

Queensland University of Technology

Brisbane Australia

This is the author's version of a work that was submitted/accepted for publication in the following source:

Diezmann, Carmel M. & Grieshaber, Susan J. (2010) The Australian story: catalysts and inhibitors in the achievement of new women professors. In Howard, Sarah (Ed.) *AARE 2010 Conference Proceedings*, AARE Inc, Melbourne, Australia, pp. 1-17.

This file was downloaded from: http://eprints.qut.edu.au/41176/

© Copyright 2010 Please consult the authors.

Notice: Changes introduced as a result of publishing processes such as copy-editing and formatting may not be reflected in this document. For a definitive version of this work, please refer to the published source:

The Australian Story: Catalysts and Inhibitors in the Achievement of New Women Professors

Carmel M. Diezmann & Susan J. Grieshaber

Queensland University of Technology

c.diezmann@qut.edu.au

s.grieshaber@gut.edu.au

Women are substantially under-represented in the professoriate in Australia with a ratio of one female professor to every three male professors. This gender imbalance has been an ongoing concern with various affirmative action programs implemented in universities but to limited effect. Hence, there is a need to investigate the catalysts for and inhibitors to women's ascent to the professoriate. This investigation focussed on women appointed to the professoriate between 2005, when a research quality assessment was first proposed, and 2008. Henceforth, these women are referred to as "New Women Professors". The catalysts and inhibitors in these women's careers were investigated through an electronic survey and focus group interviews. The survey was administered to new women professors (n=255) and new men professors (n=240) to enable a comparison of responses. However, only women participated in focus group discussions (n=21). An analysis of the survey and interview data revealed that the most critical catalysts for women's advancement to the professoriate were equal employment opportunities and mentoring. Equal opportunity initiatives provided women with access to traditionally male-dominated forums. Mentoring gave women an insider perspective on the complexity of academia and the politics of the academy. The key inhibitors to women's career advancement were negative discrimination, the culture of the boys' club, the tension between personal and professional life, and isolation. Negative discrimination and the boys' club are problematic because they favour men and marginalise women. The tension between personal and professional life is a particular concern for women who bear children and typically assume the major role in a family for child rearing. Isolation was a concern for both women and men with isolation appearing to increase after ascent to the professoriate. Knowledge of the significant catalysts and inhibitors provides a pragmatic way to orient universities towards redressing the gender balance in the professoriate.

Key Words: professors, women, Australian, academic, higher education

INTRODUCTION

In 2007-2008, the Australian Vice-Chancellors' Committee (AVCC), now Universities Australia, funded a study titled "The Achievements and Aspirations of New Women Professors" (Diezmann & Grieshaber, 2009) under the Action Plan for Women Employed in Australian Universities 2006-2010 (Australian Vice-Chancellors'

Committee, 2006). "New Women Professors" (NWP) refers to female academics who were promoted or appointed to Associate or full Professor in Australian universities between 2005 when a research quality assessment was proposed (i.e., Research Quality Framework) and 2008 when that scheme was replaced by *Excellence in Research for Australia (ERA)*. A key tenet of the study was that because women are substantially under-represented in the professoriate it is important (1) to create conditions supportive of women reaching the professoriate, and (2) to pre-empt conditions that might result in a decline in representation. A research quality assessment is likely to impact on women's representation because experience elsewhere indicates that universities vie for staff with high quality research records (e.g., Jamrozik, Weller, & Heller, 2004). Here, we report on a key question from that study, *What are the catalysts for and inhibitors to academic career success for New Women Professors?*

As a background to this question, we provide an overview of literature about the challenges to becoming a female professor and the professional factors, policies and programs that support academic women. An explanation of the research design and methods used in the study follows the section about background information. Results are reported in terms of catalysts for and inhibitors to career success for new women professors. The paper concludes with two notable points that make a difference to the career progression of new women professors.

BACKGROUND

Challenges to Becoming a Woman Professor

Worldwide, women are substantially under-represented in the professoriate (Boreham, Western, Baxter, Dever, & Laffan, 2008; Brouns & Addis, 2008; Gardiner, Tiggemann, Kearns, & Marshall, 2007; Perna, 2005; van Anders, 2004; White, 2004; Winchester et al., 2006). Despite an upward trend of representation in Australia in recent years, in 2006 only 23.1% of Level D and above were women (Queensland University of Technology [QUT], 2007). In 2008, this figure had increased slightly with women constituting 24.92% of academics at Level D and above (QUT, 2008). One of the reasons for the low representation of women is the challenges they face in reaching the professoriate. These challenges relate to the university culture, women's work roles and research expertise, family responsibilities and career progression and women's confidence, choice and aspirations.

