

Career Success: Leadership of Women in the Resources Sector of Western Australia

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Women are often an under utilised talent pool. Not surprisingly, this issue is applicable to Western Australia's (WA) economy, especially in the resources sector. The purpose of this study was to develop an understanding of how women sustain career success in leadership roles within the WA resources sector. In doing so it will begin to address the literary gap which exists in this area and also provide a theoretical framework from which the resource sector can better attract and retain future women leaders. Thirty-one women in senior management roles in the oil, gas and minerals industries participated in semi-structured in-depth interviews that used a combination of closed and open-ended questions to achieve a detailed description of their leadership experiences. The findings suggest that in order to sustain successful leadership careers, women must network, participate in professional development opportunities and engage mentors.

JEL Codes: M1 and M140

1. Introduction

Extensive research on the leadership of women and their career barriers has been conducted over the past 30 years. Existing literature suggests that women face significant challenges within their respective work fields and are less successful in progressing into senior management roles (Eagly 2007). Such an effect is present considerably more in male-dominated work environments (Eagly 2007). Thus, women appear to become held at the middle management level and experience difficulties in obtaining promotions beyond this (Eagly and Carli 2007). Despite its potential benefit, there is a limited amount of literature which addresses how women in senior management roles sustain their careers in the resource sector (Peterson and Runyan 1993; Envick and Langford 1998; Chapman and Luthans 1975; Bagilhoe and White 2011). In response to this, the current study actively explores the experiences of senior women managers in the Western Australian resources sector. It discusses the key factors of their career development and sustainability, including their determination, opportunities and barriers. The results of this study will provide researchers, the resources sector and stakeholders with a better understanding of the challenges they face including attracting, developing, retaining and advancing women in the sector.

This paper will discuss the literature review of how women pursue their careers in the resources sector followed by the methodology and the model using the qualitative method of inquiry. The findings and conclusion provided are preliminary outcomes from the study.

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2. Literature Review

The Australian resources sector plays an important part in the nation's economy. Australia is the world's largest exporter of coal, bauxite and mineral sands, followed by alumina, iron ore and uranium (IBISWorld 2010). While the resources sector predominately employs men, in recent years organizations have taken steps to increase female employment. This has resulted in women now making up approximately 18 per cent of the workforce in the resources sector. Despite this, they only hold just over six per cent of managerial positions, indicating that this sector may face difficulties in attracting and retaining female workers to these non-traditional roles (Barrera, Gardner and Horstman 2010). Understanding the factors that improve a woman's attraction and retention in the resource sector is not only important for understanding their career sustainability but is also critical in the survival and expansion of the sector in WA. This research will address gaps in our knowledge regarding how women at senior management levels in the resources sector define success, as well as how they sustain and develop their careers.

There is international evidence which shows that women face significant challenges progressing into senior roles and are less successful than men in eventually doing so (Eagly 2007; Jogulu and Wood 2011). The evidence highlights four obstacles that prevent women from advancing to these senior management placements:

i) work/life balance issues,

ii) lack of confidence,

iii) lack of awareness by businesses that gender equality affects business productivity, and

iv) the perception that women are clearly unable to 'smash the glass ceiling' (Weidenfeller and Gibson 2008; Cappelli 2006).

For women to move up the management ladder and be retained in managerial roles, organisations need to provide opportunities for career sustainability which aptly address each of these obstacles. Further examination of these is warranted to examine their application and relevance to the Australian resources sector.

2.1 Women and their Careers

Extensive research has been conducted over the past 30 years regarding women and career barriers (Peterson and Runyan 1993; Envick and Langford 1998; Chapman and Luthans 1975; Ryan and Haslam 2007). One of the main barriers is that the traditional concept of 'career' leans towards masculine stereotypes and expects women to conform to these traditional male standards (Flanders 1994). While the employment of women in organisations has risen in recent years, research has found that women tend to be employed in lower-level, entry positions or line jobs and certain conditions of these placements prevent them from advancing further (Eagly 2007). In effect, a woman's career is impacted by the presence of a "glass ceiling".

2.2 The Glass Ceilings and Other Career Metaphors

The term 'glass ceiling' was first coined by Bryant (1984) in an article in 'Adweek'. The term appeared again soon after in an article by Carol Hymowitz and Timothy Schellhardt in a 1986 edition of the Wall Street Journal (Eagly and Carli 2007). In 1991, the United States (US) Department of Labor issued a definition for the 'glass ceiling', describing it as a set of artificial barriers based on attitudes and biases that prevent women and minorities in managerial positions from advancing their careers in the corporate world, regardless of their qualifications or achievements (Eagly and Carli 2007; US Department of Labor 1991).

Eagly and Carli (2007) argue that the glass ceiling metaphor does not fully fit today's picture of women in the workforce, given that some women have managed to reach the top of the ladder or have broken through the restrictions of the glass ceiling. This is not a linear path however; rather, they are passing through a labyrinth that is full of expected and unexpected twists, turns and barriers. These obstacles are real, often invisible and are hard to prove for today's working women. Eagly and Carli (2007) suggest that women reach senior roles because they have been able to negotiate the labyrinth. For these individuals, their positions are a reflection of their ability to face and effectively address a myriad of obstacles including prejudiced feelings, discrimination and stereotypical thinking.

