

# **WOMEN IN MINING**

**A report to the “Women in Mining” Taskforce  
The Australasian Institute of Mining and  
Metallurgy**

**November 1998**

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- MIM Resources: Brisbane and Mt Isa Mines
- North Limited: Kanowna Belle Gold Mines Pty Ltd and Northparkes Pty Ltd
- Perseverance Mining: Fosterville and Balleston mines
- Placer (Osborne) Pty Ltd
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*Catherine Pattenden  
Melbourne  
November 1998*

# **SECTION 1 EXECUTIVE SUMMARY**

## 1.0 Executive Summary

The research on which this report is based will in part form the basis of a dissertation toward the degree of Doctor of Philosophy from The University of Melbourne to be submitted by Catherine Pattenden. Some of the findings contained in this report have appeared in papers presented at:

- The Women in Engineering Forum, The University of Ballarat, December 1997
- The AusIMM Sydney Miners Club, 7 May 1998.

## 1.1 Background to the Study

The minerals industry is the most highly sex-segregated industry in Australia. In a country where the active workforce comprises 43% women<sup>1</sup>, the minerals industry falls well behind the Australian average with just 11% women, with the majority of these clustered in the clerical and administrative ranks. This figure can be further reduced to less than 2 per cent female participation when only mine sites within Australia are being examined.

The number of women participating in the targeted occupations of geology, mine engineering, and metallurgy has increased significantly in recent years. For example, over the five-year period ending in 1993, the percentage enrolment of women in the non-traditional degrees of geology and mining and mineral engineering increased to over 25% and 18% respectively<sup>2</sup>. However, these gains have not been reflected in the employment figures for the industry. This suggests that either a significant percentage of female graduates in these courses, for reasons unknown, choose to join another industry upon graduation, or that the attrition rate for women in the industry is such that the flow of women out of the industry is greater than the flow in. The latter is consistent with the strong anecdotal evidence that women's attrition rate is approximately double that of their male colleagues.

Many reasons may be posited as explanation for this situation - the remoteness of the core business, the physical demands of the work, the lack of compatibility or "fit" between the demands of the business and family responsibilities. But while each of these factors may contribute to the logic of the withdrawal process for some women, this research document suggests that they are not necessarily the most significant factors influencing an individual's decision to exit the industry. Rather, the more subtle (and sometimes not so subtle) pressures of exclusion that go with being a minority within a largely homogenous community can form the core reasons for a woman's decision to reorient her career away from mining. These pressures can range from exclusion from social events and opportunities to communicate with co-workers in an informal setting through to the frustration of stalled careers and limited opportunities. Such factors frequently form the cultural undercurrent of the industry and their effects transcend policy, legislation and training. They are the principle inhibitors of diversity within the industry, and serve to exclude not just women but also many men and people of different ethnic and linguistic backgrounds.

Since the introduction of the EEO legislation in the mid-80's, some mining companies have made a concerted effort to increase the accessibility of the industry to women. Gone are the days when company representatives could openly say, "We have a policy of not employing women", or women would be

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<sup>1</sup> Australian Bureau of Statistics *Labour Force Australia* February 1998

<sup>2</sup> Cobbin, Deidre: *Women's Participation non Non-Traditional Fields of Study at the Undergraduate Level of Higher Education 1989-1993*, University of Technology, Sydney, DEET

refused an underground tour on the grounds that it would bring bad luck to the mine, or that the men working underground would down tools. The unrestrained and explicit discrimination which saw many young technically qualified women in the 1970's and 1980's struggle to find suitable employment is now largely a thing of the past.

The legal requirements imposed by the EEO and Affirmative Action legislation have been major motivating factors in the change process. In addition, there has been an increasing recognition by many companies of the tangible benefits associated with diversity in the workplace, particularly with respect to remote locations. In an environment where the normative standards have for so long been narrowly defined as those of the white, largely blue-collar, anglo-saxon male, the introduction of females has seen the promotion of generally higher behavioural and social standards. Some organisations have aimed at achieving greater diversity by the use of workforce and diversity targets, the establishment and dissemination of minimum acceptable behaviour standards, and the rigorous enforcement of EEO and anti-discrimination policies. Where such principles have been adhered to the benefits to the organisation have included not just the attraction and retention of female staff, but also a more stable and productive general workforce.

The movement of women into the industry over the last 20 years can be viewed as a barometer of the industry's ability to accommodate change and diversity on a broad scale. Despite the generally positive efforts of some companies, the terms "the boy's club" and "The Melbourne Club" were raised repeatedly by male and female interviewees alike when asked to describe the industry's contemporary management style. Deep divisions exist not just between genders, but between regional and corporate operations, with the upper echelons of corporate management frequently portrayed as remote, inaccessible and out of touch with the realities of operational life.

The culture of many organisations was typically characterised by division and dissonance between these two critical business arms. Contributing to this situation was the widely held perception that the industry continues to maintain an underlying conservatism in employment practice which has seen the promotion of individuals who most closely resemble the existing management hierarchy in terms of gender, education, and class background, resulting in a homogeneity of thought and behaviour in the upper ranks of mining management.

The challenge posed by diversity is the achievement of a truly meritocratic system whereby the ideal of the best person for the job becomes more than mere rhetoric, much professed but rarely executed. In a market in which globalisation, shrinking margins, and ever tightening operational budgets push mining workers to the edge of their capacity, the optimal utilisation, development and retention of all staff becomes a critical business imperative. Remaining with the tried and tested formulae of developing and promoting those individuals who best "fit" the existing model inhibits the industry's adaptability. It could be said that the ability to accommodate women and handle the challenges of gender diversity are symptomatic of the industry's ability to handle diversity on a broader scale, to synthesise difference, however it is defined, to bring about a greater creativity and imagination in the face of uncertainty.

## 1.2 Summary of Findings and Recommendations

Details in support of this summary can be found in Section 3.

### SECTION 3.1 JOINING THE MINING INDUSTRY: ADAPTING TO A CULTURE FINDINGS AND RECOMMENDATIONS

**FINDING 1:** That many graduates (specifically geology graduates) receive little or no exposure to the mining industry during their tertiary study.

**FINDING 2:** That the reality of modern mining is very poorly represented in the general community and many misconceptions based on out-dated practice prevail.

**RECOMMENDATION A:** That the minerals industry, through its representative and professional organisations such as The AusIMM and The Minerals Council of Australia, develop closer links with the university sector to encourage greater awareness of the practical applications of geology and related courses of study (e.g. mine engineering).

**RECOMMENDATION B:** That Universities incorporate at least one course in management and communication skills in science undergraduate courses, particularly those with a strong industry application.

**RECOMMENDATION C:** That companies and industry bodies such as The AusIMM target school careers guidance councillors in minerals industry promotions.

### SECTION 3.2 HARASSMENT, DISCRIMINATION AND EQUAL EMPLOYMENT OPPORTUNITIES: FINDINGS AND RECOMMENDATIONS

**FINDING 3:** That harassment and discrimination remain a significant problem within the minerals industry across professions.

**FINDING 4:** That EEO policies and procedures are frequently poorly promulgated throughout organisations. Once in place, organisations fail to monitor their effectiveness.

**RECOMMENDATION D:** That resource companies, in addition to statutory reporting requirements, regularly audit the effectiveness of their EEO and dispute resolution procedures to ensure that such procedures maintain their relevancy to the workplace and do not deteriorate over time but in fact track to specific improvement targets.

**RECOMMENDATION E:** That resource companies ensure that individuals appointed as contact officers should be of recognisable influence and status within the organisation, and be fully trained and certified competent.

**RECOMMENDATION F:** That within their rules of conduct, professional bodies such as The AusIMM specifically state that discrimination on the grounds of gender, marital status, sexual orientation, race, creed or colour is regarded as unprofessional conduct and grounds for disbarment from that organisation.

**SECTION 3.3      PROFESSIONAL DEVELOPMENT:  
FINDINGS AND RECOMMENDATIONS**

**FINDING 5:** That mentor relationships are generally regarded positively by mining professionals as being of tangible benefit to career progress.

**FINDING 6:** That young female professionals are disadvantaged in the assignation of mentor relationships due to the reluctance and lack of skill/competence of many senior males to mentor females.

**FINDING 7:** That expressions of paternalism within mentor relationships are detrimental to that relationship and can inhibit the professional development of the mentee.

**FINDING 8:** That there are differentials in performance standards between male and female mining professionals. Many females believe they must consistently out-perform their male peers in order to be regarded equally with those male peers, while having less margin for error.

**FINDING 9:** That equity in performance standards are probably not well reflected in remuneration.

**FINDING 10:** That females are frequently excluded from critical networking opportunities that take place during work-related social activities. When actually participating in social activities females are often subjugated to dominant male behaviour.

**RECOMMENDATION G:** That mining industry management, through professional bodies, develop guidelines on the function of mentor relationships and set specific improvement objectives and monitoring of individuals and organisations.

**RECOMMENDATION H:** That companies and industry bodies such as The AusIMM include the possible negative implications of gender specific work-related socialising in EEO training and that, through training, females be equipped with specific techniques to cope with these situations and achieve enhanced influence.

**SECTION 2  
PROJECT OUTLINE AND  
METHODOLOGY**

## 2.0 Project Outline and Methodology

### 2.1 Aim and Scope of Study

This study is aimed at identifying employment barriers that continue to inhibit female participation in the Australian minerals industry and serve to reduce longevity of employment. The target group is female technical professionals, particularly those qualified in the fields of geology, mine engineering, or metallurgy.

It is intended that the results of this study will, in the first instance, promote discussion and critical debate on the meaning of working in mining. In the second instance, it is intended to aid minerals companies and supporting bodies develop programs aimed at increasing the longevity of employment both for technical professional women and for the wider mining workforce.

Although the focus of the research is upon women, the workplace experiences of men were also collected as part of this project. Many of the issues highlighted in this report are shared by many of these men.

### 2.2 Methodology

The principle method of data collection was interviews with a cross-section of women and men either currently, or formerly, employed within the Australian minerals industry. A questionnaire survey was also conducted to aid in the interpretation of the interviews and to provide preliminary quantifiable data.

In May 1997, 24 resource companies based in Western Australia, Queensland, New South Wales and Victoria were invited to participate in the research. Of these, the following companies and sites agreed to contribute to the project, albeit with varying degrees of input:

- Argyle Diamond Mines: Perth Head Office and Site
- Bendigo Mining
- BHP Coal (Collieries Division): Brisbane and Wollongong
- BHP Minerals: Melbourne and Cannington
- CMPS & F: Brisbane
- Gwalia Consolidated: Sons of Gwalia, Leonora
- Kalgoorlie Consolidated Gold Mines Pty Ltd
- MIM Resources: Brisbane and Mt Isa Mines
- North Limited: Kanowna Belle Gold Mines Pty Ltd and Northparkes Pty Ltd
- Perseverance Mining: Fosterville and Baileston mines
- Placer (Osborne) Pty Ltd
- Shell Coal Australia: Brisbane and Capricorn Coal
- WMC Resources Limited: Perth, Mt Keith Nickel Operation, Leinster Nickel Operation, St Ives Gold Mine, and Kambalda Nickel Smelter.

See Appendix A for an overview of the project methodology.

#### 2.2.1 *Profile of Interview Data*

The aim of the interviews was to facilitate the gathering of qualitative data on the workplace experiences of individuals and to ascertain how those experiences influenced the critical decision making processes used in

career planning and lifestyle choices. The average time of each interview was one hour, with the longest interviews being three hours.

A total of 158 interviews were conducted, the majority of which took place during field visits between July and September 1997. The majority of interviewees (68% n.107) were sourced via participating companies and interviewed in their respective workplaces.

The remaining interviewees were sourced via word-of-mouth introductions or the “Working in Mining” questionnaire. Where direct face-to-face interviewing was not possible, telephone or e-mail contact sufficed. In total, 11 interviews were conducted in this manner.

All but 20 interviews were taped. The explicit permission of the interviewee to tape the interview was obtained in all cases prior to the interview commencing.

The interviews were conducted in an open-ended, conversational format. That is, while a set of pre-prepared questions was used to focus the interview, the interviews were not limited to those questions and, where appropriate to an individual’s experience, additional questions were incorporated. Where requested, the pre-prepared questions were supplied to the company or interview candidate prior to the interview date. See Appendix B for sample interview questions.

***i. Interview Participants by Source***

The interviewees were drawn from the following sources:

Source	Number of Interviewees
<ul style="list-style-type: none"> <li>• Direct representation or word-of-mouth introductions</li> </ul>	34
<ul style="list-style-type: none"> <li>• Volunteer staff from participating companies</li> </ul>	107
<ul style="list-style-type: none"> <li>• Volunteers from questionnaire respondents</li> </ul>	17
<b>TOTAL</b>	<b>158</b>

Of the 158 participants, 69% (n: 109) were female. See Appendix C for the age and gender composition of the interview group.

***ii. Interview Participants’ Undergraduate Qualifications***

The majority of interview candidates’ first qualification was in geology, mine engineering or metallurgy. In addition to members of the targeted occupations, associated individuals such as human resource managers, pit technicians, plant operators, supervisors, mine managers, and environmental engineers were interviewed where available and time permitted. See Appendix D for details of participant’s undergraduate qualifications.

## 2.2.2 “Working in Mining” Questionnaire

A questionnaire survey was conducted in order to:

- ascertain the responses of a wider group of people than could otherwise be reached by a single researcher in the time allocated for the research; and
- collect preliminary quantifiable data to add context to the qualitative interviews and to assist with their interpretation.

Some caution should be used when interpreting the results of this survey as an in-depth attitudinal survey of the industry’s professional technical workers. It is intended to be indicative of trends only and complementary to the qualitative data. See Appendix E for a copy of the “Working in Mining” Questionnaire.

### *i. Questionnaire Respondents by Source*

The total sample for the questionnaire was 500, of which the final return rate was 36% (n: 178). For the purpose of obtaining a range of responses from a cross-section of people from both within the industry and those who may have left, the sample was drawn from the following sources:

Source	Number distributed	Returns (by number)	Returns (by % of total)
• <i>Group A</i> : The Australasian Institute of Mining and Metallurgy membership database as at May 1997	300	133	74%
• Alumni’s of the Mining Engineering and Geology programs at			
◊ <i>Group B</i> : The University of New South Wales	60	16	9%
◊ <i>Group C</i> : Curtin University (The Western Australian School of Mines)	60	9	5%
◊ <i>Group D</i> : Ballarat University	60	10	6%
• <i>Group E</i> : Word of mouth introductions	20	10	6%
<b>TOTAL</b>	<b>500</b>	<b>178</b>	<b>100%</b>

#### *AusIMM Sample (Group A)*

Due to the imbalance of male to female members of The AusIMM (approximate ratio 16:1), this component of the sample was weighted very heavily in favour of women. The Institute’s Membership Manager compiled the sample and, beyond requesting a range of ages and professional levels, the researcher exerted no control on the selection of the sample.

#### *Universities Sample (Group B, C & D)*

Due to constraints imposed by the co-operating universities, the alumni samples were restricted to graduates of less than 10 years experience. For the purpose of targeting those graduates most likely to have entered

the mining professions, the university graduates were drawn exclusively from the disciplines of Mine Engineering or Geology. Where equal numbers of male to female graduates were not possible (due to insufficient female graduate numbers in the specified disciplines) the sample was by default weighted in favour of males.

Of the 178 respondents, 40% (n: 72) were received from males and 60% (n: 106) from females. See Appendix F for the age and gender composition of the questionnaire respondents.

***ii. Questionnaire Respondents' Undergraduate Qualifications***

The majority of respondents to the "Working in Mining" questionnaire (76%: n: 135) had an undergraduate qualification in one of the targeted occupations of mine engineering, geology or metallurgy. The remaining respondents either held an undergraduate qualification in a discipline other than the targeted disciplines, or did not specify. See Appendix G for details of participant's undergraduate qualifications.