The University Culture: Higher education has a traditionally masculine culture with women being overlooked or regarded as having less impact. White (2003) reports that in higher education in Australia "Male managers tend to promote those with a similar profile" (p. 50). Factors that might contribute to this culture include low percentages of women in senior academic positions (Burton, 1997; Carrington & Pratt, 2003), bureaucratic status quo (Thornton, 1996), gendered career structures (O'Connor, 2000) and informal male networks (Thomas & Davies, 2002). At its least favourable, the university culture can include discrimination towards women and their career progression. Ward (2003) argues that though women experience isolation and anxiety, they are often hesitant to admit to direct personal discrimination. Discrimination in contemporary universities is discussed further later in the paper. Thus, the university

culture can impact substantially on women's achievements by creating favourable conditions for the progression of men and unfavourable conditions for women.

Work Roles and Research Expertise: There are clear differences between male and female academic workloads. Female workloads are oriented towards teaching and associated tasks and pastoral care, whilst male workloads are oriented towards research and profile building (Bagilhole & White, 2003; Bazely et al., 1996; Boreham et al., 2008; Foster, 2001). The distinction between typical male and female academic work duties commences early in some academics' careers. Bazely et al. (1996) reported that male early career academics had lower teaching and administrative loads than females. Additionally, pastoral care is an important component of women academics' work (Chesterman, Ross-Smith, & Peters, 2003). Thus, work preferences of women might be a factor in their actual work tasks. Finally, male academics prioritise research more than females and apply for more grants than females (Soliman, 1998). However, the literature is divided on which gender has higher publication outputs with some arguing women are less productive than men (e.g., Boreham et al., 2008) and others arguing there is no difference (Sax, Hagedorn, Arredondo, & Dicrisi, 2002).

Family Responsibilities and Career Progression: Both men and women share family responsibilities, however these family duties impact on their careers differently (Bailyn, 2003). Generally, academic mothers have interrupted careers because of child bearing and they engage in a greater proportion of child rearing responsibilities (Pittman, Teng, Kerpelman, & Solheim, 1999; Tsugawa, 2003; van Anders, 2004; Ward & Wolf-Wendel, 2004). These family responsibilities reportedly disadvantage women in three ways. First, there is a large gap in gaining tenure between women and men who have families early with more men gaining tenure (Mason & Goulden, 2002) because the timing and requirements of tenure make it hard to raise families (Marcus, 2007). Second, due to family responsibilities, the employment options of many academic mothers can be limited, which impacts throughout their careers. Gaps in career paths for women due to child rearing can also mean less secure employment on return to work. A study by Boreham et al. (2008) in Australian universities found differences in the proportions of male and female staff with children in fulltime work, with 90% of males employed compared to 69% of females. Additionally, family responsibilities might compromise career mobility, and thus, lessen opportunities for promotion (Chesterman et al., 2003) or to teach overseas and to manage work in more than one country (Probert, Ewer, & Whiting, 1998). Third, women have limited time for building social capital and professional networks with colleagues as a result of balancing family and work commitments (Eagly & Carli, 2007). Thus, overall, females have less favourable employment opportunities in academia compared to males. Notably, however, support from life-partners has been shown to be vital for women balancing family and an academic career (O'Laughlin & Bischoff, 2005).

Women's Confidence, Choice and Aspirations: Ward's (2003) study into female entry into the professoriate in Australia found that the majority of respondents experienced anxiety and self-doubt about their professional roles. Many of the female professors entered the academy without a career plan, and promotion had been *ad hoc*, bolstered by prior successes. Several women reported a desire to conduct research and for others becoming a professor related to 'self-worth'. Doherty and Manfredi (2005) also

found that women enter academia with less specific career planning than male academics. They also noted that women have less confidence in the worth and competitiveness of their accomplishments. Similarly, Chesterman et al. (2003) reported that female Australian academics were more cautious than their male counterparts and undervalued their credentials. Personal choice is also a further factor to consider. For some women, not seeking a senior position is a lifestyle choice (Carrington & Pratt, 2003; Probert et al., 1998; Ward, 2000; White, 2001). Thus, there are personal factors as well as professional factors that influence the number of women in the professoriate.

Professional Factors, Policies and Programs that Support Academic Women

Women receive professional support to advance in their careers through professional factors and equal employment opportunity policies and programs.

Professional Factors: Successful academic women have mentors, network and conduct collaborative research (Soliman, 1998; Ward, 2003). Of particular note, support factors for academic women are mentoring, professional relationships, and job satisfaction. Mentoring is particularly important for entrants to the profession (Blackaby, Booth, & Frank, 2005). Mentees were more likely to stay in university, receive more grant income, have a higher level of promotion; and compared to non-mentored females, have a better perception of themselves as academics (Gardiner et al., 2007). Additionally, mentoring can help to build confidence, self-esteem, and inspire leadership (Gardiner et al., 2007).

Professional relationships play a crucial role in job satisfaction and the representation of women in the professoriate. Academic women are sustained by collegiality and support from senior colleagues as well as a critical mass of other women in power (Boreham et al., 2008; Chesterman et al., 2003; Soliman, 1998). Success for female academics in Australian universities was also influenced by access to the male power-base, networks and rules of the system (Thanacoody et al., 2006).