It is worth noting here that other metaphors can also be used to describe the different phenomena and challenges faced by women in their careers. Over the years, researchers have used a range of metaphors to illustrate their career theories (Laabs 1993; Engberg 1999; Mainiero and Sullivan 2005). Metaphors are accepted in our everyday life, language, thought and action (Lakoff and Johnson 1980). For example, 'sticky floors' refers to low-paid jobs with limited opportunities for promotion, and 'kaleidoscope' conceptualises women's career development (Laabs 1993; Engberg 1999; Mainiero and Sullivan 2005). A kaleidoscopic lifestyle refers to changing priorities that impact women during their careers (Mainiero and Sullivan 2005). Such priorities have a significant impact on the career longevity of women in the workplace.

A US study by the National Center for Women and Information noted that an average of 41 per cent of women leave their careers after 10 years and 56 per cent leave half-way through their careers, compared to only 17 per cent of men. Many women may opt for the 'off-ramp' (Mainiero and Sullivan 2005) at some point during their careers to 'fit' in with the family or their kaleidoscopic lifestyles (Mainiero and Sullivan 2005; Centre for Social Responsibility in Mining 2007a; Hewlett 2007).

Based on several studies, women on a career progression view their success as falling within two categories: the subjective and objective elements (Herrbach and Mignonac 2012; Judges et al. 1995; Smith, Caputi, Crittenden 2012). According to Judges et al. (1995), objective success refers to tangible indicators such as pay, promotions and positions whereas the subjective refers more to an external referent such as work satisfaction resulting in staff retention and higher job performance.

2.3 Women in the Resources Sector

Women in the resources sector face many similar issues that their counterparts in other industries do, including a lack of opportunities to advance their careers as well

as chances to frequently travel (Colmar Brunton Social Research 2005). The Centre for Social Responsibility in Mining (CSR) (2007a) reported that there is a low retention rate and a high rate of turnover of women in the mining sector. Similarly, while there was an increasing number of female students enrolling into mining engineering undergraduate courses, only a small number ended up working in the sector. Although some of these female graduates may have entered other industries after graduation (Centre for Social Responsibility in Mining 2007a, 2007b) it has been suggested that the early exit of women from the sector may be explained by glass ceiling barriers, the non-conducive mining culture and existing management practices (Murray and Peetz 2010). Thus, fewer women can be found in the upper management echelons of the resources sector due to this continual face-off against these significant challenges and barriers such as prejudiced feelings, discrimination and stereotypical thinking (Eagly and Carli, 2007 85).

2.4 Career Sustainability

In light of these findings, the resources sector appears to be a relatively hostile environment for women. However this phenomenon has not gone unnoticed. To retain and sustain women, the Australasian Institute of Mining and Metallurgy (AusIMM) and the Queensland Resources Council are helping to increase workplace diversity by encouraging women to participate in regular networking events. The importance of networking to a woman's career progression has been observed by a number of researchers. Networks have become a source of social capital affecting career success and providing opportunities to increase salary, promotion and career satisfaction (Coleman 1988; Sibert et al. 2001; O'Neil et al. 2011). Other key stakeholders such as the Minerals Council of Australia, the Australian Petroleum Production and Exploration Association and the Workplace Gender Equality Agency are also developing a strategy to attract and retain women in the resources and construction sectors (Morrissey 2012).

As organisations begin to understand the effects of losing women as employees, initiatives such as mentoring programs have been implemented to enhance the advancement of women in their careers (Eagly and Carli 2007; Vinnicombe 2011). In 2011, the Business Council of Australia (Business Council of Australia) launched a 'C-Suite' pilot mentoring project in which its CEOs mentored high-achieving women. The focus was to increase women on boards, raise their profile and increase opportunities for women in senior management roles. Outcomes reported by mentees included raised confidence levels, additional networks being opened to them and being able to develop an understanding of the myths preventing women's advancement (Business Council of Australia 2010). Additionally there was a constructive two-way discussion on strategies and actions (Business Council of Australia 2010). Providing opportunities for professional development has also been recognized as a means by which to fulfil the career goals of women. Wentling (2003) observed that pursuing professional development is important for women managers in terms of their future career advancement. Their participation in professional development programs gives women an opportunity to meet other managers, learn new skills and increase their self-confidence.

2.5 Women and Economic Benefits

The benefits of retaining women in the resources sector cannot be under-estimated given that WA's resources sector is judged to be moving into a critical stage in skill shortages (Eggleton 2011). Eggleton (2011) estimates that by 2015, the resources sector in WA will require another 250,000 workers to fill the vacancies of the 94 resource projects and their estimated capital expenditure of \$173.5 billion. It must be noted that the subsequent slowdown of development and cancellation of some projects suggest this number to be an overestimate. Nevertheless, women are underutilised resources and are able to fill some of the gaps that characterise these skill shortages. With more women in the workplace, business goals are met, leading to a highly productive, balanced and dynamic workforce as well as to the maintenance of WA's economic success and competitiveness (Eggleton, Morrissey 2011; Wynn 2001).

2.6 Summary

The few women who have managed to obtain senior positions play an important role for other women in identifying barriers and opportunities for career progression. This study identifies issues and offers recommendations for action for the resources sector. The range of career metaphors discussed in the literature tend to be barrier-focused rather than success-focused; that is, the literature focuses on the continued underrepresentation of women in senior roles rather than instances of their success in this area.