## **SECTION 3 FINDINGS**

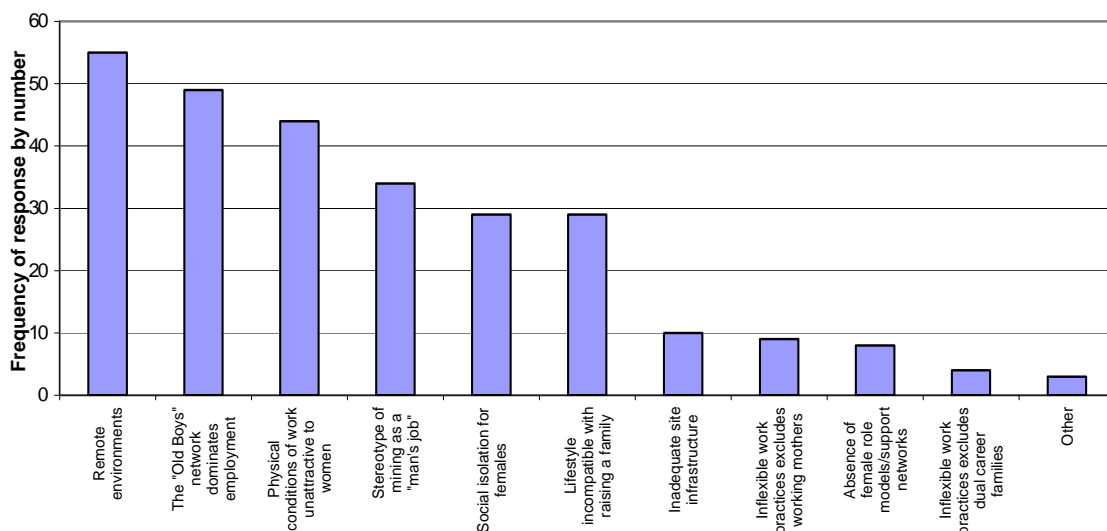
### 3.0 Findings

In the “Working in Mining” questionnaire, all participants were invited to identify one or more factors which they believed contribute to the low participation rate of women in the Australian minerals industry. The responses are represented in Figure 1 below, with supporting testimonials in Appendix I. The majority of respondents believed the remoteness and isolation of the geographic environment under which most mining workers operate to be the single most influencing factor on the industry’s ability to attract and retain women in large numbers. While on the surface it would appear that little can be done to address this issue - mining operations are invariably remote - it is likely that many of the secondary influences, such as the social isolation that many women feel, are embedded within this primary factor but not specifically identified by the respondents.

The findings as reported in the following section focus on three principle areas:

- *Joining the mining industry and adapting to a culture, focusing on the tertiary experience and early years of mining professionals*
- *Perceptions of the industry as an Equal Opportunity Employer, focusing on the ramifications of social and professional isolation resulting from experiences of harassment and discrimination*
- *Professional Development of mining women.*

Figure 1: Factors inhibiting female participation in the Australian Minerals Industry (source: "Working in Mining" Questionnaire)



### 3.1 Joining the mining industry: adapting to a culture

With the possible exception of the mining engineers, or those with an existing family connection, few of the interview participants claimed to have had significant knowledge of mining, either as a workplace or an industry, prior to their joining the work force.

For the women interviewed the decision-making process which led to a career in mining did vary between the geologists and the mining engineers<sup>3</sup>. However, for both groups, the most commonly cited attractions were:

<sup>3</sup> Too few metallurgists were interviewed to suggest trends.

- ◆ Lifestyle, a love of the bush
- ◆ Opportunities to work both indoors and outdoors
- ◆ Science driven work environments
- ◆ Money
- ◆ Career opportunities

### 3.1.1 *The Tertiary Experience*

#### (i) Geologists

Of the geologists interviewed, most initially enrolled in the subject as a subsidiary only to another science major, such as biology, agricultural science or forestry. Few cited an awareness of the discipline of geology prior to entering university. However, once they joined a geology class the attractions of an outdoor lifestyle, enjoyment of the subject, and the favourable employment opportunities for geology graduates compared with other science disciplines, influenced their decision to major in geology.

*I wasn't at all aware of it when I was in school. It wasn't until I was at Uni and started geology and took it up in the first year. I have to admit that during that first year I didn't think much about it in terms of the minerals industry [female geologist, mid 20's]*

*When I first went to University, I was going to do biology. It just happened by chance that geology was one of the units you had to do for your first year. I went to a female school, A College, and you didn't do geology or anything so this was the first time I'd ever confronted it. We had a lecturer there [at university]... and I don't know whether he singled me out or what it was - there were about 3 of us at the time doing it - and he used to encourage me a lot to get into it. He'd start talking about volcanos and stuff like that that fascinated me very much so I did it the second year and he tried to encourage me as much as possible. Like, he would say to me, "I don't care whether you're a woman or whatever, you've got an opportunity to do this. You've got every right to do it." If it weren't for him, I wouldn't do it, I wouldn't be here today [female geologist, early 30's].*

*I did geology initially because I had to choose a 4<sup>th</sup> subject. I went to university to do physics and maths and I had to choose a 4<sup>th</sup> subject out of geology or biology and my maths teacher told me geology was good fun, and you do lots of excursions. But I was a country kid so I think I took to the outdoors part of it at uni quite well. I ended up doing a double major in geology and geophysics [female geologist, late 40's]*

*Well, initially when I started off doing agricultural science at university, ag science was just one of the subjects, and I found that I enjoyed geology more than I actually enjoyed agricultural science. So I transferred across and completed my degree, and basically from there it has just evolved [female geologist, late 20's].*

*I went to ANU to do forestry and took geology as an option. I enjoyed it and kept going [female geologist, late 30's].*

*Tertiary education as training for geologists:*

One of the more consistent factors cited by many of the geologists was the lack of fieldwork and industry exposure they received during their

university course. For many of the graduates this resulted in a sense of dissatisfaction with their university training and a belief that, upon completing their degree, they were ill prepared for the work force. Given the conditions of remoteness and isolation in which many found themselves upon joining the industry, this sense of inadequate preparation exacerbated the difficulties some of the females felt when assimilating into the workplace.

Several stated that upon graduating, their knowledge of what geologists actually do, as opposed to the theoretical aspects of the discipline, was negligible and in some cases completely absent.

*I think the University was very poor grounding for people starting in the industry. There's no big emphasis on [mining]. The mine at [A mine] was really close to [the university] and the whole time I was there doing my degree I don't think we went on one field trip. Pretty pathetic really. I didn't know anything about mining. Maybe that's me being naive but no one really informed us.... There's different kinds of drilling rigs - diamond drilling and stuff - and that's where nearly every junior geologist, when they start, they start on the drilling rigs. I didn't even know what a drill rig was really. It's a shocker. And I wasn't alone. I suppose they think it's not [part of the training].... I spoke to my lecturer about it and I said I thought it was wrong. And he said "University is academic, it's theoretical. That's what you're here for. If you want practical skills, go to a TAFE". They thought that the mining industry was a separate thing from what they're teaching.... I don't think the education system was poor. It was perhaps lacking in intention about the mining industry, but actually in content about rocks, that was very good. But I don't think it was geared toward the mining industry [female geologist, mid 20's]*

*We had good grounding in research but didn't have a clue how to run a drill rig and the more practical aspects of work. University gave us a grounding in technical jargon so we could relate linguistically to everyone else but we were as green as anything when we graduated [female geologist, late 30's]*

*The university told us what rocks are but they didn't tell us anything about what we'd be doing and things like that. A lot of things you learn on site like logging and mapping and all those sorts of things, but just the attitudes and things like that, they didn't tell us at all.... Although we'd gone to mine sites and looked at rocks at mine sites we never really were told this is what a geologist will be doing. So coming out bush ... was a real shock. And also the sexism that was involved initially was just.... I'd get home and cry all the time, you know. I just didn't expect it at all [female geologist, early 30's]*

*University teaching was straight from a book. I have to give [the university] credit, though, because they kept taking you out to fieldwork and stuff like that... But as for the heat, lifestyle, what to expect, no way. The only way you found that out was being a student and going away and doing vacation work. [Interviewer: Were you encouraged to do vacation work by your University?] No, no, not at all. It wasn't until the last year that it was actually spoken about. So I got into the work force and it was a huge shock. It was interesting, geologically speaking some of the training and all that, that basically went out the window and I started from scratch again. And as time has evolved, I've re-picked up the school books as you step into a new field each time to refresh yourself. But they don't teach you the physical labour stuff, like core logging for example. We*

*never really got into that at university, or picking up samples. Stuff like that, simple things like that, the real basics. What does a fieldy do? How do you relate to a fieldy? They would never teach you about leadership, or how to be a supervisor [female geologist, late 20's]*

As a counterpoint to the perception that the practicalities of university training was considered inadequate by many of the interviewees, some took the view that it is not the responsibility of the university system to prepare graduates for the work force, and that this role rightly belongs to the minerals industry itself. While this argument has some validity in so far as the degree of industry exposure available to university students is invariably restricted, this does not absolve universities from the responsibility of providing students with adequate exposure to the industry. The development of young professionals should be a shared responsibility between academia and industry. In the current fiscal environment in which the university sector faces ever tightening government funding, nurturing closer ties with industry could be particularly beneficial.

*The tertiary education didn't prepare you at all for the actual job. I had a fairly traditional degree..., but I've been very grateful for that. I don't think that tertiary institutions should prepare people for jobs. I think they should give them the technical and academic background that they need to do that job. But the basics of what you do in the job itself needs to be learned in the industry itself.... [T]echnically I was very glad of the fact that I had a more academic degree because the basics were there for later when you need them. I don't think geologists should be just trained for the job. [female geologist, late 40's]*

## **(ii) Mining Engineers**

Engineering continues to suffer from the widespread belief that it is primarily a man's career, one from which women should be discouraged from entering. Of the variety of engineering disciplines, none suffer from this perception as much as mine engineering which continues to be typified as dirty, rough and intensely physical.

*I think a lot of people are very naive. My Dad still thinks that we are down here with picks and shovels. I think it is hugely misunderstood, what actually goes on [male graduate mining engineer, early 20's].*

The consequence of such perceptions is that, despite over 20 years of affirmative action and equal employment opportunity legislation, females continue to be discouraged from entering the industry on the grounds that it is not "appropriate" work for women. The following testimonial provides an example of how such misconceptions can continue to inhibit women's movement into the mining engineering profession. For a young woman contemplating her future career to overcome such pre-conceptions requires a high degree of determination. The young woman quoted below is from an engineering family and so was well informed on the nature and experience of engineering, hence was not easily dissuaded.

*I went to an all girls school and when I went to the guidance councillor in the middle of grade 12 and said, "I think I want to do engineering" and she went, "No, I don't think you want to do engineering. That's not the industry you want to get into. Think about doing medicine or science or something different." And she was really adamant that I shouldn't get into engineering. In the end I stopped going to her because she was just*

*telling me not to do what I wanted to do [female 4<sup>th</sup> year mine engineering student, early 20's].*

The mining engineers shared with geologists a love of science. This, together with an attraction to the outdoor lifestyle and high employment opportunities, strongly influenced their decision to pursue a career in mining. However, while few expressed a prior knowledge of the specifics of engineering, most did engage in an active process of assessment and research when considering their career choice, resulting in their initial enrolment in an engineering faculty. For most, their decision to enter mine engineering specifically was the result of a process of elimination of other engineering disciplines rather than attraction to the minerals industry in the first instance.

*I originally wanted to be a scientist but realised there were few job opportunities. I wanted a job that offered career opportunities, good pay and a chance to travel. Before applying to university, I studied The Australian and concluded mining fit the bill [female mine engineer, late 20s]*

*One of the flyers that I saw on one of the career days was on mining engineering and what attracted me about the flyer was it had just a number of key points... that there was lots of opportunities for women in the industry, that it was an internationally recognised career, that it was highly paid and that the work was indoors and outdoors, sort of varied between indoors and outdoors. And they seemed to be things that I was attracted to and I thought, 'That's me' without actually knowing what a mining engineer did. I liked the sound of it. It was then that I went to the university and looked at engineering and from there went through all of the engineering branches - civil, aeronautical, mechanical - and went back to mining and thought that is the one out of all the branches of engineering that suits me because of the all those things about career prospects, type of work [female mine engineer, mid 30's]*

*I was interested in geology at high school, went to an all girls high school so it was a real fight to even get [to do] geology. When I went to enrol in uni I talked to the geology school and wasn't very keen on what they had to offer and, because I happened to be sitting next to a guy who was going up to the engineering school I went up with him, the professor got very enthusiastic and that was the story. Because I must admit the engineering appealed. At the time I went through high school, engineering for females was almost unheard of. [female mid-40's]*

*Most people probably have really good reasons.... I was doing a science degree, I began with physics and I did a couple of years of that and I thought I love physics but it's not going anywhere in terms of a career. Financially I don't think the rewards are there at all and it's very limited to who you can work for and things. I mean, mining is still pretty limited but when I looked at engineering at uni I sort of worked it out by elimination. It was like, electrical engineering, computer, I'm not interesting in at all; civil engineering, I thought that's pretty boring; mechanical, I was interested in mechanical but I met a guy who was doing mining and what he told me about it I just thought the size of the industry, the concept of these huge things happening, you know. I liked the size of it. I liked the contribution to the finances of the country.... That's what initially attracted me. And it pays well. You've also got to go to different places for it but I believe in financial independence. And I don't mean in my 50's I mean now, in my*

*20's. And I'm prepared to do, you know, whatever. I love what I'm doing anyway [female mine engineer, mid 20's]*

### **3.1.2 Adapting to a culture**

More than any other industry, working in mining is as much a life-style choice as a career choice. If one simple phrase can be used to sum up mining as a work place, it would probably be "sink or swim". The demands of a remote lifestyle, the isolation from one's support networks of friends and family, the dislocation of fly-in-fly-out, coupled with the long hours and the high degree of personal responsibility carried by many mining professionals, results in the industry often placing extraordinary demands upon its workers.

Historically, the industry has sent individuals to the remotest of locations, often with little or no training and poor radio communications.

*In the early days we were chucked in at the deep end. The first job I had was to be in the office every 6 weeks – that was the only contact we had with them. We had no radio, we had nothing. We just went out in the vehicle [female geologist, late 40's].*

*In [the 1960's] when I was working out in the Tanami Desert, I was due to be relieved and my replacement had just finished his university degree in Northern England. He'd flown out to Darwin, flown from Darwin to Tenant Creek, had 34-48 hours in Tenant Creek and was being driven out into the Tanami Desert to relieve me. The guy barely knew... He might have changed a tyre while he was in the yard, he might have actually learnt how to use the radio, the radio was by today's standards pretty darn primitive anyway. How can you expect this guy to live, to survive in that sort of environment?... It was downright dangerous. And it was, there's just no other way of saying it, it was manic dangerous. And the guy ultimately left Australia certainly less sane than when he arrived. Now whether that was totally due to that or not, I don't know. But you couldn't blame him if it was, because he didn't know what he was coming to. It was totally irresponsible [male geologist, early 50's].*

With today's technology and emphasis on safety and training, such examples should no longer occur. However, the legacy of the industry's pioneer and cavalier days continues to find resonance in some quarters where the attitude of "sink or swim" prevails. The consequence for junior staff, fresh from university, is that they can find themselves in the remotest of geographic locations, often under prepared and poorly trained, bearing the responsibility for production and lives.

*They actually put me in as a site manager. Within twelve months of graduating they put me in charge of 40 people. That was a fairly... We'll say it was a very good learning experience but it was one of those sorts of things that either makes you or breaks you because it's a lot of pressure to put on such a young person, regardless of whether you're male or female. Especially in quite an isolated area, [the Site], it's 800 km by road to [Town A] and [Town B] and it's very much an isolated place.... I guess I wasn't prepared for the dedication that was expected by my first employer [female mine engineer, late 20's].*

In addition to the work pressures, the “sink or swim” culture can serve to promote an attitude of bravado amongst workers, resulting in a high degree of intolerance of perceived weakness or sensitivity on the part of colleagues, males and females alike. This can result in behaviour which, at best can be characterised as scorn, and at worst, victimisation, of those individuals who fail to be accepted by the group. A degree of group consciousness can operate amongst team workers in which expressions of individual preference, right down to social activities, can result in isolation of that individual from the group. This serves to promote a culture governed by a strong pecking order in which those perceived as being “weaker” or different in some way are excluded.

*I was turning into a real hard case when I met [my partner], and I'm really glad I did meet him because I think if you're not careful you can turn into a hard case because you have to rely on yourself and it's show no mercy, kind of thing. It's not like that in [this workplace] but there are places where you can't show weakness. I guess it's one of those things where it is a sort of pack mentality.... It comes back to being the weakest animal in the pack [female, engineer, late 20's].*

*You've got to stick together. You do get a bit 'outed' if, like, you work your 12-hour days and just go straight home, bed or something. You do find that the next day you are on the outer a bit because you did go home. "Where were you last night?" "Oh, I'll be there tonight" [male, engineer, early 20's].*

*In the evenings they had a local pub there, it is on the mine site, all very nice, but there was that sense of you had to become one of the boys or stand out a bit. I was 21 when I went up there and probably very naïve and I felt very much that I had to make this decision.... I can remember on a number of occasions having to say, "No, I don't drink beer, that doesn't mean I am not having a good time." And also, when people were drinking more and more I would feel very much that when you go to work the next day it was a bit strange when I met the guys, and it was mostly men up there, and I had seen them the night before having a few drinks, and I felt that would make it difficult on a long term basis, having a professional relationship with these people. I don't know if that is something that only females are conscious of, but it seemed to be more of a problem for us girls than it was for the guys [female, late 20's]*

Although both men and women are subject to the rules of tolerance that often underwrite such group acceptance, women are particularly vulnerable to exclusion. By virtue of their gender, they are easily and readily identifiable as a minority in the workplace and, particularly at times of stress, may be the object of intolerance, often resulting in harassment or discrimination, even if unintentional.