Job satisfaction of female academics is highly related to the institution and the opportunities that it affords. General variables include good working relationships, opportunity to teach, research specialisation of a department, publication success and opportunity to travel (Sloane & Ward, 2001; Ward & Sloane, 2000) and perceptions of the institution, perceptions of administration including support, and awareness of social matters and collegiality (Hagedorn, 1995). Bender and Heywood (2006) point out that women in academia receive less satisfaction from increased earnings. They argue that this might be attributed to women being more willing to trade-off income for job flexibility to attend to matters such as childcare or care of elderly parents.

Equal Employment Opportunity (EEO) Policies and Programs: Universities have endeavoured to counter gendered career opportunities by adopting Equal Employment Opportunity policies. Given that women make up an ever increasing proportion of academic staff and that many want to have children (Mason & Goulden, 2002), adoption of policies that are equitable are of the utmost importance. An investigation of the EEO policies of each of the 33 Australian universities in this study revealed that all had some EEO programs in place indicating that much has been done to promote

workplaces that consider women in academia, family, and flexibility of work conditions. These programs include, for example, the *Women in Research Program* and the *Women in Leadership Program* (QUT). While such initiatives are important in supporting equity in employment, reports indicate that many women academics continue to feel stress that is associated with pressures of work and family (Gerdes, 2003; Williams, 2001).

RESEARCH DESIGN AND METHODS

The research question, What are the catalysts for and inhibitors to academic career success for New Women Professors?, was investigated through a two phase mixed method study.

Phase 1 focussed on identifying the perceptions of new professors through a New Professors in Australian Universities survey. This survey was a modified version of a paper-based survey by Ward (2000) in which she investigated female professors in Australian universities and compiled a profile of this group including their characteristics, information on how they achieved their current position, and their aspirations. The modifications to items (1) enabled the survey to be administered electronically, and (2) included an invitation to women professors to participate in follow-up focus groups. An invitation to participate in Phase 1 of this study was extended to all new professors (female and male) appointed between 2005 and 2008 inclusive via emails from the Human Resources departments of 33 participating Australian universities. A total of 520 New Professors responded to the survey. There were 240 (48.5%) males and 255 (51.5%) females and 25 non-responses for gender. Further information about the survey cohort is available elsewhere (Diezmann & Grieshaber, in press).

Phase 2 sought a deeper understanding of the issues affecting the achievements of NWPs through a series of conversational interviews in focus groups. The stimulus questions in this interview related to the careers of the NWPs, for example, What hindrances have you faced in the academy that have impacted on your career? A total of 21 New Women Professors were focus group participants with group size varying from two to three members. Participants were drawn from 12 Australian universities across organisational units for Education, Health, Medicine, Science, Engineering, Business, Creative Industries and Sustainable Resources. The focus group interviews lasted approximately 1 hour and were conducted in face-to-face situations and via video/audio conferencing. Interviews were audio-taped and transcripts of interviews were analysed to determine key issues.

In all reporting, the participants in the survey and interviews are identified as follows. The first letter indicates whether they engaged in the Survey (S) or Interview (I). The second letter indicates if they were Female (F) or Male (M). A two or three digit code was also assigned to participants in the interviews (n=21) or surveys (n=520) respectively. Hence, the identifier S-F132 would indicate a survey respondent who was female and assigned the code of 132. Note only females were interviewed.

RESULTS

This section reports on the catalysts for and inhibitors to career success. The data are drawn primarily from NWPs' responses to the survey and discussion in focus groups. However, where relevant, survey data from male professors are included. Where these data have been used, they are indicated with an "M" (i.e., male) before the respondent number.

Catalysts

NWPs identified two strong catalysts for their success: equal employment opportunities (EEO) and mentoring.

Equal Employment Opportunities: Female survey respondents and one interviewee responded favourably to the opportunities that had been available to them through EEO policies. One respondent highlighted the change that had occurred in applying for positions as a consequence of EEO policies. She also identified the role of merit in academic appointments.

Before affirmative action policies for women in the 1980s, the real problem for me was actually getting to the shortlist and interview stage. Once affirmative actions informed HR processes, this became easier. . . . The more evidence is required for 'quality', the easier it has been for women in my situation to establish their achievements. (S-F486)

Women recognised that they received some opportunities due to gender with access to forums that would otherwise have been unavailable to them. However, they considered their role went beyond that of a 'token' female and that they could make a valuable contribution.

There have been occasions where I have received positive discrimination because I am a woman. For example, I believe there have been occasions when I have been invited to participate on a committee or attend a university event to improve the gender balance. I think the organisers selected me for my qualities (not just simply because I am a female), but there may have been males with similar qualities not given the opportunities that I have been given. (S-F345)

Despite the apparent success of EEO policies reported by some NWP, doubt exists as to their overall efficacy. Although women comprise 42% of full-time academic staff in Australian universities, women occupy only 25% of positions in Level D and above (QUT, 2008). One factor affecting the proportion of women in the professoriate might be the balance between affirmative action (i.e., positive discrimination) and negative discrimination. Affirmative action was reported to be far less prevalent than negative discrimination (Table 2). Additionally, nearly 60% of New Women Professors (n=261) reported negative discrimination during their careers (Survey Question 36a).

