

**Career Barriers of Female Accountants in the
State Public Sector**

Dr Lisa Cullen

School of Accounting Finance and Economics,
Edith Cowan University,
Perth, Western Australia
l.cullen@ecu.edu.au

Dr Theo Christopher

School of Accounting Finance and Economics,
Edith Cowan University,
Perth, Western Australia
t.christopher@ecu.edu.au

Acknowledgements

The authors would like to thank CPA Australia
for providing access to members for this research

Career Barriers of Female Accountants in the State Public Sector

ABSTRACT

This study examined and compared the extent of career barriers reported by female accountants working in the New South Wales (NSW) and Western Australian (WA) state public sectors. An analysis of responses to a mailed questionnaire led to the rejection of the null hypothesis of no differences in the extent of career barriers experienced by women working in the NSW and WA. Null hypotheses for each of the four themes of barriers, namely work-life balance, organisational, individual, and other external career barriers, were also rejected. Work-life balance barriers were higher in NSW and organisational barriers, individual barriers and other external barriers were higher in WA. Implications for management and suggestions for future research are provided.

Keywords: Career barriers, gender, public sector, work-life balance.

The purpose of this paper was to examine and compare the extent of career barriers reported by female accountants working in the state public sector in NSW to supplement an earlier study by Cullen and Christopher (2007) which included WA. The motivation for this study was twofold. Firstly, the present study extends knowledge of prevailing career barriers to another state of Australia. Secondly, less than 25% of women occupy senior accounting positions in the WA and NSW public sector and implies the public sector may be unwittingly creating gender bias in relation to career progression.

This study is important for a number of reasons. First it adds to the small body of research into career barriers in the state public sector. Second, insight into career barriers in the public sector may enable senior and middle management to implement strategies to enable more female accountants to progress into more senior positions. Third, the implementation of successful strategies may achieve a more desirable balance and encourage female accountants to apply for positions in the public sector. Finally, the results may also be of interest and benefit to management in the private sector.

The remainder of this paper is organised as follows; Firstly, the literature review provides an overview of studies into career barriers and enables research gap identification. Secondly, the research question and associated hypotheses are stated. Thirdly, a description of the research method is provided. Fourthly, the results are discussed under the four categories of barriers. Finally, the conclusion presents the findings, implications, limitations of the study and suggestions for areas for future research are identified.

LITERATURE REVIEW

Prior literature on career barriers within the fields of accounting and management can be categorised under four strands and this literature review is organised under those strands. These are: organisational barriers, work-life balance barriers, individual barriers, and other external barriers and they are discussed in that order. For the purpose of this paper, barriers related to career progression are termed career barriers.

Organisational barriers

Organisational barriers in this study are those barriers that arise due to organisational practices that the individual may have little or no control over, for example organisational structures, downsizing and compatibility with organisational culture. Prior research has given particular emphasis to the participation rate of women as managers and their progression through the '*glass ceiling*' to senior management (Bell, McLaughlin, & Sequeira, 2002; Morrison & Von Glimow, 1990; Still, 1985, 1992, 1994). The glass ceiling refers to the transparent barrier that stops women from rising above a certain level, or those artificial barriers based on attitudinal or organisational bias that prevent qualified individuals from advancing upwards in the organisation and reaching their full potential (US Department of Labor, 1991). One explanation for the glass ceiling is related to organisational culture. For example, in the United Kingdom (UK) concepts of leadership and team activity have been linked informally to gendered discourses of team sports. This re-affirms male homo-sociality that may be mirrored in formal performance appraisals that support male perceptions of the importance of socialising or networking to leadership and therefore progression (Anderson-Gough, Grey, & Robson, 2005). Access to informal networks can also be affected by the organisations culture.

Prior research has found access to informal networks to influence women's ability to progress to more senior levels (Cannings & Montmarquette, 1991; Hoddinott & Jarratt, 1998). A study of female directors of public companies reaffirmed the importance of networks for facilitating board appointments (Sheridan, 2001). At higher managerial levels, Portes (1998) highlight that social networks are important in allowing access to members of the group (i.e., men) and preventing access of non-members (i.e., women) to information and advancement opportunities.

Organisation structures have been described as being gender-biased, in that the accepted path to the top is constructed on male lifestyle patterns and values (Hoddinott & Jarratt, 1998; Still, 1994). An empirical study of accountants in Australia by Hoddinott and Jarratt (1998) found men had a more rapid career path than women, reaching higher levels sooner. Morley, Bellamy, Jackson and O'Neil (2000a) also describe the presence of a 'blokey culture and men excluding women from social activities' that may be negatively influencing the promotion opportunities of women in accounting. In the United States (US) a survey of accountants found that women cited that it was the 'organisations work environment' that impedes career progress rather than personal characteristics such as personality traits or behaviour patterns of women that may be contrary to the demands of a managerial role (Maupin, 1993). Men surveyed in the same study had a contrary view.