**SECTION 3.1**

**JOINING THE MINING INDUSTRY: ADAPTING TO A CULTURE FINDINGS AND RECOMMENDATIONS**

**FINDING 1:** That many graduates (specifically geology graduates) receive little or no exposure to the mining industry during their tertiary study.

**FINDING 2:** That the reality of modern mining is very poorly represented in the general community and many misconceptions based on out-dated practice prevail.

**RECOMMENDATION A:** That the minerals industry, through its representative and professional organisations such as The AusIMM and The Minerals Council of Australia, develop closer links with the university sector to encourage greater awareness of the practical applications of geology and related courses of study (e.g. mine engineering).

**RECOMMENDATION B:** That Universities incorporate at least one course in management and communication skills in science undergraduate courses, particularly those with a strong industry application.

**RECOMMENDATION C:** That companies and industry bodies such as The AusIMM target school careers guidance councillors in minerals industry promotions.

## 3.2 Harassment, Discrimination and Equal Employment Opportunities

### 3.2.1 Perceptions of the Minerals Industry as an Equal Employment Opportunity Employer

In the “Working in Mining” questionnaire, respondents were asked to specify their understanding of the term Equal Employment Opportunity (EEO) (see Appendix E, Q. 48). Most responses were straightforward, highlighting the principles of opportunity and promotion in an environment free from discrimination based on sex, disability, race and religion.

In contrast to these views, several respondents questioned the commitment of the minerals industry to the principles of EEO, suggesting they regard the industry’s EEO principles to be political rhetoric lacking in commitment and intent. These responses support a strong trend in the qualitative interviews in which participants expressed cynicism and doubt about the level of commitment within the industry to the principles of fairness and equity embodied in equal opportunity policy.

The following are some of the respondents’ notations to Q48 and Q49 on the meaning and significance of notions of equal employment opportunity in the minerals industry.

*Very little [female, 36-45].*

*EEO is a term coined by Human Resources Departments who may wish it to exist for technical departments who do not [female, 26-35].*

*As in so many other things, I suspect the Australian industry is an equal opportunity employer but because it does not actively seek or cultivate diversity of any kind it slides easily into conformity and “Old Boy Network-ism”! [male, >55].*

*EEO means that all jobs should be filled by the best applicant regardless of age, gender or race. To start with, all jobs should be advertised so people outside the supervisors network can apply.... The workplace should be free of bullying and should not aggressively promote one type of behaviour [female, 26-35].*

*Poor record for women at senior levels, virtually zero for disabled, aborigines, etc. (If you think it’s difficult for a woman, try being disabled) [male, 46-55].*

*Lip-service only [female, 36-45].*

*What I think it is: “We better employ a few girls so we can say we are an EEO company”. What I would like it to mean: “Employment and promotion on merit” [female, 26-35].*

*Bosses and colleagues who don’t think sexual harassment to be a compliment to the victim [female, 26-35].*

The respondents were then asked to specify whether they believe the minerals industry to be an Equal Opportunity Employer. Fifty percent of female respondents did not believe the industry to be an EEO employer, contrasting with 24% male. See Appendix H for a table of female and male responses.

### 3.2.2 Impact of Harassment and Discrimination on the Lives of Mining Women

In an era in which the presence of women, particularly in the technical professions, is challenging the traditional model of the mining worker, women in the workforce are frequently perceived as the instruments of change and unwelcome competitors in the marketplace. Their presence challenges the prevailing models of both the work and the domestic spheres and the division of labour along gender lines that continue to dominate many community structures. In so doing, they become vulnerable to accusations of taking men's jobs, of having no place in the mining industry, of being unreliable because they will inevitably leave to become mothers, of not being "women", and a litany of other accusations. For the women concerned such attitudes, when they manifest, can lead to intense professional and social isolation.

*I have certainly been in situations where, and that was when I was very young, and I was underground, and they said to me, I thought they were my friends and that was a big mistake, don't trust anybody, and I did. And at 3 o'clock in the morning, I think they were trying to stir me as well... but they said "You are stealing blokes' jobs, you are not going to be here, you are just going to nick off and have babies in 3 years, so you are stealing someone's job"... It was really subtle psychological warfare.... It was just little digs, you just got used to them, you could never tell someone about it or you would just be accused of being petty. But it wasn't. It was deliberate. But nothing that I could not handle [female engineer late 20's]*

*They don't perceive [mining] as being a feminine thing to do so ... what's a nice girl like you doing in a job like this because if you do this you must be kind of less than the full quid or socially tacky or not quite a nice girl any more. I mean those are silly things that shouldn't get to you but, you know, it's there and it's there day in day out and the days you are feeling down, that's when they get to you [female geologist, early 40's].*

In interviews many women expressed concern that, in seeking to be taken seriously as professionals, they are acutely aware of the importance of not attracting excessive attention to themselves as *women*. While this has been expressed by both corporate and site workers alike, the pressure can be particularly sharp for women in remote locations. A side effect of being one of only a handful of women in a community of men is that one's actions and behaviour are highly visible. You may not know everyone's name, but you can be assured that everyone knows yours. This is not always a bad thing. As one interviewee put it,

*one of the advantages of the mining industry is that it is a small industry and the things you do well you can be recognised for (female, late 30s).*

The converse to this, however, is that women can easily and unwittingly attract unwanted attention by virtue of their sex. Many women seek to deflect such attention away from themselves by "fitting-in" with the normative values and behaviours of the workplace, thus they may

circumscribe their work and social behaviour, their style of dress, even their circle of friends and social partners.

The assertion and maintenance of a professional persona within a remote workplace adds a level of stress not usually shared by the male members of the community. When speaking with male workers in the industry about women's movement into technical and operational occupations, a frequent comment is that women in mining are fine as long as they can do the job. Such a statement is often followed by the recounting of a story of a woman they worked with who could not, or would not, do the job - "We had a woman down here, but she didn't work out." In reference to women who have left the industry, the old adage "If you can't stand the heat, get out of the kitchen" is a common refrain.

Male responses to women on site are often polarised - women are accepted or not accepted, liked or disliked, with little grey area in between. One woman described her experience of arriving on a new site as:

*I found that everybody knew me.... I found from working in the field you had a very short amount of time to prove yourself, like within two minutes of walking in, sort of thing. Because I was a female ... I wasn't necessarily the most popular person before I turned up. However, once you passed whatever the test was, and there was a test, whether it was the way you walked into the room, the way you presented yourself, then you were accepted very well, or you weren't... [Both men and women were tested] However, I think the results are different. [Men] could be accepted, not accepted, or in the middle. And I think for women ... you were either accepted or not accepted (female, mid 30s).*

Another woman describing site life said:

*[The degree of acceptance] depends on the individual very much just like it would with guys, although there's more leniency with guys. With women they tend to point straight to the sex and say "It's because she's female. We don't like her because she's like this", but with guys they'll say, "Well, he's just like that, and you have to know how to handle him, or keep away from him when he's mad". That sort of thing.... [As a woman] you have to slot in more. You have to be a much better judge of character than normal. You have to be tactful and more aware of circumstances, read the players more (female, late 30s).*

For those women who pass the test and who are accepted, this polarisation of response can appear to have a positive outcome. You are treated either as a "goddess or stupid" (female, 30s), and if you are fortunate enough to fall into the goddess category, then, as one of the women quoted above said, "you could do anything. They'd do anything for you". However, acceptance of this type is highly volatile and conditional on "fitting-in", conforming to a particular conception of who you should or should not be, how you should or should not behave. Once conferred, such contingent acceptance can just as easily be withdrawn.

Women who are not accepted may find themselves at best marginalised, at worst ostracised, from their work community. Contingent acceptance is highly subjective and the rules of conformity for men and women alike may vary from site to site, community to community. On some sites, the emphasis is firmly located in a woman's sexuality and references to her femininity serve to differentiate her from the group. This dilemma is illustrated by the experience of one young female engineer, the lone professional woman at her work site, who was told that a male colleague

had said of her, "I don't mind that she's a female but does she have to look so much like a female". This woman was not excessively feminine. Her style of dress and conduct were appropriate to that of a site engineer - overalls, steel-cap boots, hard hat - she was the embodiment of professionalism. Her dilemma lay in the fact that some members of her work community categorised, and related to her, first and foremost as a woman, not as an engineer. She went on to say:

*I'm not male and I don't need to be. By trying to be a male and playing that game I'll only ever lose, because I'm not male. I can't play as well as they can. And I don't believe I need to (female, late 20's).*

The dilemma of contingent acceptance can have a divisive effect on relations between women. Women who are seen as antagonistic to the image of the professional, whether by design or default, may be derided for their apparent failings. The issue of sexual harassment in particular is often treated with a remarkable ambivalence. While not wishing to take the "she deserved it" stance, many women who have not themselves experienced harassment, or who have done so in only limited forms, express reservations about the prudence of a woman who might be the object of unwanted sexual attention. What did she do to draw such attention to herself? What responsibility does she bear in the situation? And why did she fail to protect herself? Conversely, they have *not* experienced harassment because they have handled themselves professionally, dressed appropriately or have been careful to conduct themselves with adequate propriety.

Harassment exemplifies the conflicting position many women find themselves in. With the existence of harassment, particularly sexual harassment, lies a constant reminder that the potent mix of sexuality and power do indeed exist side-by-side within the realm of the workplace and that this dynamic may be exaggerated in a highly masculinised environment in which the woman may be one in a community of several hundred men. In appealing to standards of professionalism as a measure of one's ability to influence and control the occurrence of harassment, the image of the woman as having somehow "invited" the harassment is invoked, resulting in part in a deflection of responsibility onto the woman concerned.

Even in relation to personal incidents, ambivalence toward harassment may be expressed. The assumption that one can somehow control its occurrence remains intact. The fear and confusion is dismissed as irrelevant, to be passed over as one of those unfortunate incidents, a professional hazard, best put down to experience and forgotten. For example one woman, in describing her own experience of harassment, said

*It's not that I've never been harassed, but I still believe that you can control it.... But it's not nice.... One night he was there... knocking on my door late at night. But I had known it was coming. You do know, the signs are there.... I turned all the lights out to pretend I was in bed. And it was horrible. I was lying there like a ... criminal, like someone was coming to get me. It was just really horrible. And then afterwards you get called a child, you're a child. And this real snubbing. And I never told anyone until I left [the company].... But yet, I shouldn't have to put up with that, nobody should have to put up with that. But I would never have taken it further, to the courts. I just didn't see the point in it.... He knew it was unacceptable behaviour, so there was going to be little gained.... But I still think very much it's survival skills that you need to be taught, and that you need to*

*understand and take responsibility. It's all very well to say it's not fair but, you know, nor is getting hit by a truck (female, 30's).*

Ambivalence can render a woman inactive, resulting in confusion and doubt. When faced with harassment or discrimination, many women choose to remain silent. Rather than draw attention to themselves and the incident by lodging a complaint with the company, many either leave their employment or, if they work in a large organisation, lobby to move sideways, citing professional interest or development as their reason for doing so. Few actually specify the true reason for their discomfort and dissatisfaction in their current work. Such responses frequently occur regardless of an organisation's sexual harassment and dispute resolution procedures.

The women who choose to handle harassment or discrimination issues in this way do so as a matter of career imperative. Their silence is an active choice made in the belief that to do otherwise is to potentially jeopardise their future career. Amongst mining women there exists a widely held belief that, regardless of the vindication of their position, to lodge a complaint of harassment or discrimination will reflect badly on them as professionals and will ultimately serve to thwart their career. The prevailing rule seems to be that to complain, to run the gauntlet of dispute resolution, is to potentially be labelled a troublemaker. The contingent acceptance may be withdrawn, leaving the woman open to accusations of impropriety or, even worse, "feminism". The mechanism of contingent acceptance and the associated vulnerability felt by many women results in a form of self-policing and compliance which renders them silent and closed in the face of discrimination. The end result fails all parties - women, companies and the wider mining community alike.

*I've had a few situations where I have seriously considered taking some (companies) to the Equal Opportunity Tribunal, but I know that as soon as I do that I won't get another job in the mining industry. The mining industry is so small in Australia - in fact, the whole worldwide mining industry - is so small that you do something like that and everybody knows about it and everybody remembers its. And you're finished. You can never expect to work in the industry again (female, 40s).*

*You must never, ever claim sexual harassment or discrimination because they'll just throw it back in your face. Never..... you just move. You can move departments if you have an opportunity, or you just change jobs (female, 40s).*

*It started out as a joke, just mucking around and then the joke got past its limits and I couldn't go back. I couldn't stop it. It was one of the weirdest situations I've ever been into because I couldn't control it. It was out of my hands. I didn't know how to stop it. I didn't know what to do. So I took the easy option and resigned and moved on to another company. I [didn't] tell them why I resigned. I suppose unfortunately the mining industry is so small I could never... Whenever I've left a place I've never ever told them why. It would come back at me [female, late 20's].*

For women who have spent years studying and nurturing a career within the mining industry, the stakes are very high indeed. Their decision not to complain, not to take action, is a choice motivated by their desire to continue as mining professionals. Their response to harassment and discrimination is a measured one, weighed carefully against the potential costs and benefits to their careers.

The potential costs are illustrated in the case of one female engineer who did make a complaint, albeit an informal one, about a colleague's behaviour towards her.

*It went into an investigation ... and it was just a nightmare situation for me as far as I was concerned. I don't believe there was any resolution that was any good. And I came away thinking, "Gosh, was that all my fault?", and I'm not like that.... And my [boss] said "Don't worry, we'll just move you out of there." So he did nothing and he said to me at the time, "We'll put it down to a personality conflict" (female, late 20s).*

By dismissing the complaint as a "personality conflict" the manager deflected part of the blame away from the harasser and on to the woman, rendering the problem a joint one. Later, when this young woman went to a new site within the same company, her colleagues at her new site would not talk to her.

*... there were rumours going around that I had people up on harassment charges.... I came to [this site] the following year and no-one would speak to me because they were told not to have anything to do with me because it would be taken out of context and I would take them to court for it.... Even now, people don't believe me that I haven't had a payout from [the company] (female, late 20s).*

Confronted with such lived experience, the industry's advocacy of equal opportunity employment diminishes into rhetoric. This is not to say that some companies, and some individuals within those companies, are not genuine in their desire to execute the highest of employment standards. For example, there are cases where companies and managers have dealt very effectively and efficiently with issues of harassment, sometimes resulting in the instant dismissal of a harasser. As one manager said, "you've got to make *explicitly* clear that sexual harassment is not acceptable in any shape, form, nature or in *any* circumstance.... You have to show no mercy. There is no mercy because it's not acceptable".

Likewise interviewees cited cases in which the behaviour meted out to some men could easily be described as harassment or assault. However men rarely frame such experiences in this way.

*You have to be very thick skinned to work underground, everything is sort of like water off a duck's back, and people do touch you and poke you and prod you, in places where you probably would rather not be touched, but it is like water off a duck's back. Like, we had to shower with men every day after work. So you work with them, it's a dirty job, you are all over each other, you might be swearing, carrying on, it's not a very happy environment down there, it does get frustrating at times, so sure, things have happened to me where I've been in a situation... were they put all this oily stuff all over my genitals. They held me down, which I suppose is bad, a bad thing to do. [It was] when I was a student, my last day, I had been there 3 months. They knew what I was all about. In the end I just lay there and let them do it rather than struggle, because it might get worse when you struggle [male, engineer, early 20's].*

Many women did express cynicism and doubt about the level of commitment within the industry to the spirit of EEO, seeing such policies as essentially public relations exercises or mere legalistic mechanisms instigated to protect companies in case of litigation. Such assumptions find support within some organisations where EEO and sexual harassment procedures are either poorly promulgated, or the person

assigned responsibility for overseeing the implementation of policy has no internal power within the organisation.

