# PERCEIVED GENDER DISCRIMINATION
# AMONG ACADEMIC WOMEN:
# PSYCHOLOGICAL EFFECTS AND COPING

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# ABSTRACT

Previous research has shown that women academics often suffer from gender discrimination in their workplace. The effects that gender discrimination has on the women who experience it have rarely been studied, the research that has been carried out, is by clinicians involved with counselling women suffering from discrimination. The present study examines academic women's perceptions and experiences of gender discrimination, and the effects that gender discrimination has on women's well-being at work. The coping strategies that academic women use to deal with discrimination are also studied. The subjects were forty-seven randomly chosen female academics from Massey University. The study was conducted in two phases. Phase one consisted of a semi-structured interview. Phase two consisted of the administration of the following scales. The Work Locus of Control Scale (Spector, 1988), Warr's Well-Being and Mental Health Measures (Warr, 1990), Self-Efficacy (Wells-Parker, Miller and Topping, 1990), the Dimensions of Stress Scale (Vitaliano, Russo, Weber and Celum, 1993) and the Cybernetic Coping Scale (Edwards and Baglioni, 1993).

The majority (71%) of women in the university had experienced gender discrimination against them at some stage of their careers. The gender discrimination was of two types, individual and structural. The majority of women had experienced individual discrimination against them and structural discrimination in their favour. Academic women did not feel included in the male dominated informal networks of the university, although they were involved in their own female dominated networks. The perceived discrimination had an effect on the women personally and emotionally, on their work life, their relationships and their future aspirations. The psychometric scale data showed that the women who were familiar with discrimination were anxious and had high negative carry over from work to other situations. Women with high aspiration and/or an external locus of control had experienced the most discrimination. Women with an external locus of control were anxious and depressed. Depression and anxiety were associated with low aspiration, low competence and low self-efficacy. The majority of women coped with discrimination by trying to change the situation. There were relationships between the coping strategies, the use of devaluation as a coping strategy was associated with the use of accommodation, symptom reduction and avoidance. The use of coping strategies was also related to mental health. Women with low competence, low aspiration and who were depressed used avoidance, and women who were anxious had low competence, low aspiration and were depressed used devaluation. This study shows that academic women are experiencing gender discrimination and that although this has an impact on their well-being at work, they do cope with discrimination.

# ACKNOWLEDGMENTS

# TABLE OF CONTENTS

# LIST OF TABLES

# WOMEN'S POSITION IN THE WORKPLACE

Many people think (or hope) that gender discrimination is now a thing of the past, but there is still a great deal of statistical and anecdotal evidence that shows that gender discrimination is still common today. In fact Hamilton, Alagna, King and Lloyd (1987) suggest that gender discrimination is not disappearing, instead it is changing, becoming less blatant and more subtle and covert. Although women are participating in the paid workforce in increasing numbers (an increase of two percent between the 1986 and the 1991 New Zealand censuses) women are still under-represented in higher positions. In New Zealand women are more likely to be employees than employers or self-employed, women in many industries and professions are still concentrated in the lower grades, and they are over-represented in lower status occupations. For example in the banking industry women make up seventy-six percent of the staff in the lowest three grades and although over ninety percent of workers in the medicine, dentistry and veterinary fields are women, only thirty-three percent of doctors, dentists and veterinarians are women (New Zealand Ministry of Women's Affairs 1992). A recent survey that looked at staff in research and development ( New Zealand Ministry of Research, Science and Technology cited in "Women in Minority" 1994) found a very small proportion of women in senior positions, women made up only fifteen percent of researchers, although fifty percent of the support staff, and thirty-two percent of technicians were women.

The status of women in the workplace is also reflected in monetary terms, in 1991 women's average weekly pay was only seventy-eight percent of what men earned. (New Zealand Ministry of Women's Affairs, 1992). The financial situation of New Zealand women may have been further impaired by the actions of the National Government. One of the first actions the government took in 1990 was to repeal the Employment Equity Act and introduce the Employment Contracts Act. Since that time the gap between the average earnings of men and women has stopped closing, in fact in February 1993 there was a slight widening of the gender pay gap (Court, 1994).

These are examples of structural discrimination against women, on a more personal level it is difficult to find exact statistics on gender discrimination cases in the workplace. Basset 1985 (cited in Lips and Colwill, 1988) found that eighty-eight percent of the professional women in their Canadian study had experienced sex discrimination. In New Zealand 555 formal complaints of sex discrimination were lodged with the Human Rights Commission between 1986 and 1991 (New Zealand Ministry of Women's Affairs, 1992). The Human Rights Commission has a fairly broad definition of sex discrimination, which includes sexual harassment and pregnancy related discrimination. Carmen, Russo and Miller (1981) estimate that in general seven out of ten women experience sexual harassment on the job.

One of the problems in discovering gender discrimination is that it is often difficult for women to recognise when they are being discriminated against. Relative deprivation

theory proposes that people make comparisons between themselves and similar others, and so often do not see the injustice. For example Crosby (1982, cited in Clayton and Crosby, 1992) found that women were concerned about the position of working women in general, but that they did not feel the same way about their own jobs. She also found that women that labelled themselves feminists were more likely to compare themselves with men than other women. A study by Luck (1991) demonstrates this idea of relative deprivation. When she asked library workers about Equal Employment Opportunity (EEO) policies they said they did not need them because there was no competition with men in the library. What they failed to see was the gender segregation that was present in the library, there were no men at the lower levels in which these women worked.

Studies on relative deprivation have also been carried out in a laboratory setting. Bylsma and Major (1994) found that women's perceptions (but not men's) about their performance were influenced by wage comparison information, but that perceptions were influenced more by what their own group got paid. They conclude that these 'social comparison processes' mean that women do not see the injustice of lower wages. This does however depend on women's identification with the comparison groups.