3. The Methodology and Model

The philosophical assumptions underlying this research involve a constructive ontology and an interpretive epistemology with a critical theoretical perspective. The ontological approach is that multiple realities exist and are subjective (Creswell 2007, 13; Cantrell 1993). From this study, the multiple realities of how these women experience sustainability in their career success will be realised by means of conversations (Cantrell 1993). The interpretive epistemology assumes that events are understood through the process of interpretation and that they are influenced by interaction during the interview. These two assumptions are best met through the data which the qualitative method brings (Creswell 2007, 12). It specifically takes an interest in, and focuses on, the power in the voices of women in senior management and their knowledge of shaping responses to everyday life to seek change and challenge in the resources sector (Brookefield 2005, 42). It seeks to understand how women define career success and sustainability through a system of meaning making and engaging to ask 'what could be' than 'what is' in the resources sector (Rubin and Rubin 2005, 25).

3.1 Sample

The 31 participants were from two main sources: The Women in Mining Network under the Australasian Institute of Women in Mining and Metallurgy (AusIMM), and The Telstra Business Women's Award Network. Snowball sampling was used to recruit participants. Recruitment of participants was progressive until saturation point was reached.

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Table 1 provides a breakdown of the position titles held by participants.

Table 1: Position Title

Position	
General Manager	12
Managing Director	5
Principal Engineer/ Geologist/ Consultant	8
CEO	1
Chairperson	1
Senior Structural Engineer	1
Vice President	2
Executive Consultant	1
Total	31

A total of 43 e-mails were sent to women identified in senior leadership roles in the Western Australian resources sector. A total of 31 women (72%) responded positively to the email invitation.

3.2 Data Analysis

Data was collected using in-depth semi-structured interviews that included a combination of closed- and open-ended questions. A process of thematic analysis was used to identify themes that emerged from the interviews.

The interview questions were developed based on the key findings from the literature review and discussion from academic and industry experts. To ensure the reliability and validity of questions a pilot study was conducted. Two women were interviewed from the finance and motor industry sectors (both male dominated industries) as the number of senior women in the resources sector is limited.

Twelve interview questions were developed covering background information such as how participants arrived at their current position, questions defining career success, barriers and opportunities faced during their careers, attendance of networking groups and/or professional development and active involvement as a mentor to others. The participants were interviewed face to face, either at their place of work or at a mutually chosen location. One participant was interviewed by phone due to distance. Each interview lasted no longer than 35 minutes and was audio-recorded and professionally transcribed. The interview transcripts were entered into QSR NVivo. The Decision Explorer data management program was used to manage the data for thematic analysis.

4. The Findings

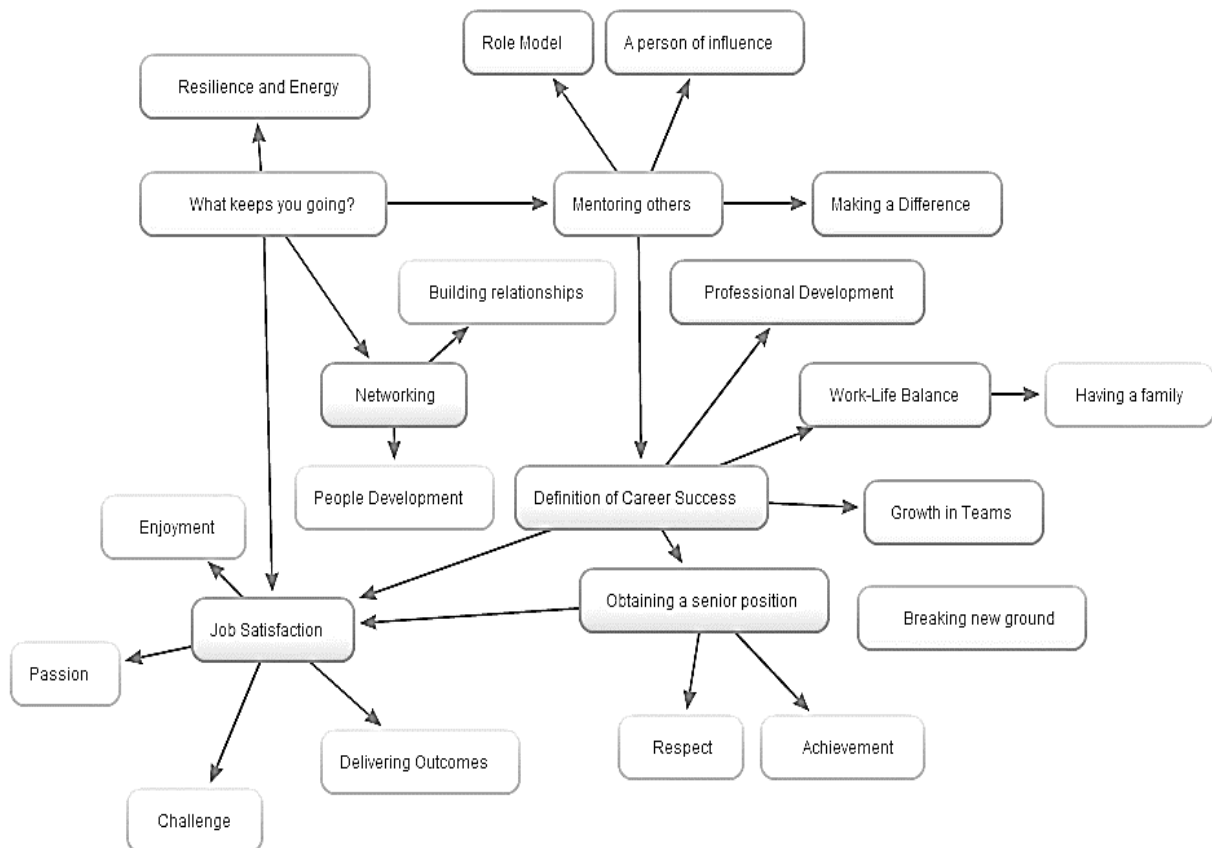
The key findings focus on the sustainability of women in leadership careers. In the interview questions, there were six questions that were asked relating to sustainability. Three main themes emerged from the cognitive mapping: networking, mentoring and professional development.

