. Specific steps to be taken in order to progress in the mining company should be clear.
- Career development opportunities should be communicated and available to all employees.
- Communication lines should be clear. A need was expressed for an approachable person to contact and assist employees with career development.

Women's needs in terms of career guidance are clearly noted in the following comments:

"Want management to tell me exactly where I'm going to with my career in the mining company." Geologist (Female – copper mine)

I want the following support from the mining company to develop my career: I want to be sent on regularly trainings, want to receive financial support for training, would like to have a career development plan." Development dispatch (Female – copper mine)

"Career paths will definitely assist women in making progress in their careers. We know what we want to achieve, but we don't know the steps to get there. We see the goal, but don't know the tools and techniques to achieve these goals." Electromechanical engineer (Female – copper mine)

"They must consider a person who has got a long service. They must be curious about why a person is still on the same level. If they don't care about you, you sometimes don't get motivated when you come to work. I want to be developed and move from point A to point B in the mining company." Attendant: Bush pumps and fitters (Female – phosphate mine)

"I want to be a safety officer, but right now I feel like I'm standing still. For almost five years I progress fine, but for the past three years I've been standing still and it's getting to bore you. Right now I'm an artisan for three years, I'm not developing, I'm not going anywhere, I'm not getting courses." Pecker operator (Female – platinum mine)

"Development is the biggest thing. That's why I'm saying they are still hiring too much women in the mining. Are we going to be all generals in the mine? That's why I say, the first group must be developed and the others must start as generals and then they must also be developed as time goes on." Rowlands shaft (Female – platinum mine)

The above findings are in line with the findings of the impact assessment done by the DMR in 2009 (see Chapter Three under 3.2.3.5 (a)). According to the findings, career plans (paths) are more focussed on the development of senior managers and mostly exclude lower-level employees (DMR, 2009).

5.4.3.6 Financial support

Although some participants indicated that mining companies do provide financial support, others expressed a serious need for financial support, as mentioned in the remarks below (also refer to the quotations above):

"Would like support from the mining company in the form of training and financial support." Electrical engineer (Female – copper mine)

"To get a bursary at the mine is very difficult. Most of the people that are studying, they are financing themselves and when you go write an exam, they only give you a day off, exam leave, only for the day you are writing the exam." Multi-skill operator (Female – copper mine)

"I want to go to school. I want the mine to support me with money to go school. If I pass I want to come back and work in this company again." General production (Female – platinum mine)

5.4.3.7 External appointments

One of the main concerns raised by the female participants was the tendency of mining companies to rather employ persons from outside the mine to fill positions within companies than to develop their own personnel. This leads to much frustration on the side of women employed in core positions. The following comments were made in this regard:

"The mining company also employ women from outside and rather send them for skills development. It's difficult for me to progress to the next level." Attendant: Bush pumps and fitters (Female – phosphate mine)

"The only thing that our company is doing is to take women from outside and put them in here, while we are here they don't train us, they don't do anything. It is difficult for us to go to the next level. They don't develop us, they just dump us there. We end up growing old there. They are not doing much for women." Lab attendant (Female – phosphate mine)

"There are always new people from outside. You work in the mine, but they can't develop us. When we apply for a post, they just take people from outside." General workers (Female – platinum mine)

5.4.4 Management response to qualitative inquiry

Although the above concerns were raised by the female participants working in core mining activities across all three mines, the mining companies included in the study already started to show a commitment to the transformation agenda of the democratic regime by starting to implement strategies to develop women in the core business of mining. The management participants indicated that certain programmes are already in place to fulfil in the training and developmental needs of women employed in core mining positions. However, it was clear that some mines are progressing faster than others. The following initiatives are provided by the mines included in the study, among others:

- Study assistance in the form of bursaries (also for employees' dependents), learnerships, opportunities to obtain formal qualifications at an institution of higher learning and graduate development programmes
- ABET training for illiterate people
- Mentorship schemes

- Career development plans
- Job descriptions, indicating the requirements to progress to the next level.