A lack of support for professional development has been found to be a career barrier. For example, a US study by Hooks and Cheramy (1994) found that many accounting firm partners admitted that they may not invest as much time in developing the career potential of female employees returning from maternity leave. This indicates that women may have less access to professional development opportunities when they return to work.

Organisational downsizing has also been found to be a career barrier for both men and women (Evans, Gunz, & Jallard, 1997; Marshall & Bonner, 2003). Bonner (1998) concluded that as a result of downsizing experiences, individuals in the organisation 'will not necessarily continue to move up the career ladder, and indeed they are increasingly unwilling to take on the responsibilities associated with managerial positions. These employees no longer foresee future promotions as feasible, or even highly desirable' (p.148). Downsizing was found to be the highest ranked career barrier in a study by Cullen and Christopher (2007), that examined perceived career barriers of male and female accountants in the WA state public sector. The mean scores for women were 4.667 compared to 4.125 for men.

Barriers related to work-life balance

Work-life balance barriers in this study relate to those barriers associated with attempting to maintain a balance between work and home life such as barriers arising from having children, career

interruptions and willingness to work long hours. Some prior studies argue that women want a more balanced lifestyle, combining work, family and leisure, while men are seen as being prepared to work in a less balanced way placing work as a first priority (Collins, 1993; Victoria Law Foundation, 1996; Gaetner, Hemmeter, & Pitman, 1987; Reed & Kratchman, 1990; Smith, 1994). Although work-life balance barriers can affect both men and women, maintaining this balance is more problematic for women as they tend to still hold the primary child-rearing and domestic responsibilities. Prior research has found that women with children are less likely to achieve senior roles (Cohn, 1991) and, in most instances, women in senior roles were unmarried and without children (Hoddinott & Jarratt, 1998; Moloney, 1994).

Career interruptions mainly associated with having children have been found to be a career barrier (Kirchmeyer, 2002; Lyness & Thompson, 1997; Parasuraman & Greenhaus, 1993). Male and female managers in a financial services organisation who took leaves of absence (due to family responsibilities, including maternity leave or illness) received fewer promotions and smaller salary increases (Judiesch & Lyness, 1999). To accommodate family commitments, employers have introduced more flexible work practices. Access to flexible working arrangements is viewed as a modern employment practice that aims to achieve the best possible match between the interests of an employee and employer. However, Frank and Lowe (2003) found that flexible working arrangements could detrimentally affect long-term career outcomes and, as a result of this gender-specific prioritising, may affect more women than men. Flexible work arrangements are available within the public sector, but can vary considerably as the availability depends on the supervisor's approval.

Barriers related to the individual

Barriers related to the individual are items the individual has the opportunity to influence. In a study of Australian accountants, Morely et al (2002) examined items perceived to be required for promotion. These included technical competence, qualifications and relevant work experience. Being deficient in these items was included in the present study as potential individual career barriers as the individual can influence them by engaging in professional development. Language or communication

problems were also included from written responses of respondents in this study that listed this as a barrier.

Other external barriers

Other external career barriers are described in this study as barriers arising from the actions of influential third parties within an organisation that the individual has little control over. For example, experiencing discrimination, harassment or bullying that could be directed at gender, ethnicity, age, religious beliefs, appearance or disability, have been found to be career barriers in prior research, (Bell et al., 2002). In addition, sexual harassment was a significant career barrier cited in interviews with female accountants in the US (Maupin, 1993), and gender discrimination was cited in an Australian study of females in the Banking industry, as the most frequent barrier to their advancement at all levels of management (Metz & Tharenou, 2001, p. 312).

This literature review has identified a considerable body of career barrier research. However, a gap exists in regard to research into career barriers in the state public service. A notable exception is the study by Cullen and Christopher (2007). The present study will contribute to the literature by examining career barriers of female accountants in the NSW public sector and compare them with the barriers evidenced in WA by Cullen and Christopher (2007). This leads to the research question and associated hypotheses in the following section.

RESEARCH QUESTIONS AND ASSOCIATED HYPOTHESES

The overall research question of the study stated in null hypothesis form is;

H₀1: There are no differences in the extent of career barriers experienced by women working in the NSW and WA state public sectors.

This is further divided into the four separate categories of barriers discussed in the previous section, namely, those related to work-life balance, organisational barriers, individual barriers and other external barriers. These four separate categories of barriers stated in null hypothesis form are;

H₀1(a): There are no differences in the extent of organisational career barriers experienced by women working in the NSW and WA state public sectors.

H₀1(b): There are no differences in the extent of work-life balance career barriers experienced by women working in the NSW and WA state public sectors.

H₀₁(c): There are no differences in the extent of individual career barriers experienced by women working in the NSW and WA state public sectors.