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4.1 Career Success

In the interview, the respondents were asked to define career success. The respondents came out with 13 concepts. Another interview question was “What keeps them going?” another nine concepts were identified with three concepts also being common to “Career Success”. Below is the cognitive mapping based on the two interview questions:

Map 1: Career Success



Respondents consider “Career Success” to include the following factors: building relationships, work life balance, being respected, able to achieve, a person of influence in the organization, job satisfaction, being constantly challenged and enjoying their work. Respondents mentioned “What keeps them going?” to include: mentoring others, being a role model, networks and job satisfaction.

Some examples of respondents’ comments are as follows:

.../I think women define success as when they’ve got all of the parts of their lives humming...so career success comes as an overall package.../

and

.../I know other women that are probably more balanced in their view of success that includes family and career and other things.../

and

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.../I think a lot of it for us is also about respect in the industry, getting your name known in the industry and having people respect you and know who you are and what you do.

and

.../ I see career success as something that makes you happy in what you're doing...So I see career success as things that keep me challenged. I don't like it when I get to the point that I'm comfortable...then it's time for me to move on.

While another respondent said that career success depends on each individual and the life journey they wish to take:

.... /I think each person has his or her own career success defined as to what it is. Whether you be- it depends on where your outlook is and where you want to get. Now, you will have the women who want to be CEOs and that's really all they want to be and that's where they're going to go to...I think people would see as their success as comparable with their peers in the industry.

4.1.1 Summary on the Definition of Career Success

This study showed that while each respondent defines career success differently, but there are commonalities pointing to external referent or subjective career success. None of the respondents mentioned promotion or increased pay as part of their definition of career success. This could be because the respondents are senior women in management and no longer consider objective career success a priority.

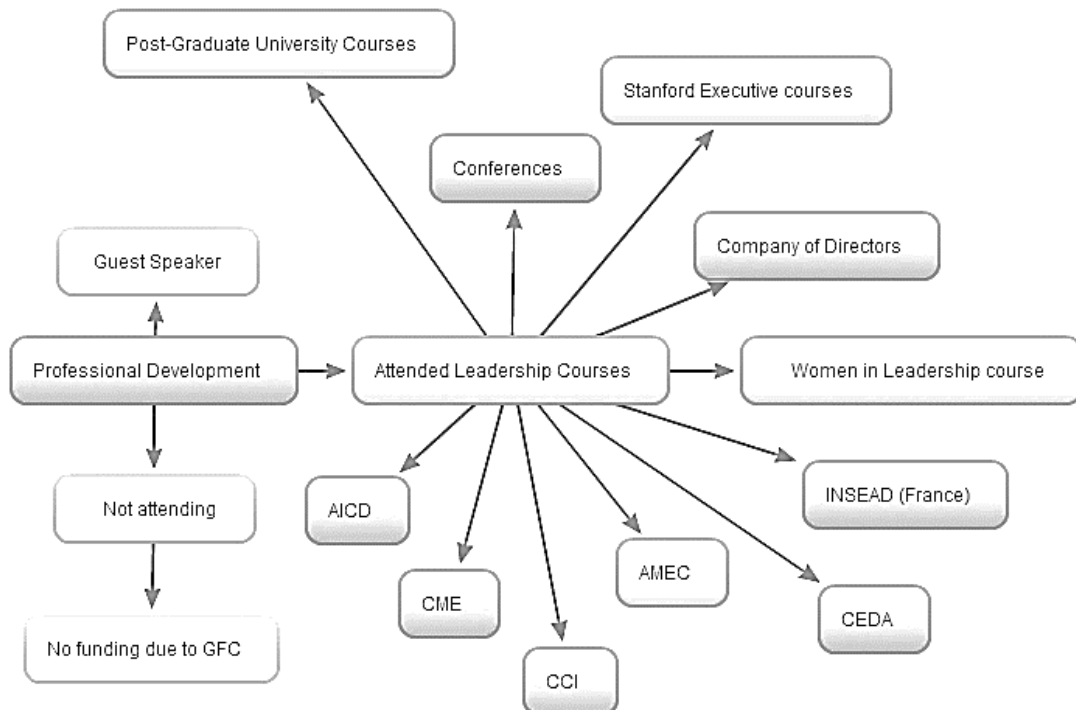
4.2 Sustaining their Leadership Careers

In this study, participants commented that to sustain their role, there is a need for continuous improvement through professional development and in the connection with people on a regular basis through networking. They also found that it is critical to have mentors during their career journeys as well as taking time to mentor others.