Table 2
Discrimination For and Against Women

	For	Against
Open (n=96)	26%	74%
Latent (n=134)	10%	90%

Despite attention to EEO policies, there can be a slippage between EEO policy and practice. In the past, there have been concerns that EEO statements were often little more than rhetoric (Lovell & Leicester, 1994), with little evidence of policy in practice. In science-related disciplines, the issue of gender representation is particularly problematic (Winchester et al., 2006) and needs close scrutiny. However, this is not to suggest that women should be employed or promoted because of their gender. As Kimura (1997) cautions, hiring women over better qualified men will only lead to downgrading women in academia and a deterioration of collegial relations. Employment and promotion should be based on merit with consideration given to equitable employment opportunities for female and male candidates.

Mentoring: Mentoring was identified as an important catalyst by participants in the survey and interviews. Survey participants (n=503) indicated that more staff (Question 40a, 57%) had been mentored at some point in their career than the converse (43%). Irrespective of whether they had a mentor or not, 89% of new professors (n=469) indicated that there was a need for a mentor (Question 40d), with similar response patterns from males and females. Those staff (n=317) who responded to having a mentor stated that various forms of mentoring were important in their career development (Question 40b). Fifty percent of staff rated mentoring as very important. The gender of the mentor varied (Question 40c). Across the population (n=297), 70% of mentors were males. There is a statistically significant difference between the gender mix of mentors for females and males. A comparison of the gender of mentees and mentors revealed that 47.1% of female respondents had female mentors compared with 52.9% of female respondents who had male mentors. In contrast, the males mostly had male mentors (89.3%) with a small proportion having female mentors (10.7%). While mentors have been found to be crucial to women's career progression, the gender of the mentor did not make a difference (Thanacoody et al., 2006).

The value of mentoring for career progression was acknowledged by respondents:

I think if I had had more role models or mentoring that would have been very helpful, there was a lack of that. In this job that I have now I have a mentor assigned to me for the first time in my career, and I found that quite helpful. (I-F14)

Staff mentored women for reasons other than simply to support the mentee's career. They also did it to hand on their knowledge, and to deal with a hostile culture. This

latter reason suggests that mentoring extends beyond the tasks of academia to being successful within the academic environment.

(So) they can deal better with the negativity and hostility that they may still encounter. (S-F278)

In the focus groups, 11 (52%) NWPs stated that they had been mentored during their career or they were currently being mentored. They also spoke of mentoring as being a part of their current role. These interview (female) participants also recognised that mentoring was important for helping with writing, applying for grants, building research teams, building networks and overseas collaboration. This is not surprising given that Gardiner et al. (2007) found that women who were mentored were more likely to remain in the academy, received more grant income, were promoted more, and had better perceptions of themselves as academics. Participants spoke particularly of the importance of mentorship from Deans, Heads of School (HOS), and doctoral supervisors.

When I applied for promotion the first time I missed out by 0.09 or something like that so I went to see her (female Dean) and she was enormously supportive and said well next time round we'll do this and this and I'll find things for you. I didn't have a very strong professional background and she said we'll find opportunities, put you on committees and things like that. (I-F08)

Interview participants who reported a lack of mentoring valued it to the extent that they were proactive in providing formal and informal mentoring to junior colleagues.

I do a lot of mentoring. We actively go and seek people to do joint research projects. So we are constantly going and asking people if they want to join our team or do they want to come in as an investigator on my ARC (Australian Research Council) because we always have an ECR (Early Career Researcher). I am actually pretty good at doing that because I didn't have that myself. I am keen to make sure that the women I work with at least get that opportunity [emphasis added]. (I-F18)

Mentoring female academics into the profession has been identified as significant in advancing female academic careers (Blackaby et al., 2005; Ward, 2003). For women advancing to the professoriate, professional relationships, networking (Gardiner et al., 2007) and senior female role models are also important (Foster, 2001).

Inhibitors

NWPs identified four inhibitors that act as barriers to the advancement of women academics. These inhibitors were negative discrimination, the boys' club, the tension between personal and professional life, and isolation.

Negative Discrimination: Survey responses about negative discrimination against women were overwhelming and included open and latent discrimination. Examples of open discrimination reported by respondents included sexism and bullying, being asked to leave a room due to being a woman, rude comments, dismissive behaviour, work duties assigned to females, leave for study, leadership roles, and references to

physical characteristics. In isolated instances, this discriminatory treatment was directed from female staff to other female staff; and from students to female staff.

I have in the past filed a complaint against a male colleague. The ensuing process was long-lived and unsatisfactory, which has now been acknowledged by the university and by outside consultants hired by the university. The discrimination continues today and the university are now trying to take action (hence the consultants). (S-F372)

A male academic colleague openly harassed me about receiving research grants and reducing my teaching responsibilities. EEO addressed the issue. (S-F243)

Latent discrimination included a culture in which there were different standards for males and females. Consistent with the literature, females reported doing work without extra pay, being expected to work harder, and gender-based differences in job appointments (see O'Connor, 2000; White, 2001).