H₀₁(d): There are no differences in the extent of other external career barriers experienced by women working in the NSW and WA state public sectors.

RESEARCH METHOD

Research instrument

Information on the extent of career barriers to female accountants was obtained through a questionnaire mailed to CPA members who were qualified accountants working in the state public sector and who possessed a minimum of 3 years work experience. The present study is related to one aspect of this questionnaire on career barriers. The mailed questionnaire was the preferred choice to gather data for this research as it is recognised as the most common method of data collection with the advantage of geographic flexibility and distribution to a wider sample (Tharenou, Donohue, & Cooper, 2007). Respondents can also maintain their anonymity (Hair, Black, Babbins, Anderson, & Tatham, 2006; Zikmund, 2003).

Sample

Table 1 provides the sample response rate. At the time of the study, after excluding respondents no longer working in the public sector, the population was 1281 CPA members. Time and financial constraints prevented all Australian states from being included in the research. Consequently, WA was chosen as it was the state location of the researcher and NSW was chosen as it had the largest group of potential respondents in Australia working in the public sector. These state government departments operate in a similar way across Australia. Female respondents comprised 162 or 40% of the 404 useable responses. In WA there were 69 female respondents compared to 93 from NSW. Similar sample sizes have been used in studies by Hoddinott and Jarratt (1998) who had 115 respondents and Igarria and Baroudi (1995) who surveyed a sample of 127 Management Information System (MIS) employees.

[INSERT TABLE 1 HERE]

Variable measurement

Respondents considered 24 career barriers and a further two barriers were added from respondents written responses. The extent of a barrier was measured on a scale of zero (not a barrier at all) to six

(very significant barrier). Mean scores of barriers were calculated for respondents who indicated an item was a barrier. The following results focus on the items that were found to be most significant in each state.

RESULTS

Demographic data

The demographic profile of the respondents is summarised in Table 2. Female accountants in WA were slightly younger with the mean age being in the 26 to 30 year age bracket compared to 36 to 40 years in NSW. Females in both states were well qualified with 55% of women in WA and 47% in NSW possessing a CPA or CA qualification. A further 11% of women in WA and 19% in NSW also held a Masters qualification. On average, women in WA had worked for 10 years in the public sector compared to 12½ years for women in NSW. The primary job functions occupied by female accountants were financial accounting (24%), management accounting (19%), general management (11%), audit (11%) and financial management (10%). The average salary in NSW fell in the \$80K-\$89K salary bracket, compared to \$70K-\$79K in WA. Salaries over \$100,000 were earned by 33% of women in NSW compared to 11.6% in WA. Women in both states worked on average, 41 hours a week. This is slightly above the generally accepted 37.5 standard hours of work in government.

[INSERT TABLE 2 HERE]

Career barriers reported

Mean scores for the 26 career barriers grouped under the four categories are shown in Table 3. Results in Table 3 show that women in NSW and WA reported experiencing 24 of the 26 career barriers. Barriers related to language and disabilities were not reported by women in either state. Overall women working in the NSW state public sector reported a lower extent of career barriers than women in WA. A total of 14 of the 24 career barriers reported had higher mean scores in WA compared to NSW. The overall research question stated in null hypothesis H_01 was rejected as significant differences were found in the extent of career barriers experienced by women working in the NSW and WA state public sectors. The four separate null hypotheses related to the four categories of barriers are also rejected as state differences were found. Evidence to support the rejection of the null

hypotheses is provided in the following section that provides a comparison of the career barriers found for NSW and WA for each of the four categories of career barriers.

[INSERT TABLE 3 HERE]

Organisational barriers

The mean scores of four of the seven organisational barriers were higher in WA compared to NSW. The top three career barriers overall by mean score were organisational barriers. The barrier with the highest mean score in both states was organisational downsizing. The mean score for women in WA was 4.778 compared to 4.395 in NSW. Table 4 provides a summary of the top ten career barriers by mean score and shows that 18.5% of women scored this barrier higher than a three on the likert scale. Table 5 provides the results of a t-test comparing state location and individual career barriers. As shown in Table 5, downsizing was found to be statistically significant at the $p < 0.05$ level providing support that downsizing was a more significant barrier in WA compared to NSW.

[INSERT TABLE 4 AND 5 HERE]

A lack of access to promotion opportunities was ranked second by mean score by women in both states. The mean score in NSW was 3.881 compared to 3.673 in WA. Table 4 shows that 42% of women in WA and 59% in NSW scored this item higher than a three on the likert scale. Table 5 also shows that access to promotion opportunities was significant at the $p < 0.05$ level, providing support that this barrier was more significant in NSW compared to WA.