4.3 Professional Development

Professional development is one of the themes that emerged from the interviews. Cognitive mapping indicates how respondents perceived the Professional Development concept. The mapping shows that women attended courses/events as part of Professional Development while some of them speak at conferences or are guest speaker at local universities in Perth. Some of them go for certified post-graduate courses in universities such as Master of Business Administration.

Map 2: Professional Development



These are some of the respondents' comments regarding the importance of Professional Development.

.../I guess part of this personal growth has been this breadth of interest in, away from the straight technical roles into a more broad business role. So I'm involved in a number of things in the broader business community, targeted to the oil and gas industry but on a number of boards and committees and things.../

.../I often take conferences away...it's time to be able to spend some time reflecting on issues that – and I use it for that reason.../

.../Yes, I think it's a good question because I could continue on with an MBA that I started many years ago.../

.../My professional development at the moment is that I'm at Curtin University doing a Masters in Mineral and Energy Economics, which xxx pays for and gives me study leave to do.../

Some respondents suggested that Professional development also helps to network as one of the respondents suggested.

.../I'm a chartered professional so I'm actually – one, it's good for networking, two I need it for my professional hours so I can be registered. For me, I want to be in the industry for another 20 years and you need to keep your tool kit pretty sharp so for me, I need to keep thinking, I need to keep learning.

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.../But definitely I think it helps to network to and talk to people and know what's going on, and share information, and when you need something, you know whom to ask.

Table 2 shows the number of respondents attending the different types of courses at the time of interviewing. It provides an indication of its importance, with four respondents completing a post-graduate qualification, four attending a leadership program and 14 attending some kind of professional development courses or events.

Table 2: Professional Development

Professional Development	No. of respondents
Completing Master Degrees	4
Guest Speaker at Universities	1
Leadership Development	4
Attended Events	2
Attended Courses	12
Not Available	8

4.3.1 Summary of Professional Development

Interviews indicated that one of the key means to achieve career advancement is to participate in Professional Development. Table 2 indicated that 74 per cent of respondents mentioned attendance at some kind of courses in their careers.

Based on interview outcomes, professional development is connected with networking as the respondents share information on what they are doing in the programs, make connections and create an informal network group among themselves.

4.4 Networking

The cognitive mapping on Networking indicated four key themes that emerged. The first is about the "Purpose of networking". The respondents mentioned that there were several purposes such as the need to be known to get somewhere and I can do something, be of value to people, provide advice and/or support, mentor other women, and meet other people.

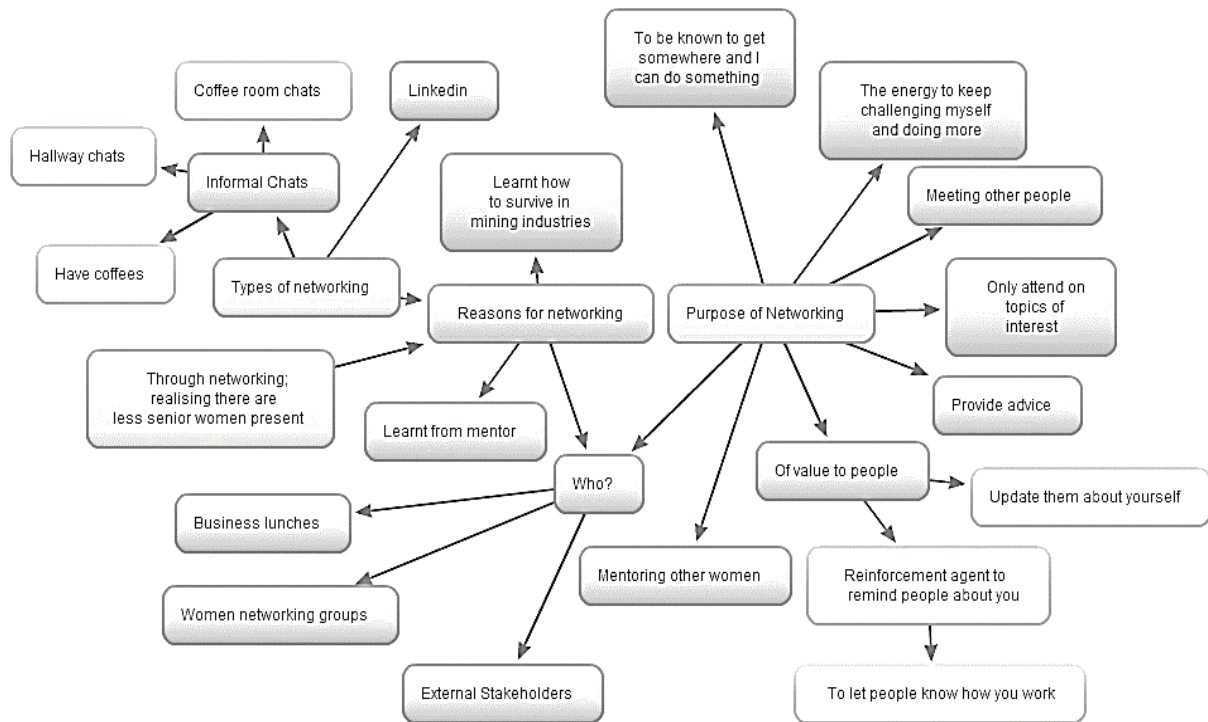
The next key theme refers to "Who" these people are. The respondents pointed to external stakeholders, the women's networking groups and various other types of networking group.