*I don't know what to do. There's never anybody on site to help you. She [a colleague] was having a bit of a problem with one of the contractors on site and I went to my senior at the time and said, "Well, where's the policy" and this was November '96.... And they didn't have a policy. It was still in a draft. And the policy that they photocopied and gave to me was still draft.... [Interviewer: Is there distribution of information about what sexual harassment is, what EEO is?]. Not to my knowledge, no. There probably is but it doesn't head my way. Because I assumed by law that they should have a sexual harassment person on site but I wouldn't have a clue who that is, wouldn't have a clue. I think that's just [the company] [female, late 20's].*

*The ways things have been done indicates they have absolutely no idea what is required. We have a secretary... Last year the general mine manager had a personal secretary ... who was the EEO officer. She was supposed to have been involved in getting facilities organised. [The secretary is] in her late 30's so she's also not just beginning working, you know, "I don't know whether I should say this". But what was happening that they'd do things and she wouldn't be involved with it at all. Like, they'd be going off and doing stuff without the involvement of the right people. [Her appointment was] very much in name only. It's a crock [female, engineer, early 20's].*

## **SECTION 3.2 HARASSMENT, DISCRIMINATION AND EQUAL EMPLOYMENT OPPORTUNITIES: FINDINGS AND RECOMMENDATIONS**

**FINDING 3:** That harassment and discrimination remain a significant problem within the minerals industry across professions.

**FINDING 4:** That EEO policies and procedures are frequently poorly promulgated throughout organisations. Once in place, organisations fail to monitor their effectiveness.

**RECOMMENDATION D:** That resource companies, in addition to statutory reporting requirements, regularly audit the effectiveness of their EEO and dispute resolution procedures to ensure that such procedures maintain their relevancy to the workplace and do not deteriorate over time but in fact track to specific improvement targets.

**RECOMMENDATION E:** That resource companies ensure that individuals appointed as contact officers should be of recognisable influence and status within the organisation, and be fully trained and certified competent.

**RECOMMENDATION F:** That within their rules of conduct, professional bodies such as The AusIMM specifically state that discrimination on the grounds of gender, marital status, sexual orientation, race, creed or colour is regarded as unprofessional conduct and grounds for disbarment from that organisation.

## 3.3 Professional Development

### 3.3.1 Mentors and Role Models

A wide range of potential relationships can come under the guise of mentorship - everything from mutual support networks with one's peers through to formalised and highly structured relationships assigned by an employer.

The guidance of an effective mentor can prove a crucial factor in the development of an individual's career and sense of satisfaction with their career choice. For women in particular, situations of geographic or professional isolation highlight the importance of personal support networks, of which effective mentoring is a crucial component. Such networks can serve to obviate many of the potential problems resulting from the physical and professional isolation which can result from the minority status of women in mining.

In the "Working in Mining" Questionnaire, mentoring was defined as follows:

*For the purposes of this questionnaire, the term mentor refers to a senior professional who acts to support the career aspirations and workplace development of a junior associate or colleague. This relationship may be formal (i.e. the mentor is appointed to act in this role by an employer), or informal (i.e. the relationship is instigated directly by the mentor and mentee with no input from the employer). In this context, mentoring refers to specific relationships in which the support and encouragement of the mentee's career is of discernible importance to the relationship.*

#### **(i) Being a mentor**

Of the male respondents to the questionnaire, 54% (n: 39) claimed to have acted as a mentor. Of these, 77% (n: 30) of the relationships were informally established, with the remaining 23% appointed to the role of mentor by their employer.

Of the female respondents, 33% (n: 35) claimed to have acted as a mentor. Of these, 69% (n: 24) of the relationships were informally established, with the remaining 31% appointed to the role of mentor by their employer.

As mentor roles tend to be adopted by, or assigned to, those individuals in positions of seniority, the differential in the percentages of males to females who have acted as a mentor may be explained by the age differential across the total number of male to female respondents. Of the total number of respondents to the questionnaire, 69% of females were less than 35 years of age, compared to 37.5% of males.

The majority of both male (95% n: 37) and female (89% n: 31) respondents believed their mentor role to have been beneficial to the career of their mentee. None of the respondents believed their mentorship to have had no benefit for the mentee although a small percentage (males: 5%: females 11%) said they did not know what the benefit of the relationship may have been. See Appendix J for the numbers of females and males who have acted as mentors and their means of appointment.

#### **(ii) Being a mentee**

Of the male respondents, 32% (n: 23) claimed to have had a mentor. Of these, 74% (n: 17) of the relationships were informally established, while the remaining 26% had their mentor assigned to them by their employer.

Of the female respondents, 41% (n: 43) claimed to have had a mentor. Of these, 65% (n: 28) of the relationships were informally established, while 33% had their mentor assigned to them by their employer.

The majority of both male (87% n: 20) and female (95% n: 41) respondents believed their career to have benefited from their relationship with their mentor. Only one male indicated he believed the mentorship relationship to have had no benefit to his career. A small percentage (males: 9%: females 2%) said they did not know what the benefit of the relationship may have been.

To contextualise the responses, an opportunity was provided for respondents to add personalised comment on their experience of mentoring (see Q47 Appendix B).

The majority of respondents indicated a very positive and enthusiastic attitude toward the informal mentoring process as a means of professional development. However, few of the participants advocated formal mentor schemes as appropriate mechanisms for establishing such relationships. Formal schemes were given only qualified and limited support by many of the participants, with few indicating employer based schemes to be successful.

This was attributed principally to four factors:

- ◆ Poorly organised schemes lacking in significant employer support
- ◆ Poorly matched mentor to mentee
- ◆ Lack of understanding by mentor and/or mentee of the aims and intentions of the relationship
- ◆ The absence of the mutual professional and personal respect which form the basis of a successful mentor relationship.

In addition, formal mentor relationships were viewed by several participants as overtly paternalistic, discouraging junior workers from developing career independence.

See Appendix L for a cross section of responses on mentorship drawn from both the questionnaires and the interviews. A point worth noting is that the few participants who advocated formalised schemes were male and mostly young. This may be a reflection of some of the gender specific problems in formal mentorship schemes as outlined below.

### ***(iii) Gender and mentoring***

While an effective mentor relationship can reap enormous benefits for the career and individual development of the mentee, and a sense of satisfaction for the mentor, several respondents highlighted the potential complications which can arise when a male mentors a junior female. The issue of the sexuality of the participants, while not explicit in the relationship, can add a complicating dimension and serve to thwart the development of the association and obviate potential benefits. The complications of the gender of the mentor/mentee can manifest in several ways:

- ◆ unease and fear of gossip by other staff
- ◆ fear of accusations of impropriety
- ◆ inappropriate expressions of paternalism - "think of me as your father"

*Mentoring older man to younger woman often has a problematic sexual overtone. This can result in a stilted mentoring relationship where the male is unable to see beyond the gender of the female mentee. The female mentee can be subtly excluded from workplace experiences and social activities [female, 26-35]*

*Never had one but would be very interested. Most males had mentors, but nobody wanted to mentor the females (female, <25]*

*I've seen some guys come into the industry who have happened to get a rather powerful mentor and it is a very good thing but I don't know how you would make it work in an official manner. I think for it to work the people have got to have a personal liking for each other probably, have sort of respect and friendship. [It's problematic for women.] Even if it wasn't so much problematic for the parties themselves they go ahead and live it. If you've got a young female engineer and an older male engineer who's doing the mentoring then they immediately lay themselves open to all the innuendo in the world. And even if there was absolutely nothing happening, it just makes their lives so much more difficult. I've gone through that a little bit because one of my first bosses was - I wouldn't say a mentor but he was a good boss - I stayed in touch with him for quite some time afterwards and there was always the odd snicker around about "Oh, they must have it off or something, otherwise why..." [female, mid 40's].*

*The guy who was assigned to me [by the company] had been with the company around 10 years or so.... I can't say that we really hit it off. And from the very first.... I felt very awkward with him because he conveyed to me that he felt awkward about the mentoring relationship and he wasn't quite sure what was involved. We'd been told some of the ground rules but we could make the relationship anything we liked. It was a professional relationship but it could extend into social type activities. The very first time he came into my office he sat down and was on the other side of the desk and very formal and said, "Now, you understand I'm married" and sort of raised the eyebrows, as if to say it's strictly formal [female, late 20s].*

Given the potential importance of mentor relationships to career development, these issues are worthy of consideration and require addressing through education within the context of formal mentor schemes operated by companies and industry associations.

Because of the personalised nature of informal mentorships, it would be difficult and inappropriate for companies or industry groups to seek to influence the dynamic of such relationships except through the effective promulgation of company guidelines of professional conduct.

#### **(iv) Paternalism - "Think of me as your father"**

One of the more subtle ways in which gender can impact negatively on the success of the mentor/mentee relationship is the inappropriate or excessive expression of paternalism. While paternalism may not in itself be negative, it entails the potential failure to recognise the expertise and professional development of the mentee. What can begin as an

apparently harmless parent/child relationship which affords the mentee a degree of protection in a strange and challenging environment can quickly deteriorate into one marked by confusion and frustration by both parties concerned.

Inappropriate paternalism can affect both male and female mentees. However, because of the perceived vulnerability that accompanies many young women as they enter the mining workforce, paternalism is more likely to manifest in male/female relationships. Likewise, because of cultural norms that continue to place females in subordinate roles to males, particularly in the workplace, the ability of many men to accept the professional authority of women is very limited. Prescribed gender roles continue to dominate the manner and form of many workplace relationships and the challenge for males, professionals and blue collar alike, is to recognise this limitation and how it impacts on their female colleagues and potentially constrains the workplace development of all parties.

*When I came here to [this organisation] my boss, we sat down for a talk and he said, "I want to guide you and I want you to consider me a parental role" and I thought this isn't on. I'm a geologist, he's a geologist, and I was really taken back by what he said... And then in the mines when you start to input we were both sort of stuck between you're a professional with your own professional judgement and a daughter. It was a real bind [female, early 30's].*

### 3.3.2 Female perceptions of the road to promotion

#### (i) ***Differentials in performance standards between males and females***

There is a widespread perception amongst mining women that there exists two competency measures in the industry - one for men, and one for women - and that women have to perform *consistently* above average in order just to be regarded as equal to their male peers. They have to be better across a range of tasks and across time before they even enter the race for promotion. And even then they may have to stand by and watch as young men who they trained, who have less experience and less qualifications, get promoted to be their bosses. Interviewees have cited cases of female geologists with 10 years field experience and consistently high performance reviews being placed under the supervision of male geologists 4 years out of university. One woman described the differential in performance standards as being the "Halo Effect". That is, from her observation, if a man demonstrates competency in one or two areas, it tends to be assumed that he will be competent across the board. Hence the Halo Effect. Women, on the other hand, have to prove themselves capable in every area in which they operate. If there is an area of weakness, or if they make a mistake, their halo, if they ever had one, quickly becomes tarnished. The result, as this woman described, is that, "women have to be damn good on every single thing they do".

Likewise, the financial rewards of working in mining appear to differ between men and women. Many women have stated a belief, and sometimes an actual knowledge, that their remuneration falls considerably behind that of their male colleagues performing identical tasks.

As an example, one interviewee found herself in a situation where her male colleague who was performing an identical job on an identical roster, with identical qualifications, was earning \$10,000 a year more than her. This was despite her consistently being assessed by the company's internal benchmarking process as being the stronger performer. When she confronted her managers for an explanation, she was told that the pay differential was based upon the risk that the company had entered into when it employed her - she was told she was a "wild-card". When she pushed for a definition, the term "wild-card" meant no more than she was a woman, and so was *assumed* to entail an inherent risk. The nature of these risks were never defined for her by her supervisors.

The demoralising effect of ongoing systemic discrimination of this kind can drain an individual of almost all desire to succeed in this industry. They begin to cast their eyes further afield to smaller organisations or to other industries altogether, such as finance and banking which, while not saint-like, at least appear to offer better odds of fair treatment.

*Women have to prove themselves on every single ability. And they don't have a halo effect. Except for if they do something bad... But guys, if they are good at one thing they are good at everything and they really sneered at everything else, so you have to be damn good on every single thing you do. Which, if you are, that's good, because that works for you and you prove yourself in every single point... But it is much harder to prove yourself. And I have also heard a few stories, especially on promotion, that girls get so frustrated because they want to get the job if they are really good. I mean, the still "twice as good" thing happens, but they also have to make sure that there is no other bloke who goes drinking with the boss down the pub. And a guy who goes drinking down the pub with the boss would get the job over a girl. And that happens all the time [female, mid-20's].*

## **(ii) Networking, socialising and homosociability**

For as much as the industry may have improved its overall recruitment processes, there remains a legacy of, for want of a better phrase, "old-boy networks", the effects of which pervade the workplace and extend into the social and family arena. Socialising, particularly in a remote context, takes on an importance beyond merely having a few beers with the mates. It can be a major vehicle of work-related communication and provides an opportunity to discuss issues in an informal and relaxed context.

More importantly, it is in socialising that the hierarchies and lines of command which map our interactions during the working day are broken down. For the politically astute and ambitious, success or failure may depend as much upon their socialising and networking skills as on their work abilities. Women frequently find themselves excluded from social networks that are based upon the notion of mateship. People tend to socialise with those individuals with whom they have most in common and feel most comfortable. An invitation to spend a night down the pub with the boys, or to accompany them on weekend activities, is often not extended to female colleagues.

Whether such exclusion results from men's fear of the sexual connotations of socialising with single women, or a misogynistic dislike of socialising with women, the result for the women concerned is the same. Social gatherings that exclude women, whether deliberately or otherwise, shut those women off from a critical avenue of professional communication and career enhancing network building.

*[Women] just get so frustrated that someone who is younger than them, who has less years experience, has proven worse than them, that they will get the job over them because they are mates with the boss or because they [men] have got the family and the stable lifestyle and they fit the bill [i.e. they fit the “ideal model”]. I mean, that is what they are comfortable with. They can go on fishing trips and stuff. I mean, people want to work with someone they feel comfortable with and always try and employ someone like themselves, and it is always very different for them to sort of move around.... Guys carry on about it just as much as the girls, on promotion, because in most cases it is never on competence or ability. And this is the thing that is so difficult from going from uni to the industry. At uni you think, “I am the best because I get the best marks”. And you carry this through, “Oh, if I work really hard and get everything like that, I am a good person”. But it is nothing like that at all. Competence is the least of their problems. If you are really competent they won’t consider you either or if you challenge them or you are competent then they’ll not want you. They want someone who just says “yes sir” [female, mid-20’s].*

### **(iii) Career Breaks**

In the “Working in Mining” questionnaire, respondents were asked to indicate whether they had taken a career break of longer than three months at any point during their career.

The intent of this question was to obtain some comparative data on the form and frequency of extended career breaks among the responding sample.

Of the total number of respondents (n: 178), only 58 indicated they had taken such a career break. See Appendix M for a comparison of career breaks for males and females.

Respondents were asked to provide details of up to two career breaks. Of the 38 females who responded, 19 had taken more than one career break with the majority of these (n: 10) being for maternity leave. Of the 20 male respondents, four had taken more than one career break being for reasons of travel, retrenchment or stress-related illness.

## **SECTION 3.3 PROFESSIONAL DEVELOPMENT: FINDINGS AND RECOMMENDATIONS**

**FINDING 5:** That mentor relationships are generally regarded positively by mining professionals as being of tangible benefit to career progress.

**FINDING 6:** That young female professionals are disadvantaged in the assignment of mentor relationships due to the reluctance and lack of skill/competence of many senior males to mentor females.

**FINDING 7:** That expressions of paternalism within mentor relationships are detrimental to that relationship and can inhibit the professional development of the mentee.

**FINDING 8:** That there are differentials in performance standards between male and female mining professionals. Many females believe they must consistently out-perform their male peers in order to be regarded equally with those male peers, while having less margin for error.