Ranked third by mean score was opportunity to act in a higher level position. The mean score in NSW was 3.771 and 3.569 in WA. A total of 55% of female respondents in NSW and 39% in WA scored this barrier higher than a three on the likert scale. T-test results in Table 5 show that opportunity to act in a higher level position was significant at the $p < 0.05$ level, providing support that this barrier was more significant in NSW compared to WA.

Compatibility with organisational culture is ranked 6th overall, but ranked 4th highest in WA. The mean score in WA was 3.558 and compared to 3.055 in NSW. As shown in Table 4, a total of 41% of the female respondents in WA and 31% of women in NSW scored this career barrier higher than a

three. The mean score for the barrier, compatibility with senior management, was 3.259 in WA and 3.205 in NSW and was ranked 8th overall.

A lack of support by the organisation for professional development had a mean score of 3.212 in WA compared to 3.27 in NSW and was ranked 7th overall. A total of 30% of women in WA and 39% of women in NSW reported that there was a lack of support by the organisation for professional development. Given that accounting is a professional occupation that requires ongoing professional development, and membership in a professional accounting body is often a requirement of public sector accounting positions, it is surprising and concerning that this was reported as a significant career barrier. Seventy one percent of female respondents in NSW and 64% in WA reported that they had received financial support and time release for professional development, however, approximately 18% of female participants in both WA and NSW reported that they were not supported with any professional development and never received any financial or non-financial support such as time release to attend professional development opportunities. In addition, 70% of respondents indicated that there was no process where professional developments needs were reviewed in the organisation. It appears that professional development needs are left to the individual.

As a result of the above findings that provide evidence of state differences with organisational barriers, the null hypothesis $H_01(a)$ was rejected. Important career barriers are also those that arise in an effort to balance the demands of work and personal life.

Work-life balance barriers

Barriers related to maintaining work-life balance continue to be important, however, female accountants in NSW reported higher means scores for four of the six career barriers related to work-life balance. These were career interruptions, having children, willingness to work long hours and family responsibilities. In WA higher mean scores were reported for family support and a lack of flexible working arrangements. Barriers related to career interruptions and having children are ranked 4th and 5th overall by mean score. The mean score for career interruptions in WA was 3.395 compared to 3.672 in NSW. Table 4 shows that 27.5% of women in WA compared to 38.7% of women in NSW scored career interruptions higher than a three on the likert scale. The mean score for the barrier

related to children was 3.528 in WA compared to 3.55 in NSW. Results of t-tests shown in Table 5 found willingness to work long hours to be significant at the ($p < 0.1$) level, providing support that the extent of this barrier was greater in NSW compared to WA. Career interruptions was also close to being significant at the $p < 0.1$ level with a significance result of $p = 0.111$ (2-tailed). This provides some support that barriers arising from career interruptions are more important in NSW than in WA. As a result of these findings, the null hypothesis $H_01(b)$ was rejected.

Individual career barriers

Table 3 shows that the mean scores for the three reported individual barriers were higher in WA compared to NSW. Academic qualifications was ranked 9th in WA compared to 22nd in NSW. The mean score in WA was 3.143 compared to 2.46 in NSW. The results of a t-test shown in Table 6 shows that the extent of individual career barriers was found to be significant at the $p < 0.1$ level, providing support that individual career barriers as a whole were more significant in WA compared to NSW. This may also be partially explained by years of experience as women in WA had less work experience than women in NSW. The null hypothesis $H_01(c)$ was rejected due to state differences.

[INSERT TABLE 6 HERE]

Other external career barriers

As shown in Table 3, women in WA and NSW reported eight of the nine other external barriers. Disability was not found to be a barrier in either state. Mean scores for gender, ethnicity, discrimination and sexual harassment were higher in WA and mean scores for bullying, age and religious beliefs were higher in NSW. The highest ranked items were gender followed by ethnicity and discrimination. The mean score for the barrier gender in WA was 3.029 compared to 2.898 in NSW. T-test results shown in Table 6 found the category of the extent of other career barriers to be significantly related to state at the $p < 0.05$ level. This provides support that other external barriers were more significant in WA than in NSW. In addition, as shown in Table 5, t-test results show that discrimination was close to being significant at the $p < 0.1$ level, where $p = 0.108$, providing some support that discrimination is more of a barrier in WA than in NSW. As a result of these findings, the null hypothesis $H_01(d)$ is rejected.

CONCLUSION

This study has examined the extent of career barriers reported by female accountants working in the NSW state public sector and compared results with earlier findings by Cullen and Christopher (2007) on WA. This study has contributed to the body of career barrier research by extending knowledge of career barriers in the state public sector and demonstrates that barriers are present and they are not uniform across states. Female accountants have reported career barriers related to all four categories examined, however, organisational barriers, individual barriers and other external barriers were more prevalent in WA while barriers related to work-life balance were more significant in NSW. The overall research question stated in the null hypothesis H_01 was rejected as significant differences were found in the extent of career barriers experienced by women working in the NSW and WA state public sectors. The four separate null hypotheses related to the four categories of barriers were also rejected as state differences were found.