When I was acting Head of Department I had to apply, address selection criteria and be interviewed. This is not the case for next year's HOD - they were simply appointed and no one else invited [emphasis added]. (S-F121)

Some staff reported experiencing both open and latent discrimination.

Failure to consult, being ignored and blatant sexist remarks being made at meetings etc. by male peers and chairs. (S-F047)

Discrimination against women suggests that the traditionally masculine culture of universities is still troubled by informal and powerful male networks (Thomas & Davies, 2002), gendered career structures (O'Connor, 2000) and male hegemony (White, 2001), perhaps because of the low proportion of women in senior academic positions.

However males were not solely responsible for discrimination against women.

I was overlooked for promotion and positions of authority [until I changed institutions] by an older woman who, I believe, felt threatened by me. My experience of discrimination has been from both sexes [I have also had great bosses of both sexes], but the most active and overt discrimination came from a female boss [emphasis added]. (S-F316)

The Culture of the Boys' Club: The culture of "the boys' club" was referred to by a total of 73 new professors (M=3, 1%; F=70, 27%) who were survey respondents or interview participants. This term was not introduced by the survey or the interviewers. In all cases the comments related to positive treatment or opportunities for men: "preferential treatment for the boys" (S-F388) which resulted in inequitable treatment of women. Males concurred with the existence of the boys' club, for example, "the boys' club [is definitely in operation at my university]" (S-M139).

Participants identified traditionally gendered conceptions of males as leaders with institutional authority. This authority is seen to reside in males simply due to their gender. In contrast to an authoritarian style of leadership, the consensus leadership style favoured by women can be seen as weak.

I also think that the management culture in Universities is still about headbutting, not about consensus, and so perhaps suits a naturally male style it still certainly scares me! I'd rather work towards consensus, but that can be seen as weak. (S-F059)

Members of the boys' club support each other through favourable positions for other men and through social networks. This support extends to decision-making practices related to leadership roles and work assignments.

I was being proposed as Head of School. The men decided, over some beers, that it would be better not to have me as Head of School. End of story. (S-F124)

The effect of the culture of the boys' club is varied and has individual and institutional impacts. These include the underutilisation of talented women and in some case their loss from particular universities.

I never really appreciated what the 'glass ceiling' is until I came here. My career was progressing really well and now I get here and I think it is very hard work — it is a gentleman's club, a lot of the decisions get made outside of the formal processes, what I call **gentleman's agreements**, maybe this is exaggerating but it feels like this to me. If I wanted to progress I would have to leave here. I mean my research will progress but if I want to progress in terms of my career I'd have to leave here. . . I feel like I don't have a voice [emphasis added]. (S-F003)

Responses indicated that the boys' club continues to impact on women once they reach positions of authority, with some males finding it "difficult to take direction from a female" (S-F059), others are "dismissive" of women (S-F218) and subject women to "campaigns of exclusion" (S-F413).

There were indicators that the impact of the boys' club was lessening, at least in some universities. However there were also indicators that boys' club legitimates practices that limit women's participation, achievement and career progression.

This (2008) was the first open round of promotion in our university for professor level E, and the end of a long era of the boys' club ruling the university, the new broom male VC has managed to dismantle some of this, which has changed expectations significantly. (S-F089)

The unsolicited and uninhibited responses about "the boys' club" signal that while it might now be valid to speak about such things, there is no reduction in impact. However, it is possible that respondents are referring to older males in universities in their comments about the boys' club because as Thanacoody et al. (2006) showed in a small comparative study of Australia and Mauritius most prejudice experienced by

women in Australian universities was instigated by older males. While this may be the case, it is an area for further investigation as there appears to be little other evidence that it is generation based.

The Tension between Personal and Professional Life: The clash between personal and professional lives was reported by NWPs in both the survey and interview responses. Consistent with traditional versions of the nuclear family and gendered forms of discrimination in universities (see Ward, 2003), two female survey respondents commented that their careers were spoken about as less important than their husbands' careers.

I heard that (in) one selection committee; the opinion was expressed that I wouldn't need a job as my husband was a professor. (S-F327)

The impact of gender on child rearing responsibilities was reported by numerous women who talked about the challenge of combining an academic career with having children. Women have interrupted careers due to child bearing and are responsible for a greater proportion of child rearing (van Anders, 2004; Ward & Wolf-Wendel, 2004). In this study, child rearing responsibilities impacted on women's time for research and scholarship, their career progression, and their ability to travel overseas.

There is an assumption that once you have children that your academic career will stall. Older male colleagues said to me that I will not want to do research anymore, since I will be preoccupied with my children. I felt I needed to prove them wrong and worked too hard to show them that I could still get ARC grants once I had my children. (S-F030)

The perception of incompatibility between being an academic and a mother was highlighted by comments about colleagues' support and supervisor's advice.

I had a couple of experiences of senior academics considering me not worth the investment of their time because of my intention to have and then the actuality of having a family and only being committed to working part-time on research. I can see their point of view - quite rational if everything depends on publishing and getting grants [emphasis added]. (S-F222)

Women expressed regret at the impact of their career on family life.