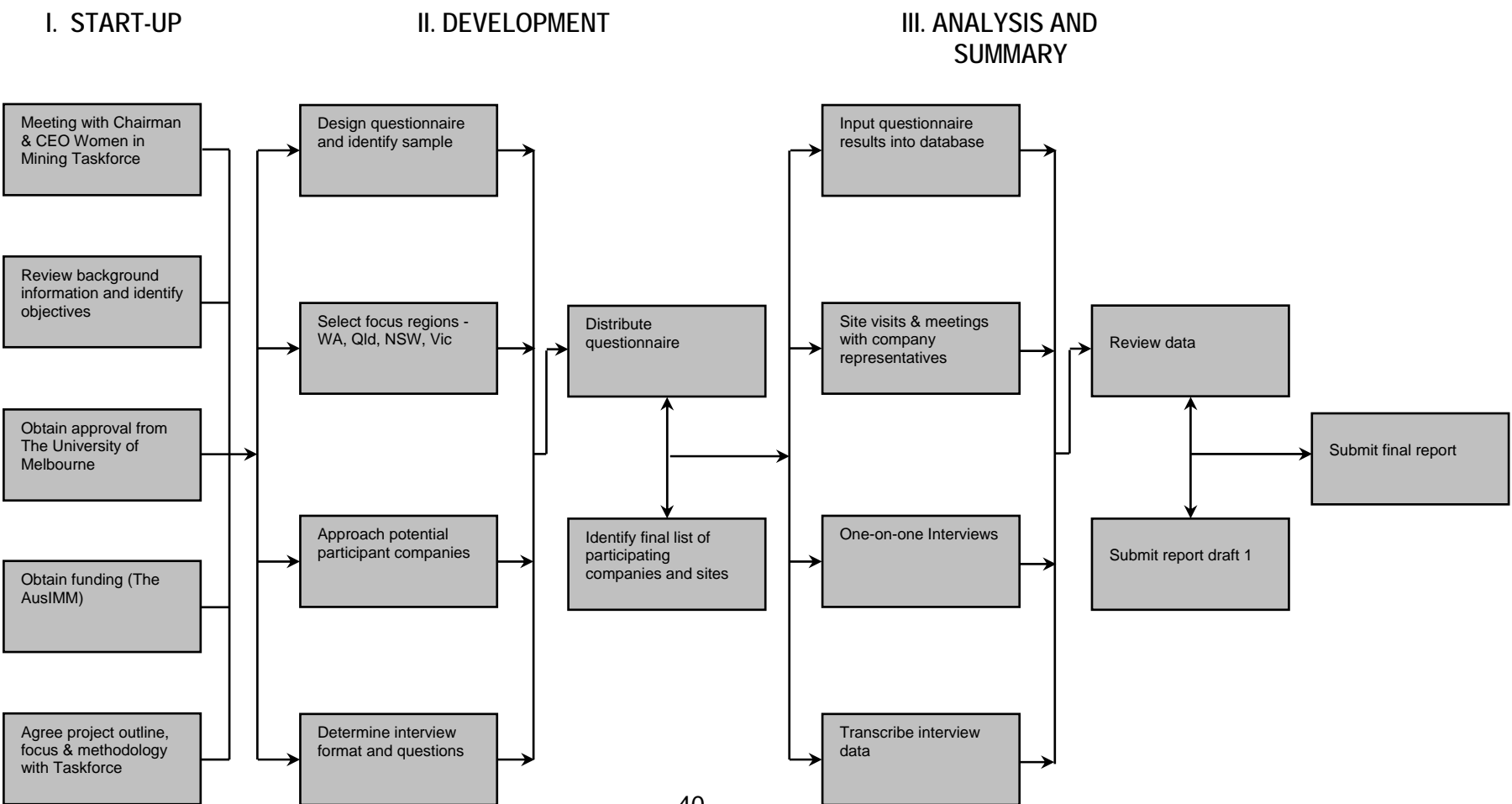
**FINDING 9:** That equity in performance standards are probably not well reflected in remuneration.

**FINDING 10:** That females are frequently excluded from critical networking opportunities that take place during work-related social activities. When actually participating in social activities females are often subjugated to dominant male behaviour.

**RECOMMENDATION G:** That mining industry management, through professional bodies, develop guidelines on the function of mentor relationships and set specific improvement objectives and monitoring of individuals and organisations.

**RECOMMENDATION H:** That companies and industry bodies such as The AusIMM include the possible negative implications of gender specific work-related socialising in EEO training and that, through training, females be equipped with specific techniques to cope with these situations and achieve enhanced influence.

# **APPENDICES**



# APPENDIX B

## SAMPLE INTERVIEW QUESTIONS

### Interview Objective and Procedure

The objective of these interviews is to gather a range of personalised workplace experiences of professional technical women and men either currently, or formerly, employed within the industry. The interviews will be conducted in private on a one-to-one basis. The anticipated average time for each interview is approximately 1 hour.

The format of the interviews will be an open, conversational dialogue. The questions outlined below are intended as a framework to facilitate the gathering of thematically comparable data. They are not exhaustive and additional questions may be asked during the course of the interview in response to issues raised by the subject.

The interview may be taped with the agreement of the subject. All tapes, transcripts and abstracts arising from these interviews will be treated with the *strictest* confidence in accordance with The University of Melbourne's Human Research Ethics Requirements and Code of Conduct for Research.

### Subject Profile

#### **Education / Qualifications:**

- i) Qualified in geology, mining engineering, or metallurgy.
- ii) Qualified in other technical professions such as environmental science or non-mining specific engineering sub-disciplines (e.g. civil) will also be interviewed to garner as wide a variety of opinions and experiences as possible.

**Age:** Any age.

#### **Current employment:**

- i) Currently employed within the industry (either for mining/exploration companies or consultancies) in a technical professional capacity at any level of seniority.
- ii) Qualified as a technical professional but **currently** employed in a non-technical capacity (e.g. human resources, management, administration).
- iii) Qualified as a technical professional but **no longer** working directly within the industry in any capacity.

#### Demographic Data

- 1 Age
- 2 Marital status
- 3 Children Yes/No?            How Many?
- 4 Professional qualifications
- 5 Current job title
- 6 How many years in the industry since graduation
- 7 Membership of professional organisations (e.g. AusIMM, Institution of Engineers)

### Questions

- 8 What attracted you to the minerals industry?
- 9 At the time you started work, did you have a realistic idea of what would be required of you as a worker in your chosen occupation (i.e. were you prepared for the conditions in which you might have to work - remote, dirty, etc.)?
- 10 What University did you go to?

- 11 In retrospect, do you think your University course effectively prepared you for work? (e.g. fieldwork trips, practical application of skills, etc.)?
- 12 Have you undertaken any post-graduate professional development courses? If yes, what were they?
- 13 Was this at your own instigation or were you encouraged by your employer?

**Individual work experience: all subjects**

- 14 If currently working, please describe that work in general terms.
- 15 What do you (dis)like your work?
- 16 On average, how many hours a week do you work?
- 17 Does your job require you to travel much? If yes, how much (on average)?
- 18 In your organisation, are there many female technical professionals at your level or above? Females only Is it important to you that there be other females of similar professional standing?
- 19 What sort of socialising takes place on remote sites?
- 20A *For women with children:*
- How long were you absent from the workplace following the birth of your children?
  - Did you encounter any particular difficulties upon returning to the workforce following this period of absence?
  - In your opinion, what impact has having children had on your professional life? Do you think you are regarded differently professionally since having children?
  - What assistance (if any) did you receive from your employer during this period (e.g. flexible working hours, did not require you to travel regularly)?
  - What do you think employers within the minerals industry could do to assist technical professional women with young families?
- 20B *For men with children:*
- In your opinion, what impact has having children had on your professional life?
  - What do you think employers within the minerals industry could do to assist employees with young families?
- 20C *For women and men in a marriage/de facto relationship but without children:*
- How compatible do you think your current job would be with motherhood / fatherhood?
  - What do you think employers within the minerals industry could do to assist professional employees with young families?
- 21 *For women and men no longer working in technical occupations:*  
How long ago and for what reasons did you move away from your original occupations?

**For those who have left the industry**

- 22 Why did you leave the industry?
- 23 Would you consider returning to the industry at some point in the future? If not, why not?
- 24 Please describe your current work in general terms.
- 25 On average, how many hours a week do you work?
- 26 Does your job require you to travel much? If yes, how much (on average)?

### ***Mentors***

- 27 Have you at any time had a mentor, either male or female? If yes, was this relationship informal or was your mentor appointed by your employer?
- 28 How important do you think mentors are to professional development?
- 29 Have you ever been a mentor yourself?

### ***The minerals industry as a workplace***

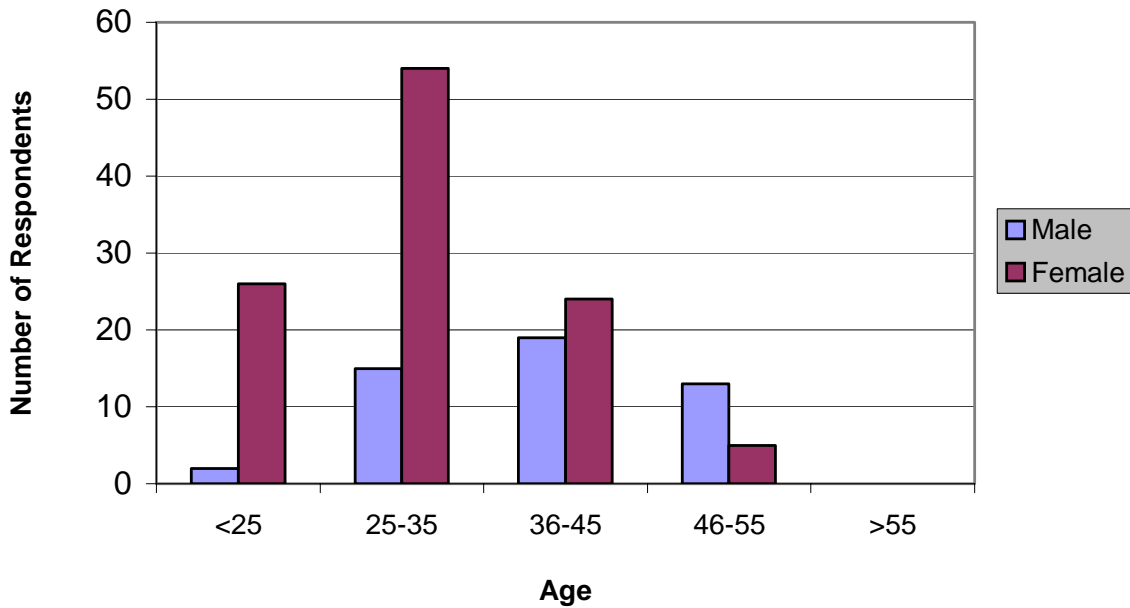
- 30 What is your experience of working on site compared with the corporate office?
- 31 (For women) Have you ever experienced harassment of any kind in the workplace? Please describe this?
- 32 If yes, how did you, and your employer, handle the harassment issue?
- 33 Do you think there are areas of employment within the minerals industry to which women are not well suited?
- 34 What obstacles do you think remain in the industry which may inhibit the participation of women?
- 35 How do you envisage your professional future?

## APPENDIX C INTERVIEW PARTICIPANTS BY AGE AND GENDER

**Table 1: Interview participants by Gender and Age**

Age Range	Female	Male
<25	26	2
25-35	54	15
36-45	24	19
46-55	5	13
>55	0	0
<b>Total</b>	<b>109</b>	<b>49</b>

**Figure 3: Interview Participants by Age and Gender**

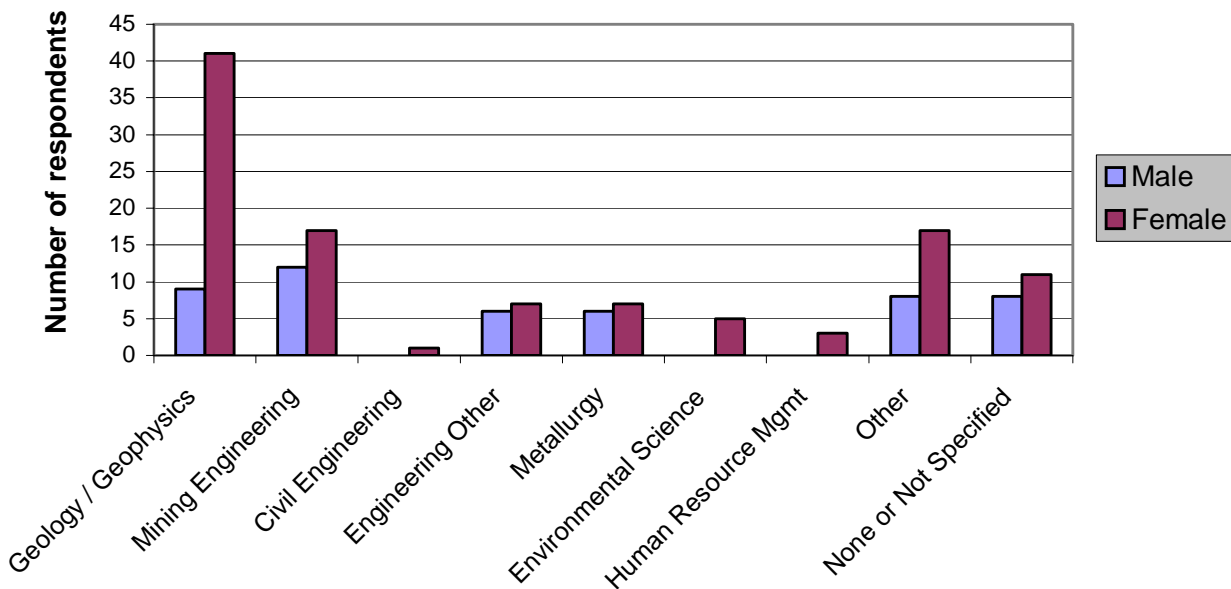


## APPENDIX D INTERVIEW PARTICIPANTS BY UNDERGRADUATE QUALIFICATION

**Table 2: Interview participants by Undergraduate Qualification**

	Male	Female
Geology / Geophysics	9	41
Mining Engineering	12	17
Civil Engineering	0	1
Engineering Other	6	7
Metallurgy	6	7
Environmental Science	0	5
Human Resource Mgmt	0	3
Other	8	17
None or Not Specified	8	11
<b>Total</b>	<b>49</b>	<b>109</b>

**Figure 4: Interview Participants by Undergraduate Qualification**



**Women in Mining  
Questionnaire**

**Research conducted by:** Catherine Pattenden  
Anthropology  
University of Melbourne

**In conjunction with:** The Australasian Institute of Mining and Metallurgy

***PLEASE RETURN THIS SURVEY IN THE ENCLOSED STAMPED ADDRESSED ENVELOPE TO CATHERINE  
PATTENDEN BY 30 JUNE 1997***

**1 What is your age?**

- <25
- 26-35
- 36-45
- 46-55
- >45

**2 What is your gender?**

- Male
- Female

**3 What is your marital status?**

- Married
- De Facto (includes same-sex relationships)
- Single

**4 Do you have any children?**

- Yes  → How many? \_\_\_\_\_
- No  What age range? \_\_\_\_\_

**5 Are you the main income earner in your household?**

- Yes
- No
- Equal

**6 Please state all tertiary qualifications achieved?** (e.g. BsC, MsC, PhD, MBA, etc.)

- Geologist \_\_\_\_\_
- Engineer: (please specify area of specialisation) \_\_\_\_\_
- Metallurgist \_\_\_\_\_
- Other (please specify) \_\_\_\_\_

**7 How many years have you worked since your first graduation?** (Excluding any career breaks, e.g. 10 years less 1 year maternity leave = 9 years)

\_\_\_\_\_ (Years)

**8 Do you consider continuing education to be important to your career development?**

- Yes
- No
- Don't Know

**9 If you have undertaken any post-graduate**

**study, what form did that study take?** (tick more than one if necessary)

Post-graduate degree

Post-graduate diploma

Professional short-courses

Other (please specify) \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**10 Did you receive any employer support for this study?**

Yes

No  *Go to question 12*

Don't Know  *Go to question 12*

**11 If yes, what form did your employer's support take?** (Nominate more than one if necessary)

• Paid Study Leave:  
Part-time

Full-time

• Unpaid Study Leave:  
Part-time

Full-time

• Financial assistance (please specify)  
\_\_\_\_\_  
\_\_\_\_\_

• Other (please specify)  
\_\_\_\_\_  
\_\_\_\_\_

**12 What is your current employment status?**

Employed full-time

Employed part-time

Contractor

Casual

Unemployed

Leave of Absence (e.g. maternity leave)

**13 If you are currently working, what is your job title?** (e.g. Graduate Geologist, Senior Engineer, Supervisor, Human Resources Manager)

---

**14 Approximately how many people are employed on your current work site?**

<100

100-500

500-1000

>1000

Unknown

**15 Are you currently working in a position directly relevant to your original occupation (as determined by your original qualification)?**

Yes  *Go to question 19*

No

**16 If no, have you left your original occupation permanently?**

Yes

No

**17 At what point did you exit your original occupation**

Never worked in original occupation (as determined by original qualification)