Findings

It appears that progression through the glass ceiling still poses a significant problem in the WA and NSW public sectors. Female accountants occupy less than 25% of senior accounting positions in the WA and NSW state public sectors and the findings of this study demonstrate that this gender bias can be partially explained by the large number and extent of barriers reported by women in this study. Most notably are the organisational barriers related to downsizing, access to promotion opportunities, opportunities to act in higher level positions and compatibility with organisation culture and the work-life balance barriers related to career interruptions and having children. The findings of this study have a number of implications and these are discussed in the following section.

Implications

The implications of the research findings of this study are threefold. Firstly, in a time where the public sector is having trouble attracting and retaining professional accounting staff the career barriers identified in this study, are areas where time and resources should be directed into improving outcomes for female accountants. Despite female accountants being professional well-educated individuals that recognise the tenure of their positions and portability of their skills within government

organisations, downsizing was reported as the most significant career barrier in both NSW and WA, but was more significant in WA. Downsizing is likely to increase competition for positions and make it even more difficult for women to advance and may have future implications on staff turnover. The downsizing barrier was previously identified by Still (1992) and is still relevant today.

Secondly, the varying results of career barriers between the two states examined suggests that a one-size fits all approach to career management is not be a suitable strategy. Actions and strategies that senior and middle management can undertake to enable more female accountants to progress into more senior positions, to achieve a more desirable gender balance and encourage female accountants to apply for positions in the public sector will differ between states. On the whole, taking measures to manage downsizing, providing more opportunities for promotion and opportunities to act in higher level positions, improving negative perceptions of organisational culture by supporting professional development and managing staffs professional development needs supported with financial and time release are positive career strategies. Finally, the results may also be of interest and benefit to management in the private sector.

Limitations and areas for further research

The present study is subject to the limitations associated with questionnaire research that deals with opinions and values (Sekaran, 2003). These limitations are inherent in the utilisation of questionnaires. The study only relates to a single period and so does not consider changes over time. Further, the results of the study are only applicable to WA and NSW. These limitations suggest areas for further research. Questionnaires can be supplemented with interviews, a longitudinal study would provide data on changes or alternatively a replication of the same study could provide more recent data. Other states could be included and this would permit generalisability of the results.

Concluding comment

The accounting profession is highly competitive and the lure of higher salaries and rewards from private sector organisations can significantly impact the employment strategies of the public sector that have limited resources and limited opportunities to offer rewards. If organisations foster the career progression of their staff, and introduce strategies to improve the individuals' ability to maximise their potential, this may, in turn, positively influence the levels of staff turnover with less staff leaving for reasons relating to actual or perceived career barriers.

REFERENCES

- Anderson-Gough, F., Grey, C., & Robson, K. (2005). Helping them forget: the organizational embedding of gender relations in public audit firms. *Accounting, Organizations and Society*, 30(2), 469-490.
- Anonymous. (2004 (April), January 2006). Flexible work lures accountants into public sector *Financial Management* p5, (<http://www.proquest.com/> (accessed January 26, 2007).
- Bell, M. P., McLaughlin, M. E., & Sequeira, J. M. (2002). Discrimination, harassment, and the glass ceiling: Women executives as change agents. *Journal of Business Ethics*, 37(1), 65-76.
- Bonner, D. (1998). *Examining Schein's career anchors in the new workplace: How individual survivors of downsizing perceive their careers*. Unpublished PhD, George Washington University, Washington.
- Cannings, K., & Montmarquette, C. (1991). Managerial momentum: A simultaneous model of the career progress of male and female managers. *Industrial and Labor Relations Review*, 44(2), 212-228.
- Cohn, C. (1991). Chiefs or Indians: Women in Accountancy. *Australian Accountant*, 61(11), 20-30.
- Collins, K. M. (1993). Stress and departures from the public accounting profession: A study of gender differences. *Accounting Horizons*, 7(1), 29-38.
- Cullen, L. (2010). *The Influence of Career Perceptions on Career Progress of Accountants in the State Public Sector (Ph.D.)*. Edith Cowan University, Perth, Western Australia.
- Cullen, L., & Christopher, T. (2007). Perceived barriers to career progression in the Western Australian state public sector. *Journal of Contemporary Issues in Business and Government*, 13(2), 81-98.
- Evans, M. G., Gunz, H. P., & Jallard, R. M. (1997). Implications of organizational downsizing for managerial careers. *Canadian Journal of Administrative Sciences*, 14(4), 359-371.
- Foundation, V. L. (1996). *Facing the Future: Gender employment and best practice issues for law firms*. Retrieved from.
- Frank, K. E., & Lowe, D. J. (2003). An examination of alternative work arrangements in private accounting practice. *Accounting Horizons*, 17(2), 139-151.
- Gaetner, J., Hemmeter, P., & Pitman, M. (1987). Employee turnover in public accounting: A new perspective. *The CPA Journal*, 57(8), 30-37.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate Data Analysis* (6 ed.). Upper Saddle River, New Jersey: Pearson Education International.
- Hoddinott, M., & Jarratt, D. (1998). Gender imbalance in the workforce; An examination of the public accounting profession. *Australian Accounting Review*, 8(2), 59-67.
- Igbaria, M., & Baroudi, J. J. (1993). A short-form measure of career orientations: A psychometric evaluation. *Journal of Management Information Systems*, 10(2), 131-154.
- Judiesch, M. K., & Lyness, K. S. (1999). Left behind? The impact of leaves of absence on manager's career success. *Academy of Management Journal*, 42(6), 641-651.
- Kirchmeyer, C. (2002). Gender differences in managerial careers: Yesterday, today and tomorrow. *Journal of Business Ethics*, 37(1), 5-24.
- Lyness, K. S., & Thompson, D. E. (1997). Above the glass ceiling? A comparison of matched samples of female and male executives. *Journal of Applied Psychology*, 82(3), 359-375.