I now regret taking on this challenge (to be a strong researcher) as I feel that by proving my point I deprived myself and my children of valuable time together. (S-F30)

The difficulty of balancing family and work commitments is consistent with the literature (e.g., Eagly & Carli, 2007; Thanacoody et al., 2006). The interview participants provided some insight into how women attempted to balance work and families but also acknowledged that there was a heavy cost.

I would also put the slant on it too that for me it was about having the energy or the headspace to progress my career when the energy was with the children, the home and the teaching and everything else [emphasis added]. (I-F09)

Interview participants also commented that there was a need for domestic duties to be shared by their partners and for their partners to be supportive of their careers.

For my husband he didn't even bother to tell us what time he was coming home. He didn't think about who was feeding them (children), who is putting them to bed, that kind of stuff. There was an element of stress around having to sort out the children as well as having a career. I think that came from a person not being assertive enough about sharing responsibilities in the home. (I-F10)

Isolation: Over 50% of survey respondents reported feeling isolation prior to becoming a professor (57%, n=491), or since becoming a professor respectively (50%, n=490). However unlike the other inhibitors, these feelings of isolation were not confined to women and there were no statistically significant gender effects. Unfortunately, there is some indication that becoming a professor might have increased isolation. One interview participant explained that isolation was related to an academic culture which was quite secretive.

I think hindrances are - there is a lot of cloak and dagger, and I think a major one is intellectual insecurity. People keeping information secret and I think, well, I know a bit, you know a bit, work together and now we will know a lot. Very cloak and dagger. In our workplace people don't mention they are going for promotion, they don't mention they have a book contract or they have an article to be published. ... I am in charge of community engagement and I say, why are we worrying about that when we don't have a community ourselves? I perceive it is from the top down – don't share because somebody might steal it [emphasis added]. (I-F19)

Attention is needed to feelings of isolation because it is one factor influencing the low representation of women in the professoriate (Ward, 2003). In senior positions that are dominated by males, it is not uncommon for women academics to feel isolated and marginalised (Ward, 2003). Thus, the concern anticipated by female academics associated with more senior roles is real, with many of the female Australian academics expressing concern about the possibility of being isolated, ostracised or criticised (Chesterman et al., 2003).

CONCLUDING POINTS

Two notable points emerged from the results. First, although a range of catalysts for achievement in academia have been identified in the literature, the most critical catalysts for the achievement of NWPs were *equal employment opportunities* and *mentoring*. EEO policies were reported to be supportive of women and made a difference to promotion and membership of decision-making committees. However,

there is a need to ensure that EEO policies are aligned with practices. One respondent recognised this tension between policy and practice and cautioned other women to "tread very carefully" (S-F124) in their academic life. Such advice is an example of how informal mentoring can provide insight into the political culture of academia. Formal and informal mentoring is also important to provide an insider view to the complex work of academics. Thus, amid the other support mechanisms for women's career progression, universities should ensure that there are opportunities for female academics to be mentored and that equal opportunity policies are implemented effectively.

Second, of the range of inhibitors to academic progression there are four that NWPs perceived as the most problematic, namely negative discrimination, the culture of the boys' club, the tension between personal and professional life, and isolation. Negative discrimination is a major inhibitor of women's achievement. However, discrimination is not practised solely by males and nor solely by staff. A culture of sexism and bullying in universities needs to be addressed because it undermines the achievement of equity for women. The existence of "the boys' club" is an example of sexism in operation. It has significant negative effects on the achievement of women. For example, the assignment of heavy teaching workloads to women and lighter teaching loads to men can inhibit women's achievement and opportunities for promotion. To counteract the boys' club culture, decision-making practice needs to be transparent and based on merit. However, the efficacy of these practices will be undermined if senior leadership of a university support or participate in "the boys' club". The tension between personal and professional life was widely reported. Hence, policies about flexible work practices and career progression need to be embedded in practice. Additionally, women should have access to counselling about combining careers and family. The issue of isolation in universities could be counteracted by networking opportunities for female professors and support for building of local scholarly communities within the University. Each of these inhibitors is a long term issue. However after over 20 years of EEO policies (Winchester et al., 2006), the level of negative discrimination and comments about the boys' club was unexpected. This suggests that at least in some universities associated practices need to be reviewed and expectations heightened.

On balance, the four inhibitors of career progression for women (negative discrimination, the culture of the boys' club, the tension between personal and professional life, isolation) in this study outweigh the catalysts (equal employment opportunities, mentoring) for two reasons. First, participants identified more inhibitors than catalysts. In addition, the number of responses about inhibitors far exceeded responses related to catalysts. Second, it only takes one inhibitor to have a serious effect on a woman's career, irrespective of the catalysts. For example, EEO policies will have little effect if the practices associated with the culture of the boys' club go unchallenged and unchecked. A number of these inhibitors are interrelated and appear to be deeply embedded in university cultures. Hence, they are likely to be highly resistant to change. One way to address inhibitory issues is through female role models who have demonstrated that despite encountering these inhibitors they have been able to succeed and reach the professoriate. Importantly, to support the achievements of women there is a need to foster equal employment opportunities and mentoring activities, address negative discrimination and the culture of the boys' club.