Exited after 5 years

Exited after 6-10 years

Exited after 11-15 years

Other (please specify) \_\_\_\_\_

**18 Please specify why you exited your original profession?** (attach additional paper if necessary)

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**19 Please give a brief description of your main work duties in your current job?**

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**20 Please list the professional organizations (e.g. AusIMM, Inst of Engineers) of which you are a**

- Current member

- Past member

**21 Do you currently belong to any networking associations?** *(reword this to clarify, define networking)*

- Yes
- No  *Go to question 23*
- Don't Know  *Go to question 23*

**22 If yes, please name the association(s) and the number of years of your participation?**

Name of Networking association	Number of years of participation
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>

**23 Where is the location of your main workplace?**  
*(e.g. city name or mine site. If a site, please specify the region, e.g. the Pilbara, North Qld, etc.)*

**24 If your regular workplace is located at a mine site, do you**

- Live in a mining town permanently
- Commute fly-in, fly-out
- Other: (please specify)

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**25 If you commute (fly-in, fly-out) what is the shift rotation** *(e.g. 2 weeks on/2 weeks off) ?*

## Work Related Travel:

**26 Does your work require you to travel away from your home base?** *(not including any regular commuting you may do to and from your workplace - e.g. fly-in/fly-out)*

- Yes
- No  *Go to question 30*

**27 If yes, how many days a month do you estimate you are away from home?**

- <5 days
- 6-10 days
- 11-15 days
- >16 days

**28 On average, are you away from home more than 2 weekends a month?**

- Yes
- No

**29 Do you enjoy your work-related travel?**

- Yes
- No
- Don't Know

**30 Have you ever been posted overseas during your career?**

- Yes
- No  *Go to question 32*

**31 To which countries were you posted and for how long?**

Country	Months/Years
_____	_____
_____	_____
_____	_____
_____	_____

*Go to question 34*

**32 Have you ever been offered an overseas posting?**

- Yes
- No  *Go to question 34*

**33 If yes, why did you choose not to accept the posting?**

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### Career Breaks:

**34 Have you taken extended leave (other than study leave) for a period greater than 6 months at any point in your career?**

- Yes
- No  Go to question 42

**35 For what purpose was the leave taken and for how long?** (Nominate more than one if necessary)

Purpose		Months/Years
Maternity Leave	<input type="checkbox"/>	_____
Paternity Leave	<input type="checkbox"/>	_____
Overseas travel (not work related)	<input type="checkbox"/>	_____
Other (please specify)	<input type="checkbox"/>	_____

**36 Immediately prior to your taking leave were you satisfied with your job grade (taking into account length of tenure, qualifications, seniority, etc.)?**

- Extremely satisfied
- Satisfied
- Moderately satisfied
- Unsatisfied
- Extremely unsatisfied

**37 When you resumed your career, did you return to the same employer?**

- Yes
- No

**38 Compared to your job grade at the time of your departure on leave, at what level did you re-enter your career upon your return?**

- Higher Level
- Same
- Lower Level

**39 How would you rate your degree of satisfaction with your re-entry level at the time you resumed your career (compared to your degree of satisfaction at your exit [question 36])?**

- Extremely satisfied
- Satisfied
- Moderately satisfied
- Unsatisfied
- Extremely unsatisfied

**40 How long ago was your extended leave?**

- <2 years ago
- 3 - 5 years ago
- 5-10 years ago
- > 10 years ago

**41 How would you rate your degree of satisfaction with your career progress since you resumed your career?**

- Extremely satisfied
- Satisfied
- Moderately satisfied
- Unsatisfied
- Extremely unsatisfied

**42 Please state the reasons for your degree of satisfaction or dissatisfaction in question 41?**

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**Mentors:**

**43 Have you had a professional mentor at some point during your career?**

- Yes
- No  *Go to question 47*
- Don't Know  *Go to question 47*

**44 Was this mentor appointed by your employer?**

- Yes
- No
- Don't Know

**45 Has this mentor / mentee relationship been beneficial to your career?**

- Yes
- No
- Don't Know  *Go to question 47*

**46 Please state why you believe your mentor has, or has not, been beneficial to your career?**



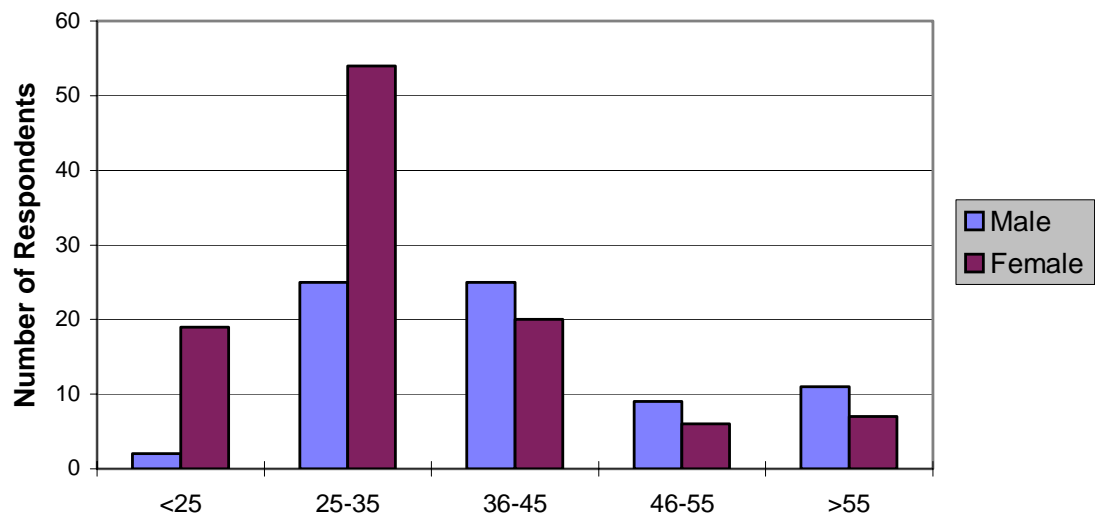


## APPENDIX F “WORKING IN MINING” QUESTIONNAIRE RESPONDENTS BY AGE AND GENDER

**Table 3: Questionnaire Respondents by Age and Gender**

Age Range	Female	Male
<25	19	2
25-35	54	25
36-45	20	25
46-55	6	9
>55	7	11
<b>Total</b>	<b>106</b>	<b>72</b>

**Figure 5: Questionnaire Respondents by Age and Gender**

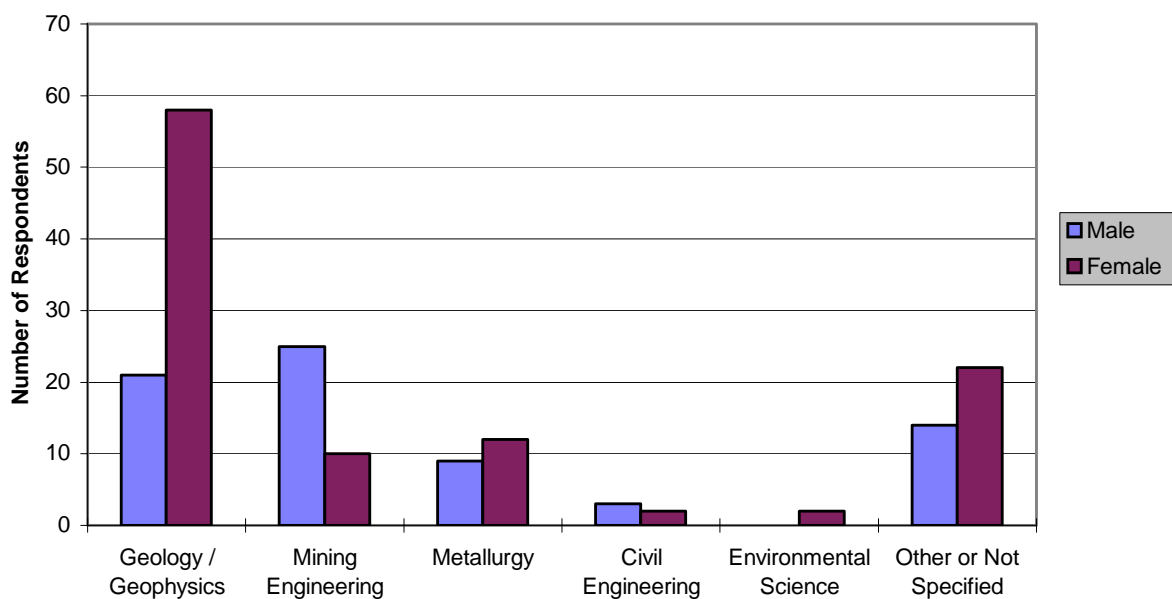


## APPENDIX G “WORKING IN MINING” QUESTIONNAIRE RESPONDENTS BY UNDERGRADUATE QUALIFICATION

**Table 4: Questionnaire Respondents by Undergraduate Qualification**

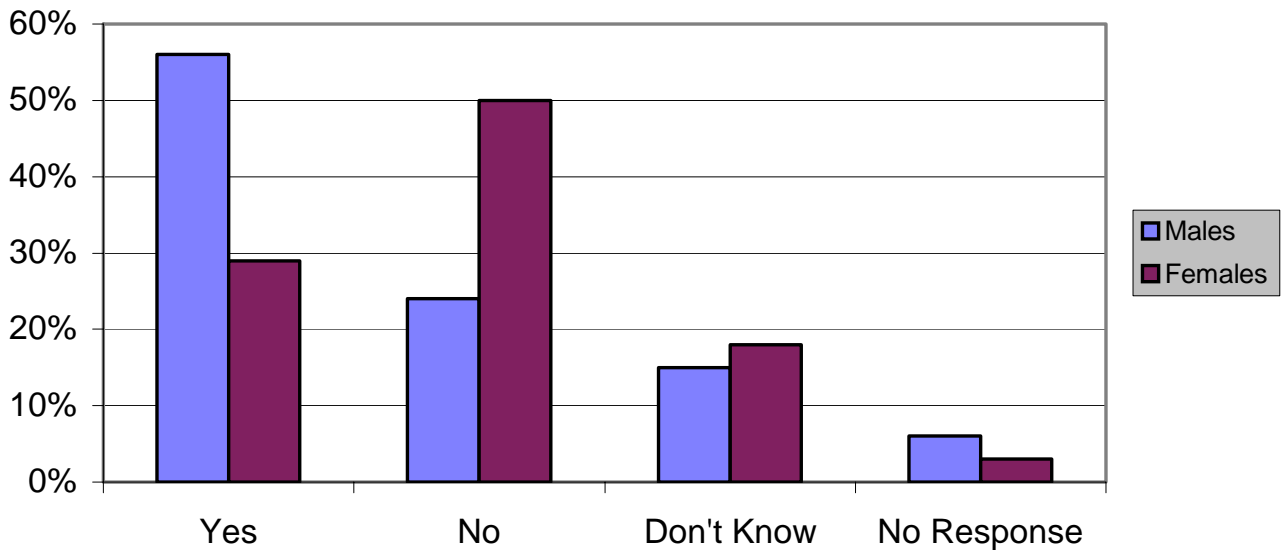
	Male	Female
Geology / Geophysics	21	58
Mining Engineering	25	10
Metallurgy	9	12
Civil Engineering	3	2
Environmental Science	0	2
Other or Not Specified	14	22
<b>Total</b>	<b>72</b>	<b>106</b>

**Figure 6: Questionnaire Respondents by Undergraduate Qualification**



**APPENDIX H**  
**PERCEPTIONS OF THE MINERALS INDUSTRY**  
**AS AN EEO EMPLOYER**  
**MALE TO FEMALE COMPARISON**

Figure 7: % of Males to Females: Perceptions of the Minerals Industry as an Equal Opportunity Employer



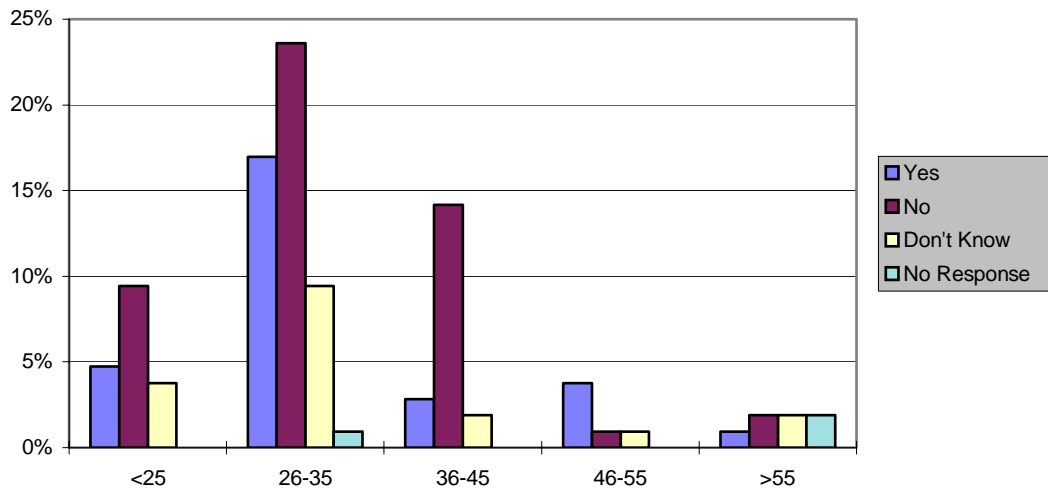
# PERCEPTIONS OF THE MINERALS INDUSTRY AS AN EEO EMPLOYER

## FEMALES

**Table 5: Female (by Age): Perceptions of the Minerals Industry as an EEO Employer**

Age Range	Yes		No		Don't Know		No Response		Total	
	n:	%	n:	%	n:	%	n:	%	n:	%
<25	5	5%	10	9%	4	4%	0	0%	19	18%
26-35	18	17%	25	24%	10	9%	1	1%	54	51%
36-45	3	3%	15	14%	2	2%	0	0%	20	19%
46-55	4	4%	1	1%	1	1%	0	0%	6	6%
>55	1	1%	2	2%	2	2%	2	2%	7	7%
<b>TOTAL</b>	<b>31</b>	<b>29%</b>	<b>53</b>	<b>50%</b>	<b>19</b>	<b>18%</b>	<b>3</b>	<b>3%</b>	<b>106</b>	<b>100%</b>

**Figure 8: % of Female Respondents by Age Grouping:  
Perceptions of the minerals industry as an EEO Employer**



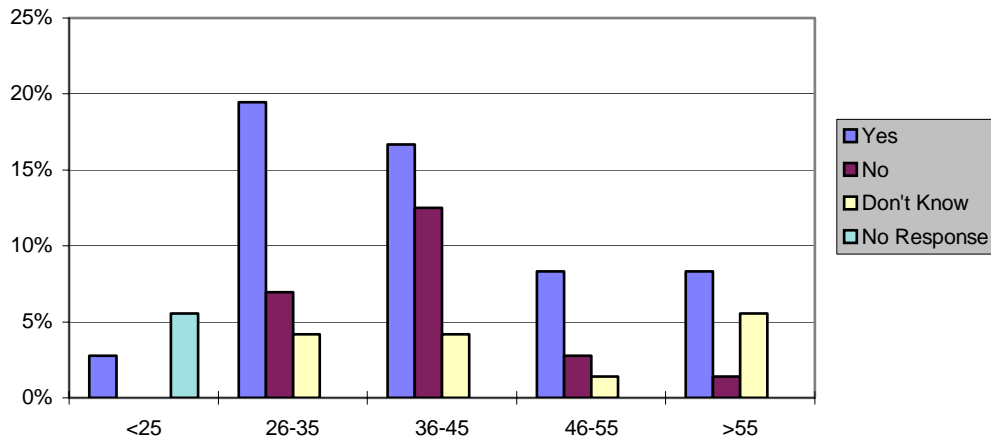
# PERCEPTIONS OF THE MINERALS INDUSTRY AS AN EEO EMPLOYER

## MALES

**Table 6: Male (by Age): Perceptions of the Minerals Industry as an EEO Employer**

Age Range	Yes		No		Don't Know		No Response		Total	
	n:	%	n:	%	n:	%	n:	%	n:	%
<25	2	3%	0	0%	0	0%	0	0%	2	3%
26-35	14	19%	5	7%	3	4%	3	4%	25	35%
36-45	12	17%	9	13%	3	4%	1	1%	25	35%
46-55	6	8%	2	3%	1	1%	0	0%	9	13%
>55	6	8%	1	1%	4	6%	0	0%	11	15%
<b>TOTAL</b>	<b>40</b>	<b>56%</b>	<b>17</b>	<b>24%</b>	<b>11</b>	<b>15%</b>	<b>4</b>	<b>6%</b>	<b>72</b>	<b>100%</b>