- Marshall, V., & Bonner, D. (2003). Career anchors and the effects of downsizing: implications for generations and cultures at work. A preliminary investigation. *Journal of European Industrial Training*, 27(6/7), 281-291.
- Maupin, R. J. (1993). How can women's lack of upward mobility in accounting organisations be explained? *Group and Organisation Management*, 18(2), 132-152.
- Metz, I., & Tharenou, P. (2001). Women's career advancement: The relative contribution of human and social capital. *Group and Organizational Management*, 26(3), 312-342.
- Moloney, D. (1994). Towards 2000: Women Executives in Australia. *Executive Research Services*, 12.
- Morley, C., Bellamy, S., Jackson, M., & O'Neil, M. (2000a). *Men and Women being accountants: A survey of Australian Accountants* (RMIT Working paper series 2000/10). Melbourne: RMIT.
- Morley, C., Bellamy, S., Jackson, M., & O'Neil, M. (2002). Attitudinal barriers to women's career progression in accounting. *Australian Accounting Review*, 12(1), 64-72.
- Morrison, A. M., & Von Glimow, M. (1990). Women and minorities in management. *American Psychologist*, 45(2), 200-208.
- Parasuraman, S., & Greenhaus, J. H. (1993). Personal portrait: The lifestyle of the women manager. In E. A. Fagenson (Ed.), *Women in Management* (pp. 186-211). Newberry Park CA: Sage.
- Portes, A. (1998). Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology*, 24, 1-24.
- Reed, & Kratchman. (1990). The effects of changing role requirements on accountants. *Advances in Public Interest Accounting*, 3, 107.
- Sekaran, U. (2003). *Research methods for business: A skill building approach* (4th ed.): John Wiley and Sons Inc.
- Sheridan, A. (2001). A view from the top: women on boards of public companies. *Corporate Governance*, 1(1), 8-14.
- Smith, S. (1994). Storming the Board: What's holding women back? *Management*, 41(5), 42-48.
- Still, L. V. (1985). *The status of women managers in Australian business; an exploratory study Paper No.2*. Nepean: School of Business, University of Western Sydney.
- Still, L. V. (1992). Breaking the glass ceiling: Another perspective. *Women in Management Review*, 7(5), 3-8.
- Still, L. V. (1994). Where to from here? Women in Management. *Women in Management Review*, 9(4), 3-10.
- Tharenou, P., Donohue, R., & Cooper, B. (2007). *Management research methods*. Sydney: Cambridge University Press.
- Zikmund, W. G. (2003). *Business research methods* (7 ed.). Mason, Ohio: South Western: Thomson Learning.
- U.S. Department of Labor. (1991) A report on the glass ceiling initiative. Washington, D.C.

Table 1: Sample response rate

	Western Australia			New South Wales			Combined Total		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Sample provided by CPA	291	181	472	597	340	937	888	521	1409
Excluded (pilot study)	(7)	(6)	(13)	(25)	(25)	(50)	(32)	(31)	(63)
Total Sent	284	175	459	572	315	887	856	490	1346
Not Public Sector			(28)			(37)			(65)
Total possible responses			431			850			1281
Questionnaires returned	114	73	187	131	101	232	245	174	419
Response rate			43%			27%			33%
Excluded from analysis									
< 28 hours a week	(1)	(3)	(4)	0	(6)	(6)	(1)	(9)	(10)
< 3 years work experience	0	(1)	(1)	0	(2)	(2)	0	(3)	(3)
Missing data	(2)	0	(2)	0	0	0	(2)	0	(2)
Useable response rate	111	69	180	131	93	224	180	162	404
			42%			26%			32%