Then the respondents discussed the types of networking they go to. Some have informal chats, have coffees with people, hallway chats and also networking on LinkedIn, a social media for businesses.

The last key element looks at the "reasons for networking". There were several reasons for undertaking networking mentioned. Some go for networking to learn how to survive in the mining industry, some understand there are fewer senior women around and some would like others to learn from them as they are in the senior leadership role.

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Map 3: Networking



These are some of the respondents comments regarding networking.

.../The last couple of years I've got more involved in networking, but it's more a matter of providing advice, support, mentoring to other women that are earlier on in their careers.../

.../I think the networking in the last couple of years has done a couple of things. The first thing is because there are less senior women around the place, it does sometimes feel lonely and just having somebody else that says "Yeah, been there, done that, feel the same.".../

.../potentially networking. I don't think we can underestimate the importance of networking. Be it internal or external to your own organization. That influences people's opinion significantly.../

I do a lot of networking because business development is a key part of the work that I do now. So I'm quite active in terms of Women in Mining. I'm on the Women in Mining distribution list and I go to their networking events.../

.../ Absolutely. You've got to be known. We are a community, we're little communities and the only way somebody gets somewhere is if I know that person and I can do something.../

.../I actually think women are brilliant networkers but I think that once – sometimes when women get into the office they see that this is their role and they don't see it as being necessary to go out there and speak to people doing similar roles in similar organisations or different roles in similar organisations... men by nature are better

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networkers because they'll often go to the pub for a drink after work or they're invited to play a game of golf ... I'm often invited out for drinks at night with different people but actually I have to go home...there's a load of washing to do or ... sit and relax and have a chat with my partner or my son.../

However, there are respondents who found difficulties in networking due to other family commitments.

.../the balance for me is that, you know, how much do you do of that? Because often it's outside of work and I've still got a young family so its balancing all of that and understanding how to get the most out of it.../

There are also some who are not involved in networking since they are sitting on committees in corporate boards and other industry related activities.

.../I'm not really into the whole women's women sisterhood thing. One of my sisters is very much into it but I'm not really. I just figure I'm getting on with having my life and doing it ...I'm involved in, as I say, a couple of boards and some other industry initiatives and activities.../

.../networking groups, is valuable as it is where you can demonstrate who you are and that's different from being an inactive member that turns up at an event. Because you get to know people, you get to know whether they pull their weight, you get to know whether they lose their temper.../

4.4.1 Summary on Networking

Overall, respondents felt that networking is important and perceive it as a key element to their work. However, some respondents are not able to attend networking due to home commitments or serve as a committee member in corporate boards.

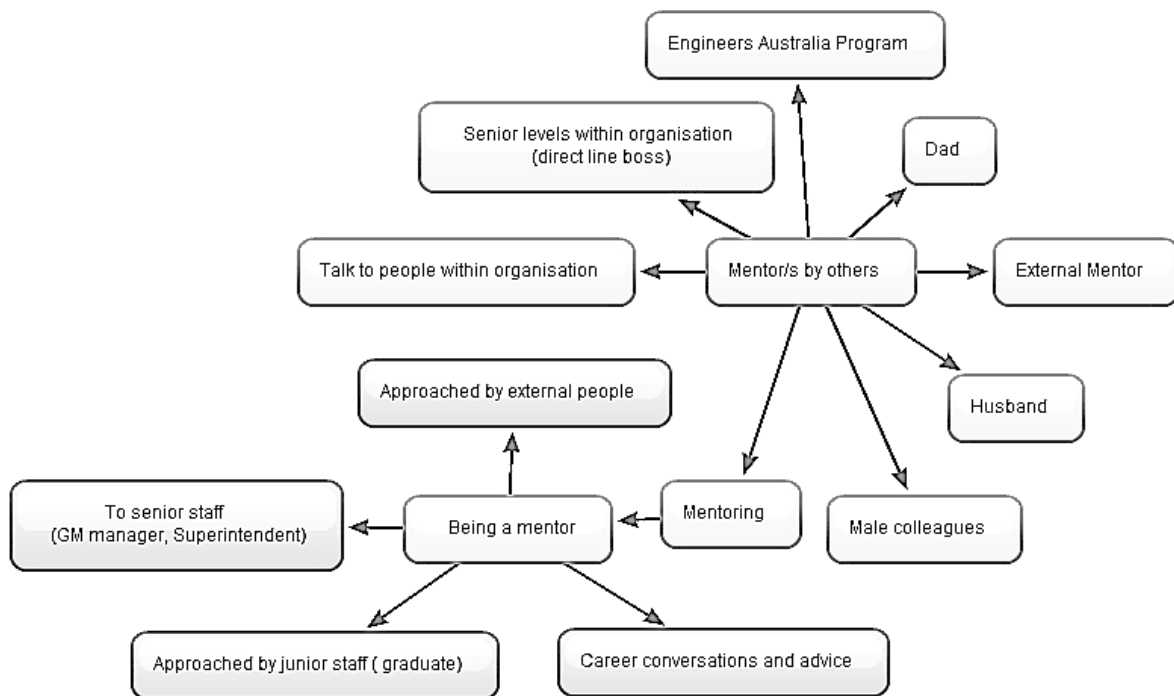
4.5 Mentoring

Respondents consider mentoring by others as critical to their career success as well as having the opportunity to mentor others, or serving as a role model to others.