**Figure 9: % of Male Respondents by Age Grouping:  
Perceptions of the minerals industry as an EEO Employer**



# APPENDIX I

## FACTORS CONTRIBUTING TO THE LOW PARTICIPATION RATE OF WOMEN IN THE AUSTRALIAN MINERALS INDUSTRY: Testimonials

### FEMALES

*[Companies] want to be able to say in their annual report "We do lots of things and lets have some picture of some women on the posters" [female, mid-20's].*

*Not much encouragement at school to be engineering oriented. Few women undertake mining related qualifications - may not perceive the industry to be open to them. Image of mining from within and without still a "man's job" which is crap but some still think that way. All those Hard Yakka ads on TV! [female, 26-35].*

*Extremely established male/"bloke" culture in the workforce making it difficult for women to fit in. Lack of flexibility in terms of managing family and career [female, <25].*

*Sexual harassment, no support structure for women [female, <25].*

*Entrenched male ethos, expectation of physical abilities. Reduction of choice to have a family [female, <25]*

*"Boys" club mentality in the industry. Excludes and isolates women. Lack of provision for women to have families. Defensiveness of men to women in the industry, i.e. you should be at home, not taking men's jobs [female, <25].*

*The unwillingness to employ females, assuming that they can't or don't want to work within the industry. Also the macho Australian male image with the mining industry and generally the remote locations of mine sites [female, <25].*

*Women have little hope of seniority or recognition of their work. The only reasonably senior women in mining are lawyers, personnel, economists etc. Not geologists, engineers, etc. [female, >55]*

*Attitude. The majority of bosses and colleagues secretly (or otherwise) believe the mining industry is unsuited to female professional employees (or vice versa) and in believing that help to make it so, and perpetuate the myth, e.g. "See, I told you she couldn't cut it" [female, 26-35].*

*Tradition. Perception that industry is "dirty" and unbecoming to females. Some employers believe that the presence of a female would be "disruptive" to a male dominated workforce. Perception that young females aren't serious and will leave and get married in the middle of a job. Perception that females will not be able to cope with the rigours of fieldwork and climatic extremes as well as with extended periods of absence from home and lack of female company [female, 26-35].*

*The senior professionals are usually men (95% at least). They are more comfortable employing other men and have more trust in male work mates. Women are only employable while they are young and unencumbered (i.e. no children) [female, 26-35].*

*I have heard that on some minesites there is a culture of not changing to make things more acceptable to women - you cut it on their terms, they won't change the terms [female, 26-35].*

*Men in the mining industry are extremely sexist - this seems to have been passed down thru the years and prevents women being employed [female, 26-35].*

*Many women see this industry as dominantly male and therefore may feel afraid that they are not tough enough to join the industry. The opinion of the majority of males that a woman's place is at home is one I've come across frequently [female, 26-35].*

*Very entrenched culture that mining is a man's world with dirt, trucks, noise, isolation. Women aren't easily accepted, they have to be better than the best male or useless [female, 26-35].*

*Mining areas in which people have lived and worked there all their lives - difficult to bring in changes like women in the workforce against such attitudes. Management don't encourage women's employment or development where it would upset unions. There is (was?) insufficient encouragement at secondary / tertiary levels for women to enter / continue in the industry. Blatant discrimination in employment as graduates [female, 26-35].*

*Senior management not being genuinely and deeply committed to employing persons of ability. The "old boy" network - "clones" of senior management types do not threaten [female, 36-45].*

*Men's preconceived ideas that women wouldn't be able to handle the work in mining conditions such as heat, dirt, underground environment, etc. Men often "scared" of females, unsure as to how they should treat women in certain circumstances. They feel they can be "themselves" more with men, but have to take precaution with women [female, 36-45].*

*Very few role models for females in the mining industry - females don't get to very high levels of management. A female of 15 years experience is generally at the level of an 8-10 year experienced male, regardless of qualifications and whether they have had time out to have a family. Inability of management to offer same opportunities for females [female, 36-45].*

*Macho, Neanderthal culture. Physical barriers to entry - i.e. underground toilets, showers, etc. Unions - lists of retrenched employees limits new entrants. Glass ceiling at a much lower level than other industries [female, 36-45].*

*The nature of mining has historically been presented as dirty, requiring physical strength. This picture has not been marketed otherwise [female, 46-55].*

*Mining industry is a monoculture not accepting diversity, whether racial or gender based. Women tire of energy draining workplace e.g. exposure to pornography, women driver "jokes", etc. Women are not given social permission to behave in the aggressive way successful men behave. Career breaks due to child rearing a red herring. Most women try hard to establish a career and have their children after they see what an uphill struggle it is. Limited range of female "types" accepted in workplace (pref. Working class, raucous, unattractive, not challenging to workplace culture) [female, 26-35].*

*Dirty work - not many females interested or can hack the pace. Not many men will follow their women to mining towns. Where would they work? Think they may get a hard time from miners (actually miners are 99% good guys) [female, 46-55].*

*Women rarely get into the management ranks because of the "glass ceiling" (most managers are 50 years + entrenched MCP). To return to work following childbirth is difficult especially in field geology and young female geologists are thus denied good role models from 30-40 year old professional geologists. If women do return to work after childbirth they are usually relegated to the lower paid office geologists roles - library research, etc. [female, 36-45].*

*Non acceptance by the majority of male geologists to work under or for a woman. Many men have not learnt to be comfortable in communication with women and therefore feel threatened or*

*embarrassed; traditional roles a problem; women often have junior geological roles, but the “glass ceiling” is very alive. Even the most liberal of men have “under the skin” problems accepting that women can achieve as good or better results and professional expertise than men. It is a big problem. I doubt it is just the family factor [female, 36-45].*

*Secondary education tends to channel females into less applied occupations.... Men can't have babies!! Why is it that mining managers won't employ females at a technical level? One employer (very senior CEO) said to me: “Because you always run off and have babies, that's why” - charming! [female, 26-35].*

*The reluctance of other than a small minority of women to undertake field based work which is essential for a career in the mining industry. The reluctance of some companies to give women the necessary background to allow them to fully develop a career in exploration and mining [female, >54].*

*The incorrect perception is that the mining environment is dirty, hostile, requires brute strength and is unsuitable for females. I found whilst studying geology that even at a Tertiary level, industry education was limited and outdated. If I had my time over again I would have studied mining engineering but at that time [mid 80s] this was discouraged, it's pleasing to see that this is changing and we now see female engineers in industry [female, 26-35].*

*The concept of work twice as hard for half the recognition is still rife. There is still the concept of promote a “like” person or mate even if they are less able. Women themselves give up the fight and go and run to universities etc. [female, 26-35].*

*Combination of remote sites, long (e.g. 12 hours) working hours make it difficult for women to combine mining careers and family. Stay at home hubbies who clean toilets are very rare! Also often being the sole female in the workplace are continually up against the “boys club”. Worked at one mine where the unwritten “policy” was to NOT employ ANY female mill operators regardless of experience etc. In hazardous environment (e.g. lead dust) often no policy regarding pregnant women. Just make up policy when the situation arises [female, 26-35].*

*Women leave because they get put off by smutty personal comments and innuendos; only being given unchallenging roles; have their subordinates whom they trained being promoted over them; never having men acknowledge that the females may be not as pushy, but more intelligent than them [female, 26-35].*

# FACTORS CONTRIBUTING TO THE LOW PARTICIPATION RATE OF WOMEN IN THE AUSTRALIAN MINERALS INDUSTRY: Testimonials

## MALES

*Isolation - most population is transient and women from the cities cannot handle it. Most technical women don't know what they want out of life. I see them come and go all the time [male, 26-35].*

*[Women] don't like physical aspects of work - conditions, heats, hours, etc. Don't like work sites - too dominated by "lowest-common-denominator" type man [male, 26-35].*

*[Women] can have pre-conditions, i.e. employ husband too! [male, 36-45]*

*Very conservative employment attitudes. Often hard and heavy physical work. Many mining camps etc are not "civilized" enough to attract women [male, 36-45]*

*Inherent resistance to women in mining from employers despite employer EEO policies [male, 36-45]*

*Small numbers of women enter these careers. Minority groups always struggle. It's a "rough" industry [male, 36-45]*

*Mining industry tends to be dominated by old boys club types, or cowboys, neither of whom take women seriously [male, 36-45]*

*Girls perception of mining industry. Girls approach to science subjects at school. Sexual discrimination in the work place. Sexual harassment, often subtle psychological as opposed to physical. Opting out to have and raise children. I estimate that I would interview (total 100-120/year) equal numbers of male / female Hons graduates but after 5-10 years experience the ratio has swung to 80:20 owing mostly to women opting out for family reasons. The mining industry is not well designed for part time work, whilst raising a family [male, 36-45].*

*There are specific factors which preclude women from working in the industry - their sex being a major one [male, 46-55].*

*Boy's type club. Poor promotion of women by uni [male, 36-45].*

*Mining is capital intensive requiring increasing technical skills for many professional and non-professional positions. Until engineering and geoscience attract equal proportions of both sexes imbalances will continue. Stereotype images of mining are probably unattractive - remote location, dirt, aggressive male oriented activity. Women who join the industry in spite of these images regularly rate highly in output, flexibility and contribution to management. My personal experience is that in managerial and executive positions similar benefits result [male, 46-55].*

## APPENDIX J

### MENTORS: NUMBER OF FEMALE AND MALE MENTORS AND MEANS OF APPOINTMENT

Figure 10: Females as mentors by number and relationship to mentee

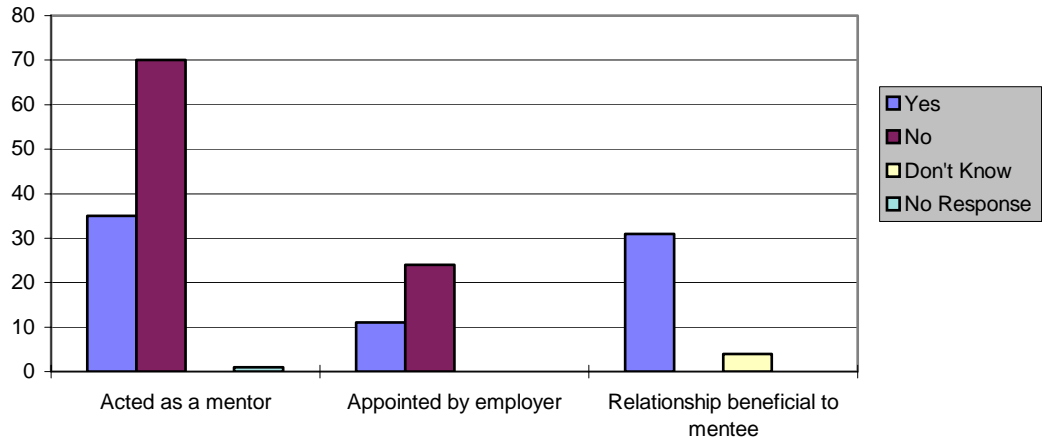
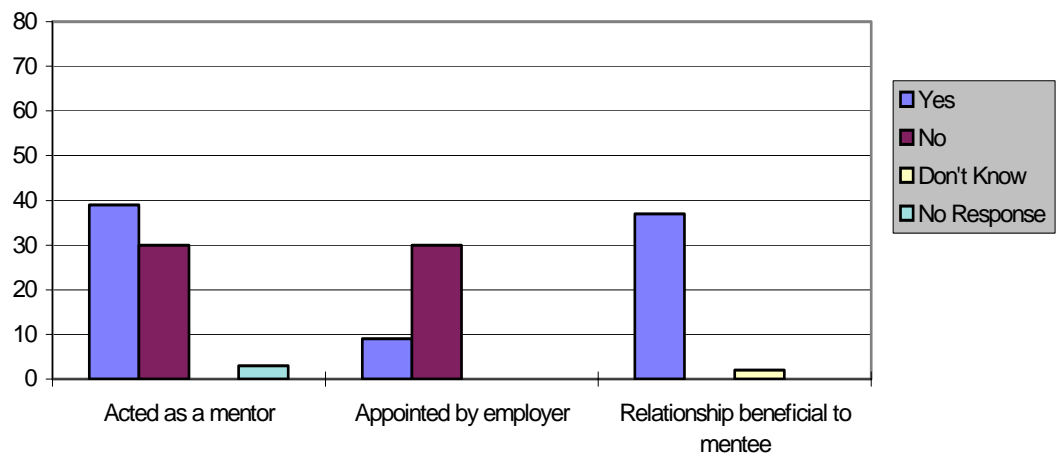


Figure 11: Males as mentors by number and relationship to mentee



## APPENDIX K MENTEES: NUMBER OF FEMALE AND MALE MENTEES AND MEANS OF APPOINTMENT

Figure 12: Numbers and Source of Females as Mentees

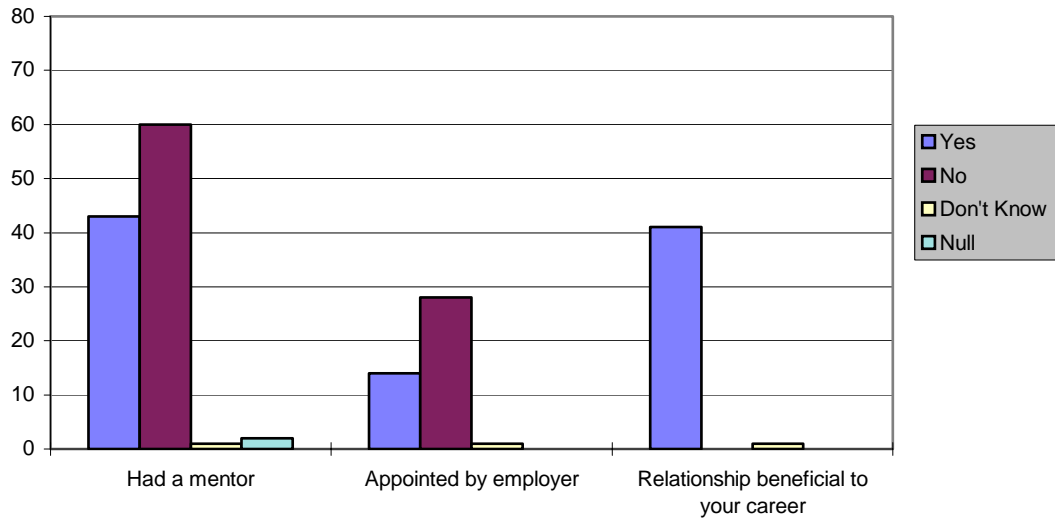
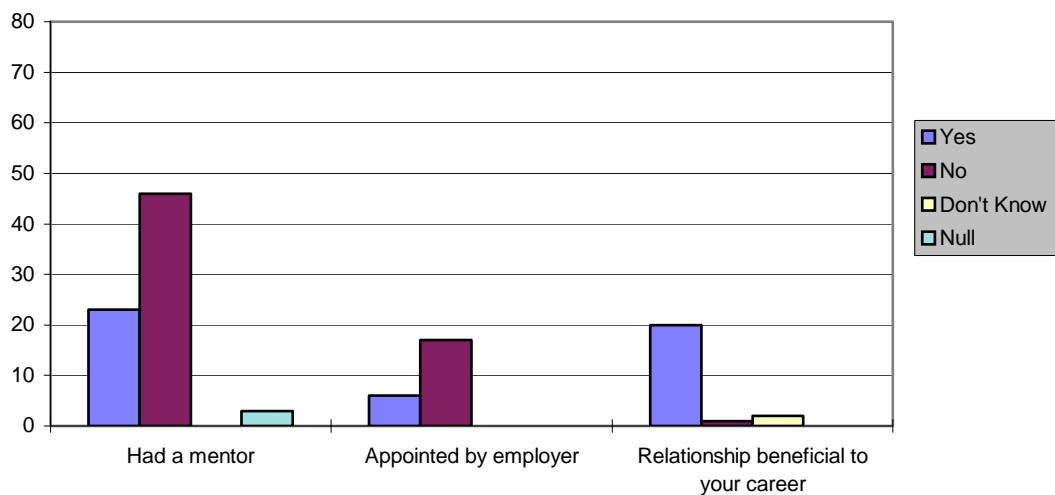


Figure 13: Number and Source of Males as Mentees



# APPENDIX L

## PERCEPTIONS OF THE VALUE AND IMPACT OF MENTOR RELATIONSHIPS: Testimonials

### FEMALES

*An essential part of a professional network. I am not referring to a formal "employer-designated" system. Mentor relationships are best self-made and earned [female, 36-45].*