Source: Cullen (2010)

Table 2: Demographic characteristics

	WA		NSW		Total	
	#	%	#	%	#	%
State	69	43	93	57	162	100
Age						
Under 25 years	2	2.9	2	2.15	4	2.47
26 - 30 years	15	21.74	15	16.13	30	18.52
31 - 35 years	11	15.94	16	17.2	27	16.67
36 - 40 years	11	15.94	18	19.35	29	17.9
41 - 45 years	13	18.84	11	11.83	24	14.81
46 - 50 years	10	14.49	13	13.98	23	14.2
51 - 55 years	70	10.14	13	13.98	20	12.35
56 - 60 years	0	0	4	4.3	4	2.47
> 61 years	0	0	1	1.08	1	0.62
Work Status						
Full-time (permanent)	65	94.20	87	93.55	152	93.83
Full-time (contract/fixed term)	3	4.35	6	6.45	9	5.56
Part-time (permanent)	1	1.45	0	0.00	1	0.62
Highest academic qualification						
Bachelor Degree	23	33.33	31	33.33	54	33.33
Masters	8	11.59	18	19.35	26	16.05
Professional - CPA	38	55.07	44	47.31	82	50.62
Years of work experience						
1-5 years	8	11.59	3	3.23	11	6.79
6-10 years	16	23.19	22	23.66	38	23.46
11-15 years	10	14.49	13	13.98	23	14.20
16-20 years	8	11.59	17	18.28	25	15.43
21-25 years	17	24.64	14	15.05	31	19.14
26 - 30 years	8	11.59	14	15.05	22	13.58
31 - 35 years	2	2.90	6	6.45	8	4.94
> 35 years	0	0.00	4	4.30	4	2.47
<i>Average years experience</i>	<i>16.3</i>		<i>18.65</i>		<i>17.65</i>	
Time in public sector						
0-5 years	23	33.33	24	25.81	47	29.01
6-15 years	29	42.03	32	34.41	61	37.65
16-20 years	9	13.04	24	25.81	33	20.37
21-30 years	8	11.60	11	11.82	19	11.73
> 30 years	0		2	2.15	2	1.24
Primary job function						
Financial accounting	14	20.29	25	26.88	39	24.07
Management accounting	13	18.84	18	19.35	31	19.14
General management	9	13.04	9	9.68	18	11.11
Audit/financial investigation	7	10.14	10	10.75	17	10.49
Financial management	6	8.7	10	10.75	16	9.88
<i>Average time in public sector</i>	<i>10.02 years</i>		<i>12.55 years</i>		<i>11.47 years</i>	
<i>Average salary</i>	<i>\$70K-\$79K</i>		<i>\$80K-\$89K</i>		<i>\$70K-\$79K</i>	

Source: Cullen (2010)

Table 3: Summary of mean scores for career barriers for WA and NSW

		WA (n=69)		NSW (n=93)		Total (n=162)	
		Mean	Rank	Mean	Rank	Mean	Rank
Barriers related to work life balance							
1	Career interruptions	3.395	6	3.672	4	3.566	4
2	Children	3.528	5	3.550	5	3.542	5
3	Willingness to work long hours	2.927	15	3.207	7	3.095	9
4	Family responsibilities	2.833	19	3.203	9	3.047	10
5	Family support	2.889	16	2.656	18	2.740	18
6	Lack flexible working arrangements	2.844	18	2.522	21	2.652	20
Barriers related to the organisation							
7	Downsizing	4.778	1	4.276	1	4.395	1
8	Access to promotion opportunities	3.673	2	3.881	2	3.799	2
9	Opportunities to act in higher levels	3.569	3	3.771	3	3.694	3
10	Compatibility with organisational culture	3.558	4	3.055	10	3.264	6
11	Lack of support by the organisation for professional development	3.212	8	3.270	6	3.246	7
12	Compatibility with senior management	3.259	7	3.205	8	3.227	8
13	Access to informal networks	3.000	12	2.946	11	2.967	11
Barriers related to the individual							
14	Relevant work experience	3.128	10	2.803	15	2.930	13
15	Technical competence	2.946	13	2.614	20	2.745	17
16	Academic qualifications	3.143	9	2.46	22	2.705	19
17	Language-communication	0	26	0	26	0	26
Barriers related to other external							
18	Gender	3.029	11	2.898	12	2.946	12
19	Ethnicity	2.929	14	2.813	14	2.867	14
20	Discrimination	2.867	17	2.789	16	2.816	15
21	Bullying	2.758	20	2.760	17	2.759	16
22	Age	2.563	22	2.615	19	2.595	21
23	Religious beliefs	2.053	24	2.870	13	2.500	22
24	Appearance	2.577	21	2.317	23	2.418	23
25	Sexual harassment	2.476	23	2.188	24	2.302	24
26	Disability	0	25	0	25	0	25