Furthermore, two of the mines included in the study indicated that Grade 12 has also become a requirement to apply for a position at the mining company. In addition, one of the mines indicated that science as a school subject has also become a prerequisite for employment at the mining company. The following two main reasons were put forward for increased admission requirements. Firstly, it is determined by the nature of the work and secondly, it is done to build the overall skills level of the business. According to the participants, a large number of workers in the mining industry are still illiterate. This hinders workers' opportunities to be promoted. The illiterate person will, probably for the rest of his/her life, remain on the same level. One of the participants highlighted the effect that continuous illiteracy has by stating: *"The implication is that companies become poorer and poorer in terms of internal promotion opportunities and these opportunities are then taken up by external candidates. "It is bad for the organisation, it is bad for the morale of the workers, because people sit there for 20 years and are still employed at the lowest level." Senior manager: Production (Female – phosphate mine)*

Although the above-mentioned programmes are in place at the mining companies, it is evident from the findings that female employees are not fully aware of the programmes. A need for transparency on the side of management was detected among participants.

5.4.5 Conclusion

It is evident from the quantitative as well as the qualitative findings that much still needs to be done on the side of mining companies in terms of the provision of adequate training opportunities and suitable and transparent skills and career development programmes. Although positive results (quantitative) were obtained from the majority of the participants of the management target groups of the respective mines, this view was not supported by the majority of the female participants. The qualitative findings revealed further specific concerns that should be taken in to account to ensure development, progression and mainstreaming of women in the core business of mining. The Mining Charter as well as the requirements of the SLP obliged mining companies to develop and implement a comprehensive human resource development programme that should provide for a detailed skills development, mentorship, bursary and internship plan. Furthermore, a

trained and skilled diverse workforce could enhance productivity, personal satisfaction and job enrichment, as suggested by Nel *et al.* (2012:380).

5.5 CHAPTER SUMMARY

This chapter provided the biographical information of the research participants. The empirical findings regarding the first two main themes, *Company procedures and policies* and *Workplace opportunities*, were presented and discussed. The qualitative and quantitative data were presented in an integrated way, according to relevant thematic issues. Qualitatively, the views of the participants as expressed during the personal interviews and focus group discussions and observed directly were reported. Quantitatively, data were presented in frequency tables, graphs and diagrams. Descriptive statistics were reported per statement as mean and standard deviation. In addition, a factor analysis was conducted of the sections *Company policies* and *Workplace opportunities* to explore the factorial structure.

Attention was given to employee benefits provided by mining companies as well as mining company policies. According to the findings, it is clear that discrepancies exist in data obtained from the three mines included in the study. Some mines are faring better than others with regard to the provision of employee benefits as well as with policy implementation.

The findings showed that women employed in core mining positions have specific needs in terms of benefits provided, as indicated in 5.3.1.2, which should not be ignored. In order to retain women for the core business of mining, mining companies should be sensitive to these needs of female employees.

Although the quantitative data positively indicated that women employed in core mining positions across all three mines have partial knowledge of most of the mining company policies, the perception exists that the female participants demonstrate more knowledge of policies related to the *Expressive policies* factor (pregnancy, HIV/Aids, sexual harassment and health and safety) than the *Instrumental policies* factor (employment equity, skills development, remuneration, recruitment and retrenchment and mine closure). Although the quantitative findings revealed considerably positive results, the qualitative data revealed the following loopholes: a lack of knowledge, a lack of transparency, racism, nepotism and non-compliance with government guidelines. Furthermore, gaps exist between policies and the actual implementation and application thereof. The implementation and application of the employment equity, skills development and mine

closure policies remain major challenges that mining companies are facing. Much still needs to be done with regard to the successful implementation of these policies.

In terms of the section on *Workplace opportunities*, the quantitative as well as the qualitative findings show a lack of adequate training opportunities as well as suitable and transparent skills and career development programmes. Quantitatively, positive results were reported on each of the indicators from the management target groups; however, this view was not supported by the majority of the female participants. The qualitative findings revealed specific concerns related to the following aspects: perceptions, recognition, training opportunities, mentoring systems, career guidance, financial support and external appointments. Mining companies need to take note of these concerns and should adhere to the requirements of the revised Mining Charter as well as the revised SLP in terms of human resource development in order to ensure the development and progression of women in the core business of mining. The development of women in the core business of mining is critical for reaching employment targets, as required by the Mining Charter, as well as for retaining women for the mining industry.

The chapter to follow presents the empirical findings of the following sections: *Infrastructure facilities, Physical ability* and *Health and safety in the workplace*.