Acknowledgements: Funding for this project was provided by Universities Australia as an initiative under the Universities Australia Action Plan for Women Employed in Australian Universities 2006-2010. The views expressed are those of the authors and should not be attributed to Universities Australia. Special thanks to the Vice Chancellors from participating 33 Australian universities and the respondents from these universities. We are also indebted to Lynn Wilss for managing this project and for her scholarly contributions to this paper and the report, and to Paul Shield for his insightful preparation and interpretation of the statistics.

REFERENCES

- Australian Vice-Chancellors' Committee (2006). The second AVCC Action Plan for women employed in Australian universities 2006-2010. Canberra: AVCC. Retrieved 28 January, 2009 from http://www.universitiesaustralia.edu.au/documents/policies_programs/women/AVCC -Action-Plan-for-Women-2006.pdf
- Bagihole, B., & White, K. (2003). Created in their image: An analysis of male cultural hegemony in Higher Education in Australian and the United Kingdom. In B. Groombridge, & V. Mackie (Eds.), Re-Searching research agendas: Women, research and publication in higher education: Proceedings of the Australian Technology Network -Women's Executive Development (ATN-WEXDEV) 2003 research conference. Perth, WA: Learning Support Network, Curtin University of Technology.
- Bailyn, L. (2003). Academic careers and gender equity: Lessons learned from MIT. *Gender, Work and Organisation, 10*(2), 137-153.
- Bazely, P., Kemp, L., Stevens, C., Asmar, C., Grbich, C., Marsh, H., & Bhathal, R. (1996). *Waiting in the wings: A study of early career academic researchers in Australia*. National Board of Employment, Education and Training. Commissioned Report No, 50. Canberra: Australian Government Publishing Service.
- Bender, K.A., & Heywood, J.S. (2006). Job satisfaction of the highly educated: The role of gender, academic tenure, and earnings. *Scottish Journal of Political Economy*, 53(2), 253-279.
- Blackaby, D., Booth, A.L., & Frank, J. (2005). Outside offers and the gender pay gap: Empirical evidence from the UK academic labour market. *The Economic Journal*, 115, F81-F107.
 - Boreham, P., Western, M., Baxter, J., Dever, M., & Laffan. W. (2008). *Gender differences in early post-PhD employment in Australian universities: The influence of the PhD experience on women's academic careers. Final Report.* University of Queensland: UQSRC. Retrieved 21 November, 2008 from http://arts.monash.edu.au/womens-studies/research/projects/report.pdf
- Brouns, M., & Addis, E. (2008). *Synthesis Report on the Workshop, Gender and Excellence in the Making*. Luxembourg: Office of Official Publications of the European Communities, pp. 11-32 (2004).

- Burton, C. (1997). *Gender equity in Australian university staffing*. Higher Education Division, DEETYA, EIP 97/18, Canberra, December.
- Carrington, K., & Pratt, A. (2003). How far have we come? Gender disparities in the Australian higher education system. Current Issues Brief No 31, 2002–03, Department of Parliamentary Library, Canberra, pp. 1–25.
- Chesterman, C., Ross-Smith, A., & Peters, M. (2003). Changing the landscape? Women in academic leadership in Australia. *McGill Journal of Education*, *38*(3), 421-436.
- Diezmann, C.M., & Grieshaber, S.J. (2009). *Understanding the achievements and aspirations of new women professors: A report to Universities Australia*. Brisbane: Faculty of Education, Queensland University of Technology.
- Diezmann, C.M., & Grieshaber. S.J. (In press). *Gender equity in the professoriate: A cohort study of new women professors in Australia.* Paper to be presented at HERDSA Conference, 6-9 July, Melbourne.
- Doherty, L., & Manfredi, S. (2005). *Improving women's representation in senior positions in the higher education sector, stage 1 findings*. Oxford: Centre for Diversity Policy Research, Oxford Brookes University. Eagly & Carli, 2007
- Eagly, A.H., & Carli, L. (2007). Women and the labyrinth of leadership. *Harvard Business Review, September*, 63-71.
- Foster, N. (2001). A case study of women academics' views on equal opportunities, career prospects and work and family conflicts in a UK university. *Career Development International*, *6*(1), 28-38.
- Gardiner, M., Tiggemann, M., Kearns, H., & Marshall, K. (2007). Show me the money! An empirical analysis of mentoring outcomes for women in academia. *Higher Education Research & Development*, 26(4), 425-442.
- Gerdes, E. (2003). The price of success: Senior academic women's stress and life choices. *Advancing Women in Leadership*, *13*, Spring.
- Hagedorn, L.S. (1995). Wage equity and female faculty job satisfaction: The role of wage differentials in a job satisfaction causal model. Paper presented at the *Annual Meeting of the Association for the Study of Higher Education*, November 2-5.Orlando, Florida. Retrieved 28 January, 2009 from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage __01/0000019b/80/14/5a/e2.pdf
- Jamrozik, K., Weller, D.P., & Heller, R.F. (2004). Research assessment: There must be an easier way. *The Medical Journal of Australia, 180*(11), 553-554.
- Kimura, D. (1997). Affirmative action policies are demeaning to women in academia. *Canadian Psychology*, *38*(4), 238-243.
- Lovell, T., & Leicester, M. (1994). Equal opportunities and university practice; race, gender and disability: a comparative perspective. *Journal of Further and Higher Education*, 18(2), 43-51.
- Marcus, J. (2007). Helping academics have families and tenure too. *Change*, 39(2), 27-32.