Source: Cullen (2010)

Table 4: Summary of significant career barriers by state in order of highest mean score

	WA (n=69)			NSW (n= 93)			Total (n= 162)		
	Not barrier	Low	High	Not barrier	Low	High	Not barrier	Low	High
		Score 1-3	Score 4-6		Score 1-3	Score 4-6		Score 1-3	Score 4-6
1. Downsizing	60	2	7	64	6	23	124	8	30
<i>% of group mean</i>			10.14%			24.73	76.54%	4.94%	18.52%
	4.778			4.276			4.395		
2. Access to promotion opportunities	14	26	29	9	29	55	23	55	84
<i>% of group mean</i>			42.03%			59.14%	14.20%	33.95%	51.85%
	3.673			3.881			3.799		
3. Opportunities to act in higher level positions	18	24	27	10	32	51	28	56	78
<i>% of group mean</i>			39.13%			54.84%	17.28%	34.57%	48.15%
	3.569			3.771			3.694		
4. Career interruptions	31	19	19	32	25	36	63	44	55
<i>% of group mean</i>			27.54%			38.71%	38.89%	27.16%	33.95%
	3.395			3.672			3.566		
5. Children	33	19	17	33	29	31	66	48	48
<i>% of group mean</i>			24.64%			33.33%	40.74%	29.63%	29.63%
	3.528			3.550			3.542		
6. Compatibility with organisational culture	17	24	28	20	44	29	37	68	57
<i>% of group mean</i>			40.53%			31.18%	22.84%	41.98%	35.19%
	3.558			3.055			3.264		
7. Lack of support by the organisation for professional development	17	31	21	19	37	37	36	68	58
<i>% of group mean</i>			30.43%			39.78%	22.22%	41.98%	35.80%
	3.212			3.270			3.246		
8. Compatibility with senior management	11	34	24	10	44	39	21	78	63
<i>% of group mean</i>			34.78%			41.94%	12.96%	48.15%	38.89%
	3.259			3.205			3.227		
9. Willingness to work long hours	14	37	18	11	45	37	25	82	55
<i>% of group mean</i>			26.09%			39.78%	15.43%	50.62%	33.95%
	2.927			3.207			3.095		
10. Family responsibilities	15	35	19	19	43	31	34	78	50
<i>% of group mean</i>			27.54%			33.33%	20.99%	48.15%	30.86%
	2.833			3.203			3.047		

Source: Cullen (2010)

Table 5: Independent samples t-test comparing state location and individual career barrier items

		t-test for Equality of Means				
		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Downsizing	Equal variances assumed	-2.280	160	.024	-.710	.311
	Equal variances not assumed	-2.357	159.166	.020*	-.710	.301
Access to promotion opportunities	Equal variances assumed	-1.969	160	.051	-.578	.293
	Equal variances not assumed	-1.964	145.250	.051*	-.578	.294
Opportunities to act in higher level positions	Equal variances assumed	-2.328	160	.021	-.728	.313
	Equal variances not assumed	-2.292	137.463	.023*	-.728	.318
Willingness to work long hours	Equal variances assumed	-1.778	160	.077	-.495	.278
	Equal variances not assumed	-1.781	147.709	.077+	-.495	.278
Career interruptions	Equal variances assumed	-1.584	160	.115	-.539	.340
	Equal variances not assumed	-1.601	152.121	.111	-.539	.337
Discrimination	Equal variances assumed	-1.599	160	.112	-.463	.290
	Equal variances not assumed	-1.615	151.660	.108+	-.463	.287

Note: * Significant at the 0.05 level;

+ Significant at 0.1 level

Table 6: Independent samples t-test comparing state location and career barrier categories

		t-test for Equality of Means				
		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Extent of all career barriers	Equal variances assumed	-1.577	160	.117	-.04245	.02691
	Equal variances not assumed	-1.551	137.021	.123	-.04245	.02736
Extent of work-life balance career barriers	Equal variances assumed	-.854	160	.394	-.10856	.12705
	Equal variances not assumed	-.839	135.768	.403	-.10856	.12943
Extent of organisational career barriers	Equal variances assumed	-1.520	160	.130	-.054580	.035899
	Equal variances not assumed	-1.528	149.248	.129	-.054580	.035721
Extent of other external career barriers	Equal variances assumed	2.168	160	.032	.38815	.17903
	Equal variances not assumed	2.157	143.784	.033*	.38815	.17997
Extent of individual career barriers	Equal variances assumed	1.623	160	.107	.10663	.06572
	Equal variances not assumed	1.633	149.970	.105+	.10663	.06530

Note: * Significant at the 0.05 level;

+ Significant at 0.1 level