It is also understood from the interviews that some respondents may have had several mentors over time. Most of them seem to prefer someone from the senior level, which are mostly male as there are few female senior women in the resources sector.

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Map 4: Mentoring



A sample of responses regarding mentors.

.../I've had a number of wonderful mentors...He just gave me opportunities to be involved in fantastic work.../

.../That really made me feel valued. XYZ was a great mentor.../

.../I do have some good mentors, some friends that I leverage from.../

.../So I have my husband to start with. Then I have two mentors. One with xxx is a male as well as in another section. He was appointed as my mentor doing a one week training and I really enjoyed working with him. So I said, "Why don't you continue being my mentor afterwards?" and he accepted. I think now the situation is turning. I'm almost mentoring him.../

Some respondents have the opportunity to mentor others.

.../Yes, I do actually. I do I mentor- I've got a graduate that I mentor. Certainly I've got some-three junior managers, ...in their early management career...all of three of those people so they get their technical boss-type relation with me and then I pull them aside and I have the person.../

.../I've got a number of people that I mentor and coach myself. So, you know I have constant feedback through that.../

4.5.1 Summary on Mentoring

All the respondents mentioned that it was important to have mentors during their careers to provide them with directions and give them the confidence to advance their careers. At senior levels, the respondents felt the need to mentor junior managers, graduates and provide them with regular feedback.

5. Summary and Conclusions

To summarise the findings of this study, three key themes have emerged; professional development, networking and mentoring. Based on the past research, mentoring is likely to lead to networking confirming some of the findings of this study. However, in this study, the three themes are interconnected with each other as they were mentioned on several occasions throughout the course of interviewing. As such, they may be considered as a conceptual cluster that comes together and serves to sustain top management women in the resource sector of WA.

It has also been observed that women leaders have the capability and capacity to be mentors to other staff members, be it senior/ junior or men/women and serve as a role model to the community. Gender does not seem to be an issue to whom they mentor in the resources sector.

One impediment to developing and sustaining careers was the acknowledgement that many women had out-of-work responsibilities that precluded participation in the after-hours activities in that interconnected cluster of development, networking and mentoring. To ensure that the valuable skills of their women employees are used optimally employers in the resources sector, should seek to provide opportunities for women to participate in professional development and networking during office hours.

Several limitations which arise within this study are due to its qualitative nature. The researcher recognises that ascertaining these and their effect is important for the integrity of the findings. Due to time constraints, the researcher was unable to conduct the study outside of WA. This limits the transferability of the findings beyond WA resource environments. The number of participants, while adequate for in-depth interviews, is also too small to conduct quantitative research to assess consistency of findings across methodologies. This is a limitation which is greatly influenced by the male dominated field of human resources and the shortage of women which this brings.

Within the current scope of the research however, we can conclude that women in the industry need to recognize that professional development, mentoring and networking are interrelated and these key elements are purposeful and important to sustain their career at the top management level.

References

Bagilhoe, B & White, K 2011, *Gender, power and management: A Cross-Cultural Analysis of Higher Education*, Palgrave Macmillan, London.