- Mason, M.A., & Goulden, M. (2002). Do Babies Matter: The Effect of Family Formation on the Lifelong Careers of Academic Men and Women. *Academe*, *88*(6), 21-27.
- O'Connor, O. (2000). Resistance in Academia. Paper presented to *NAWE International Conference on Women in Higher Education*, New Orleans.
- O'Laughlin, E., & Bischoff, L. G. (2005). Balancing parenthood and academia: Work/family stress as influenced by gender and tenure status. *Journal of Family Issues*, 26(1), 79-106.
- Perna, L.W. (2005). Sex differences in faculty tenure and promotion: the Contribution of family ties. *Research in Higher Education*, *46*(3), 277-307.
- Pittman, J.F., Teng, W., Kerpelman, J.L., & Solheim, C.A. (1999). Satisfaction with performance of housework. *Journal of Family Issues*, *20*(6), 746-770.
- Probert, B., Ewer, P., & Whiting. K. (1998). *Gender pay equity in Australian higher education*. Melbourne: National Tertiary Education Union.
- Queensland University of Technology. (2007). Selected inter-institutional gender equity statistics: Based on parameters from the AVCC Action Plans for Women in Australian Universities 1999-2003 and 2006-2010. Retrieved 28 January, 2009 from http://www.equity.qut.edu.au/ staff/reports/
- Queensland University of Technology. (2008). Selected inter-institutional gender equity statistics: Based on parameters from the UA Action Plan for Women in Australian Universities 2006-2010. Australia-wide Statistics, 2008. Retrieved 6 May, 2010 from http://www.equity.qut.edu.au/staff/reports/index.jsp
- Sax, L.J., Hagedorn, L.S., Arredondo, M., & Dicrisi, F.A. (2002). Faculty research productivity: Exploring the role of gender and family-related factors. *Research in Higher Education*, *43*, 423-446.
- Sloane, P.J., & Ward, M.E. (2001). Cohort effects and job satisfaction of academics. *Applied Economics Letters*, *8*, 787–91.
- Soliman, I. (1998). Many routes one destination: Profiles of successful academic women. University of New England.
- Thanacoody, P., Bartram, T., Barker, M., & Jacobs, K. (2006). Career progression among female academics: A comparative study of Australia and Mauritius. *Women in Management Review*, 21(7), 536-553.
- Thomas, R., & Davies, A. (2002). Gender and new public management: Reconstituting academic subjectivities. *Gender, Work & Organization, 9*(4), 372-397.
- Thornton, M. (1996). Dissonance and distrust: Women in the legal profession. Melbourne: Oxford University Press.
- Tsugawa, A. (2003). *Japan's First Attempt at Promoting Women in Science*, Project Members of the Sustainable Development Department, Mitsubishi Research Institute, Inc., Japan.
- van Anders, S. (2004). Why the academic pipeline leaks: Fewer men than women perceive barriers to becoming professors. *Sex Roles*, *51*(9/10), 511-521.
- Ward, B. (2000). The female professor: a rare Australian species the who and how. Paper presented to the 2nd European Conference on Gender Equality in Higher Education, Zurich.

- Ward, B. (2003). *The female professor: A rare Australian species the who and how.* Thesis submitted for fulfilment of PhD degree, Murdoch University.
- Ward, M.E., & Sloane, P.J. (2000). Non-pecuniary advantages vs. Pecuniary disadvantages: job satisfaction among male and female academics in Scottish universities. *Scottish Journal of Political Economy*, *47*, 273–303.
- Ward, K., & Wolf-Wendel, L.E. (2004). Academic motherhood: Managing complex roles in research universities. *Review of Higher Education*, *27*(2), 233-257.
- White, K. (2001). Women in the professoriate in Australia. *International Journal of Organisational Behaviour*, 3(2), 64-76.
- White, K. (2003). Women and leadership in higher education in Australia. *Tertiary Education and Management*, *9*(1), 45-60.
- White, K. (2004). The leaking pipeline: Women postgraduate and early career researchers in Australia. *Tertiary Education and Management 10*, 227-241.
- Williams, W.M. (2001). Women in academe, and the men who derail them. *Chronicle of Higher Education*, p. B20.
- Winchester, H., Lorenzo, S., Browning, L., & Chesterman, C. (2006). Academic women's promotions in Australian universities. *Employee Relations*, *28*(6), 505-522.