*I don't like the idea of tying a tag around a mentor for career development because I think too many people come into the organisation these days expecting people to manage their life. Mining companies are very paternalistic and too willingly take on management of every aspect of people's lives... The other thing too is ... I've been in the industry for 17 years and I'm not sure if I've ever been given an honest performance review. Because I think deep down - and I've had some fairly reasonable bosses - but I think deep down they live in fear of a woman getting upset or getting emotional and I think mentors are good for giving people objective feedback, saying "that was really dumb, you shouldn't have done that". So I think from that perspective I think they're critical. But I hate the thought of someone saying to me, "This is your mentor". Artificial, contrived. And the label itself provokes all those sorts of emotions for me. So they're very valuable, they're critical and they are fantastic for those sorts of reasons but by the same token I have concern about a formal scheme [female, late 30's].*

*At the company I acted as a mentor, the manager paid lip service to career development but didn't like it when we pushed for giving the graduates deliberately varied experience. I can't imagine mentoring working formally - the mentor has to believe that the mentee is worth the effort [female, 26-35].*

*I don't believe official mentors would be a success. It is good to speak to someone who has experienced the same frustrations and who can give practical advice - senior women are few and far between, senior influential women a rarity [female, 36-45]*

*It's often better to find your own mentor or mentee than to be appointed one in my opinion. That way there is a greater degree of mutual respect and the relationship is not "forced" [female, 36-45].*

*Mentoring can only be successful if both parties are willing to use the relationship to its full potential and be proactive in seeking each other out and raising issues [female, 26-35].*

*My mentor was organised by [the organisation]. I found it hard to approach my mentor for advice, partly because I never met him face to face and also because it was hard to track him down due to the nature of his work [female, <25].*

# PERCEPTIONS OF THE VALUE AND IMPACT OF MENTOR RELATIONSHIPS: Testimonials

## MALES

*When new to a job, a mentor is a MUST - there is simply too much to learn by oneself, e.g. how to board a chopper, fill-out paperwork etc. SHOULD BE MANDATORY BY LAW [respondent's emphasis] [male, 26-35].*

*Very important. Graduates from uni often think they know it all but are very ignorant of real work. Therefore need a guide to reduce pain of transition and ensure they stick it out [male, 26-35].*

*Should be more of it. It's far more prevalent in the USA than here [male, >55].*

*The mentor program is good, but I found the informal mentor relationship to be first class. This is probably due to the good relationship that existed before becoming a "mentor" [male, 26-35].*

*Have never seen such a scheme work effectively [male, >55].*

*It only works if both parties are committed to it [male, 46-55].*

*It is a shame that in recent years it is becoming an expectation from graduates that companies provide this service. I believe the individual has a larger part to play in the destiny of his/her career. Graduates are "babied" - this seems to be creating an arrogance of expectation that they should be looked after. There seems to be a lack of self drive and hard work to reach achievements. I believe there should be support from the business to the development of their professional personnel - but not at the expense of individuals being forced to meet career milestones generally by themselves [male, 26-35].*

## APPENDIX M CAREER BREAKS A COMPARISON OF FEMALES AND MALES

**Table 7: Career Breaks Greater than 3 Months Female and Male Respondents**

	<b>Yes</b>		<b>No</b>		<b>No response</b>		<b>Total</b>	
	<i>n:</i>	<i>%</i>	<i>n:</i>	<i>%</i>	<i>n:</i>	<i>%</i>	<i>n:</i>	<i>%</i>
Female	38	21%	66	37%	2	1%	106	60%
Male	20	11%	51	29%	1	1%	72	40%
<b>Total</b>	<b>58</b>	<b>33%</b>	<b>117</b>	<b>66%</b>	<b>3</b>	<b>2%</b>	<b>178</b>	<b>100%</b>

**Table 8: Reasons for Career Breaks Greater than 3 Months for Female and Male Respondents**

	<b>Maternity/ Paternity Leave</b>		<b>Family Leave</b>		<b>Travel</b>		<b>Other</b>		<b>No Response</b>		<b>Total</b>	
	<i>n:</i>	<i>%</i>	<i>n:</i>	<i>%</i>	<i>n:</i>	<i>%</i>	<i>n:</i>	<i>%</i>	<i>n:</i>	<i>%</i>	<i>n:</i>	<i>%</i>
Female	13	22%	1	2%	13	22%	10	17%	1	2%	38	66%
Male	1	2%	0	0%	8	14%	10	17%	1	2%	20	34%
<b>Total</b>	<b>14</b>	<b>24%</b>	<b>1</b>	<b>2%</b>	<b>21</b>	<b>36%</b>	<b>20</b>	<b>34%</b>	<b>2</b>	<b>3%</b>	<b>58</b>	<b>100%</b>

**Table 9: Reasons for Career Breaks Greater than 3 Months for Female and Male Respondents by Row**

	<b>Maternity/ Paternity Leave</b>		<b>Family Leave</b>		<b>Travel</b>		<b>Other</b>		<b>No Response</b>		<b>Total</b>	
	<i>n:</i>	<i>%</i>	<i>n:</i>	<i>%</i>	<i>n:</i>	<i>%</i>	<i>n:</i>	<i>%</i>	<i>n:</i>	<i>%</i>	<i>n:</i>	<i>%</i>
Female	13	34%	1	3%	13	34%	10	26%	1	3%	38	100%
Male	1	5%	0	0%	8	40%	10	50%	1	5%	20	100%

**APPENDIX N**  
**"Working in Mining" Questionnaire**  
**Extract of Results Not Appearing**  
**Elsewhere**

**Question 1 & 2: Respondents by Age and Gender [See Appendix F]**

**Question 3: What is your marital status?**

**Question 4: Do you have any children?**

	FEMALE			MALE		
	Number of Respondents	With Children Number	%	Number of Respondents	With Children Number	%
	Married	42	15	36%	55	46
De Facto	21	9	43%	6	3	50%
Single	40	0	0%	10	0	0%
Divorced	2	0	0%	0	0	0%
No Response	1	0	0%	1	0	0%
<b>TOTAL</b>	<b>106</b>	<b>24</b>		<b>72</b>	<b>49</b>	

**Question 5: Are you the main income earner in your household**

	FEMALE		MALE	
	Number	% of Total	Number	% of Total
Yes	47	44%	66	92%
No	24	23%	1	1%
Approximately Equal	32	30%	4	6%
No Response	3	3%	1	1%
<b>TOTAL</b>	<b>106</b>	<b>100%</b>	<b>72</b>	<b>100%</b>

**Question 6: Respondents by Undergraduate Qualification [See Appendix G]**

**Question 7: Have you received any employer support at any point during your studies?**

	FEMALE		MALE	
	Number	% of Total	Number	% of Total
Yes	37	35%	37	51%
No	69	65%	35	49%
<b>TOTAL</b>	<b>106</b>	<b>100%</b>	<b>72</b>	<b>100%</b>

**Question 8: If yes, what form did this support take? (Nominated more than one if necessary)**

FEMALE	MALE
--------	------

	Number	% of Total	Number	% of Total
Paid Stdy Leave: Taken part-time	12	24%	12	27%
Paid Stdy Leave: Taken full-time	1	2%	2	4%
U/pd Stdy Leave: Taken part-time	3	6%	0	0%
U/pd Stdy Leave: Taken full-time	1	2%	2	4%
Other: Full payment of fees	13	25%	11	24%
Other: Part payment of fees	6	12%	8	18%
Other: Books & study Materials	15	29%	10	22%
Other: Other	0	0%	0	0%
<b>TOTAL</b>	<b>51</b>	<b>100%</b>	<b>45</b>	<b>100%</b>

**Question 9: How would you rate the importance of continuing education to career development?**

	FEMALE		MALE	
	Number	% of Total	Number	% of Total
Vital	35	33%	23	32%
Very Important	38	36%	29	40%
Important	27	25%	16	22%
Not very important	6	6%	3	4%
Unimportant	0	0%	1	1%
<b>TOTAL</b>	<b>106</b>	<b>100%</b>	<b>72</b>	<b>100%</b>

**Question 11: What is your current employment status?**

	FEMALE		MALE	
	Number	% of Total	Number	% of Total
Employed full-time	72	68%	57	79%
Employed part-time	5	5%	0	0%
Contractor	6	6%	2	3%
Consultant	11	10%	8	11%
Casual	1	1%	1	1%
Unemployed	2	2%	2	3%
Leave of Absence	4	4%	1	1%
Other	4	4%	1	1%
No response	1	1%	0	0%
<b>TOTAL</b>	<b>106</b>	<b>100%</b>	<b>72</b>	<b>100%</b>

**Question 13: Are you currently working in a position directly relevant to your original qualification?**

	FEMALE		MALE	
	Number	% of Total	Number	% of Total
Yes	75	71%	40	56%
No	25	24%	31	43%
Don't Know	0	0%	0	0%
No response	6	6%	1	1%
<b>TOTAL</b>	<b>106</b>	<b>100%</b>	<b>72</b>	<b>100%</b>

**Question 14: If no, does your current position utilise elements of your original qualification?**

	FEMALE		MALE	
	Number	% of Total	Number	% of Total
Yes	19	42%	26	84%
No	26	58%	5	16%
Don't Know	0	0%	0	0%
<b>TOTAL</b>	<b>45</b>	<b>100%</b>	<b>31</b>	<b>100%</b>

**Question 15: At what point did your work move away from the field of your original qualification?**

	FEMALE		MALE	
	Number	% of Total	Number	% of Total
Never worked in an occup'tn related to orig qual	3	13%	5	16%
Changed after <5 years	9	38%	9	29%
Changed after 6-10 years	7	29%	10	32%
Changed after 11-15 years	4	17%	7	23%
Other	1	4%	0	0%
<b>TOTAL</b>	<b>24</b>	<b>100%</b>	<b>31</b>	<b>100%</b>

**Question 16: Can you identify some of the factors/circumstances involved in your move to your present work?**

#### FEMALE RESPONSES

Utilise my skills in a more preferred area  
 1. Didn't want field work. 2. Now working in computer software - felt lots of opportunities  
 Limited career opportunities within industry. MBA opened avenue to change sectors.  
 Location, spouse career  
 Didn't want to work in isolated mines anymore, wanted to be than just a geo, increase overall mining business exp  
 Found working in a remote locat'ns depressing & the fly-in fly-out roster system disjointed & unattractive  
 Money, challenge, interest, career move  
 Availability of work  
 Multi-skilled & work across tech & financial sectors. managerial capacity, strong communicator  
 graduate in '91 - downturn in industry, unable to find job in geo discipline so was obliged to turn to environmental  
 Free agent, challenging assignments, co-operation by companies, no political nonsense  
 Firstly a change in interest to environmental science, then a need to work part-time as a sole parent  
 Operational mine geo experience provided opportunities & promotion outside specific geo field. A v good mentor  
 Sexual harassment, career path progressing too slow  
 Greater job/career opportunities

#### MALE RESPONSES

Lack of career opportunities  
 Low availability of work in field of original qualification and preference to do something else anyway

More interesting work  
 Logical development of career  
 I moved from coal geology to coal marketing b/c I enjoyed working with people and was an urban type  
 Basically the switch to HR involves me b/c less interested in the actual mining, but how as a  
 co we  
 actually go about mining  
 Loss of motivation, do not like sitting behind desk, poor relationships with supervisor  
 Need to work in corporate H/O situation for childrens high school education  
 No Australian or local experience  
 Lack of opportunity to advance. Married life was better in the  
 city.  
 Not wanting to live in mine-sites all my life. Broader opportunities (& more senior) in commercial fields  
 Considered a health risk to the mining industry by shortsighted recruitment managers. I am profoundly deaf.  
 Personal interest in computers. Wider field of application. Better prospects.  
 Returned to Brisbane due to wife's family problems, couldn't get job in the city undertook further study  
 Opportunity

**Question 18: Are you a member of any professional organisations?**

	FEMALE		MALE	
	Current Mbr	Past Mbr	Current Mbr	Past Mbr
The AusIMM	86	6	58	6
Institution of Engineers	9	10	3	1
Other	0	0	0	0
Have never belonged to any professional org	4		2	0

**Question 19: Do you current belong to any other business, personal development or community service organisations?**

	FEMALE	MALE
Yes	17	13
No	83	56
Don't Know	2	0
<b>TOTAL</b>	<b>102</b>	<b>69</b>

**Question 22: If your regular workplace is located at a mine site, do you**

	FEMALE	MALE
Live in a mining town permanently	25	12
Commute fly-in, fly-out	13	8
Other	15	7
No response	53	45
<b>TOTAL</b>	<b>106</b>	<b>72</b>

**Question 25: Does your work require you to travel away from your home?**

	FEMALE	MALE
Yes	62	53

No	37	16
No response	7	3
<b>TOTAL</b>	<b>106</b>	<b>72</b>

**Question 26: If yes, how many days a month do you estimate you are away from home?**

	<b>FEMALE</b>	<b>MALE</b>
<5 days	41	22
6-10 days	0	0
11-15 days	3	6
>16 days	0	0
<b>TOTAL</b>	<b>44</b>	<b>28</b>

**Question 27: Are you regularly away from home for 2 or more weekends a month?**

	<b>FEMALE</b>	<b>MALE</b>
Yes	12	13
No	55	40

**Question 28: Do you enjoy your work-related travel?**

	<b>FEMALE</b>	<b>MALE</b>
Yes	50	33
No	4	6
No opinion	10	11

**Question 29: Have you ever been offered an overseas posting during your career?**

	<b>FEMALE</b>	<b>MALE</b>
Yes	31	41
No	68	29
No response	7	2

**Question 30: Did you accept the offer of an overseas posting?**

	<b>FEMALE</b>	<b>MALE</b>
Yes	23	32
No	17	10

**Question 32: If no, can you identify one or more factors which might have contributed to your decision not to accept the overseas posting?**

**FEMALE RESPONSES**

- Children
- The offer of more continuous work in Australia
- Just settling in city for first time in 15 yrs. Own home, social life, etc. wanted to keep & not move on anymore.

Sick of moving from place to place, making new friends, relationships, etc.  
 Money, lack of benefits offered by employer, e.g. housing assistance, superannuation  
 Overseas work was only refused because of on-going work commitments in Australia  
 Turned down position in Ghana due to considered safety risk as single female in politically unstable area.  
 In first instance decision to leave to co I was with to accept current minestie. In later instances decision to start  
 a family and then inability to relocate due to husbands' bus commitments  
 I enjoy my present job & the region in which it is situated. At the end of mine life I intend to work o/seas  
 I have actively avoided o/s

**MALE  
 RESPONSES**

Timing of position but I would like to work over sea  
 Money, lack of long term opportunities  
 Just recovering from car accident  
 I felt I did not have the necessary experience  
 Indefinite nature of offer  
 Personal - ill family member  
 Latin America - Chile - childrens education / Canada - better job in PNG / Peru - better job in Aust  
 Not sufficient money  
 Currently - children's education

**Question 33&34 Occurrence and Reason for Career Breaks [See Appendix M]**

**Question 35: When you resumed your career, did you return to the same employer?**

	FEMALE		MALE	
	1st Break	2nd Break	1st Break	2nd Break
Yes	86	6	58	6
No	9	10	3	1

**Question 36: Compared to your job classification at the time of your career break, at what level (classification) did you re-enter your career upon your return?**

	FEMALE		MALE	
	1st Break	2nd Break	1st Break	2nd Break
Higher level	9	2	4	0
Same level	16	8	11	2
Lower level	12	7	4	1

**Question 37: Immediately prior to your break were you satisfied with your job classification (taking into account lenth of tenure, qualifications, seniority, etc.)**

	FEMALE		MALE	
	1st Break	2nd Break	1st Break	2nd Break
Extremely satisfied	2	2	1	0
Satisfied	19	11	11	2

Moderately satisfied	0	4	0	2
Dissatisfied	4	1	3	0
Extremely dissatisfied	2	0	1	0

**Question 38:** Upon returning to your career, how would you rate your degree of satisfaction with your re-entry classification?

	FEMALE		MALE	
	1st Break	2nd Break	1st Break	2nd Break
Extremely satisfied	6	0	1	0
Satisfied	17	12	11	1
Moderately satisfied	8	1	5	1
Dissatisfied	6	4	2	0
Extremely dissatisfied	0	0	0	0

**Question 39:** How would you rate your current degree of satisfaction with your career progress?

	FEMALE	MALE
Extremely satisfied	10	7
Satisfied	9	9
Moderately satisfied	12	5
Dissatisfied	6	2
Extremely dissatisfied	1	2

**Question 41-51** See Appendicies