Teo, Lord & Nowak

- Barrera, S, Gardner, J & Horstman, B 2010, *Women's experiences in the Western Australian mining industry: a snapshot in 2010*, CME. Perth, WA: 10.
- Brookefield, S 2005, *The Power of Critical Theory: Liberating Adult Learning and Teaching*, San Francisco, CA: Jossey-Bass.
- Bryant, G 1984, *The working woman report: Succeeding in business in the 80s*, Simon and Schuster, New York.
- Business Council of Australia 2010, 'CEOs step up to take direct action on women in top jobs', Business Council of Australia, Melbourne, Vic, viewed 19 July 2013, <<http://www.industrysearch.com.au/CEOs-step-up-to-take-direct-action-on-women-in-top-jobs/f/5034>>.
- Cappelli, P 2006, *Where are the women in top management?*, viewed 3 October 2011, <<http://www.hrexecutive.com/HRE/story.jsp?storyId=8185469>>.
- Centre for Social Responsibility in Mining 2007a, *Unearthing new resources-attracting and retaining women in the Australian minerals industry*, CSRM.
- Centre for Social Responsibility in Mining 2007b, *What students want - career drivers, expectations and perceptions of mining engineering and minerals processing students*, CSRM.
- Chapman, JB & Luthans, F 1975, 'The female leadership dilemma', *Public Personnel Management*, pp. 173-179.
- Coleman, J 1988, 'Social capital in the creation of human capital', *American Journal of Sociology*, vol. 94, pp. 95-120.
- Colmar Brunton Social Research 2005, *Study into the retention of women in minerals and energy resources sector*, Brisbane, QLD, Queensland Resources Council, viewed 19 July 2013, <https://www.qrc.org.au/_dbase_upl/Retention%20of%20women_full.pdf>.
- Creswell, J 2007, *Qualitative Inquiry and Research Design: Choosing among Five Approaches*, 2nd edn, Thousand Oaks. CA: SAGE.
- Eagly, AH & Carli, LL 2007, *Through the labyrinth: The Truth About How Women Become Leaders*, Harvard Business School Press, Boston, Massachusetts.
- Eagly, AH 2007, Female leadership advantage and disadvantage: resolving the contradictions. *Psychological of Women Quarterly*, vol. 31, issue 1, pp. 1-12.
- Eggleton, M 2011, 'Three ways to tackle skill shortages: Mining Skill Shortage', viewed 4 October 2011, <<http://career-advice.careerone.com.au/job-hunting-strategy/employment-news/women-needed-to-combat-mining-skills-shortage/article.aspx>>.
- Engberg, K 1999, *It's Not The Glass Ceiling, It's The Sticky Floor: And Other Things Our Daughters Should Know About Marriage, Work and Motherhood*, Prometheus Books, Amherst, NY.
- Envick, BR & Langford, M 1998, 'Behaviours of entrepreneurs: a gender comparison', *Journal of Business and Entrepreneurship*, pp. 106-115.
- Flanders, ML 1994, *Breakthrough: The career woman's guide to shattering the glass ceiling*, Paul Chapman Publishing Ltd, London.
- Herrbach, O & Mignonac, K 2012, 'Perceived Gender Discrimination and Women's Subjective Career Success: The Moderating Role of Career Anchors', *Relations Industrielles/Industrial Relations*, vol. 67, no.1, pp. 25-50.
- Hewlett, SA 2007, *Off-ramps and On-ramps*, Harvard Business School Press, Boston, MA.
- IBIS World 2010, *Digging deep: The Australian mining division is the nation's most important export sector*, Melbourne.

Teo, Lord & Nowak

- Jogulu, U & Wood, G 2011, 'Women's managers' career progression: an Asian Pacific perspective', *Gender in Management: An international Journal*, vol. 26, no. 8, pp. 590-603.
- Judges, T, Cable, D, Boudreau, JW & Bretz, RD Jr 1995, 'An empirical investigation of the predictors of executive career success', *Personnel Psychology*, vol. 48, no. 3, pp. 485-519.
- Laabs, J 1993, 'The sticky floor beneath the glass ceiling', *Personnel Journal*, vol. 72, no.5, pp. 35-39.
- Lakoff, G & Johnson, M 1980, *Metaphors we live by*, University of Chicago Press, Chicago, IL.
- Mainiero, LA & Sullivan, SE 2005, 'Kaleidoscope careers: an alternative explanation for the "opt-out" revolution', *Academy of Management Executive*, vol. 19, no. 1, pp. 106-123.
- Morrissey, C 2011, *Women seeing themselves in resources*, Queensland Resources Centre, Brisbane, QLD, pp. 15.
- Morrissey, C 2012, *Leading practice principles for the attraction and retention of women in the minerals and energy sector*, Queensland Resources Council, Brisbane, Qld.
- Murray, G & Peetz, D 2010, *Keep your head high' adaptations and struggles of Australian Women Miners*, Griffith University, Brisbane, QLD.
- O'Neil, D, Hopkins, M & Bilimoria, D 2008, 'Women's careers at the start of the 21st century: patterns and paradoxes', *Journal of Business Ethics*, vol. 80, pp. 727-743.
- Peterson, SV & Runyan, AS 1993, *Global gender issues*, Westview Press, Boulder, Colorado, U.S.A..
- Ryan, MK & Haslam, A 2007, 'The glass cliff: Exploring the dynamics of the appointment of women to precarious leadership positions', *Academy of Management Review*, vol. 32, no. 2, pp. 549-572.
- Rubin, HJ, & Rubin, IS 2005, *Qualitative Interviewing*. 2nd edn, Thousand Oaks, CA: Sage.
- Sibert, SE, Kraimer, ML & Liden, RC 2001, 'A social capital theory of career success', *Academy of Management Journal*, vol. 44, no. 2, pp. 219-237.
- Smith, P, Caputi, P & Crittenden, N 2012, 'How are women's glass ceiling beliefs related to career success?', *Career Development International*, vol. 17, no. 5, pp. 458-474.
- US Department of Labor 1991, *A report on the glass ceiling initiative*, US Department of Labor, Washington DC.
- Vinnicombe, S 2011, 'Reflections on "locks and keys to the boardroom"', *Gender in Management: An international Journal*, vol. 26, no. 3, pp. 196-199.
- Weidenfeller, NK & Gibson, SK 2008, *Breaking through the glass wall: The experience of being a woman enterprise leader*, Academy of Human Resources Development Conference Proceedings USA.
- Wentling, RM 2003, 'The career development and aspirations of women in middle management – revisited', *Women in Management Review*, vol. 18, no. 6, pp. 311-324.
- Wynn, EJ 2001, *Women in the Mining Industry*, AusIMM Youth Congress, Brisbane.