The situation of women in society must be taken into consideration when looking at the mental health of women. According to Carmen, Russo and Miller (1981) "women's sense of identity is developed within a framework that defines women as a devalued group" (p. 1321). Many researchers believe that these factors contribute to women's mental health problems. In fact Hamilton, Alagna, King and Lloyd (1987) suggest that the larger numbers of women who suffer from depression compared to men may be a result of gender discrimination. They also say that researchers should no longer ignore the consequences of women's subordinate role and the devaluation of women on the mental health of women.

Sex discrimination, sexism and gender (based) discrimination are usually used inter-changeably, and some researchers also use other expressions, for example, gender based abuse (Hamilton, Alagna King and Lloyd, 1987). There are subtle distinctions between these terms. Sexism is defined by Websters dictionary (1993) as exploitation and domi-nation of one sex by the other. Lott (1985) suggests that there are three aspects to sexism, affect, cognition, and behaviour. Affect is demonstrated by negative attitudes (which are prejudice), cognition is responsible for the beliefs that go with the attitudes (stereotypes) and behaviour is the acts of exclusion ( which are discrimination).

Discrimination is defined by Websters dictionary (1993) as prejudicial treatment of a person or minority group based on sex. Atkins (1985) claims that using the term 'sex' discrimination narrows the area of focus to one of biological differences. Gender based discrimination however includes the social construction of gender and the roles that are stereotypically associated with that, gender based discrimination is also interpreted as including sexual orientation.

Discrimination covers an enormous range of behaviours, there are many types of discrimination. A useful distinction is between indirect and direct discrimination. Direct discrimination according to Wilson (1986) can be intended or unintended. Direct intended discrimination is the easiest to detect and eliminate. This is when action is taken based on discriminatory beliefs which are acknowledged. Direct unintended discrimination is when a person does not realise that the action is based on a discriminatory belief. Indirect discrimination is when what appear to be neutral beliefs are in fact discriminating, for example making mobility a criteria for promotion. These forms of discrimination work together and to achieve equality all of them need to be removed.

Discrimination can be demonstrated in a huge variety of ways, it can cover differential hiring, promotion or pay, providing men with more opportunities for training and making mobility a requirement for promotion. Cockburn (1991) says that it is important to consider not just equality of opportunities for women but equality of outcomes. She says for example that "Until the symbolic man-as-citizen has his mind on the cooker, his eye on a toddler and a hand on grandad's wheelchair, no constitution will guarantee social equality" (p. 97). According to Hamilton, Alagna, King and Lloyd (1987) discrimination is used, to remind women of their ascribed social roles, and as a threat as to the consequences of deviation from those roles.

## WOMEN'S POSITION IN ACADEMIA

Equal Employment Opportunity (EEO) policies and progress in the methods of handling cases of sex discrimination have encouraged progress towards gender equality in universities. In New Zealand the Universities Amendment Act of 1988 requires the council of each university to develop and publish a yearly EEO programme and to ensure compliance. Despite this, progress is still slow, women's position in academia reflects that of women in the general workplace; women play a subordinate role. One woman in a New Zealand study by Wilson (1986) says that "the only time women take over the university is in the evenings when the cleaners take over" (p. 34). Smith (1992) claims that there is little evidence that shows the EEO programmes have improved the position of women in universities in New Zealand. She says that progress will not be made until women are represented in leadership positions and have some power to make changes. There are very few women administrators in New Zealand universities, and there are no women vice-chancellors (although Victoria University has a woman chancellor). The result of this is that there are not enough senior women to implement changes to the system.

Women remain in the lower positions of the organisational hierarchy, for example in untenured and short term or part time positions. In 1989 in New Zealand only four and half percent of professors were women (Vasil, 1993). At Victoria University in 1990 (Hughes and Ahern, 1993) only eight percent of professors were women. The numbers of women academics in polytechnics and universities actually decreased slightly between 1990 and 1992 (Court, 1994).

The position of academic women in New Zealand is similar to the status of academic women internationally. For example in Australia only three percent of university professors are female (Cass, Dawson, Temple, Wills, and Winkler, 1983). In New South Wales and South Australia the removal of compulsory retirement at the age of sixty-five has created a situation which protects the older men at the top and does not allow new opportunities for younger women (Maslen, 1994). In the United Kingdom five percent of professors are women. This is even lower, however at the older universities of Oxford and Cambridge where only three percent of professors are women (Wolf, 1993). Women academics at Oxford tried to increase the number of readerships available, because they thought that women would have more chance of receiving these than they do of receiving a professorship. Placing more women into readerships is however removing them from tenure track positions, there is little chance of promotion from a readership (Wolf, 1993). Wills (1983) mentions the tendency for women to end up in lower academic positions where they have few opportunities for progress.

Although women make up more than fifty percent of undergraduates in the United States and receive a third of doctorates, they are under-represented in tenured university positions, only twelve percent of these are held by women. In the field of psychology between 1960 and 1969, twenty percent of the doctoral degrees were earned by women, and this rose to thirty-two percent between 1970 and 1979. But in 1987 only fourteen percent of full psychology professors were women (Teltsch, 1987 cited in Sekaran and Kassner, 1992). The number of women academics is more heavily skewed in the top institutions (measured by expenditure) than in the less wealthy (National Research Council [U.S], 1979).

Not only are women underrepresented at certain levels in universities but they are also unevenly distributed between disciplines. The first women academic staff in New Zealand in 1911 taught in home science at Otago (Smith, 1992). In the United Kingdom men still make up the greatest proportion of academic staff in science and technology. New Zealand universities also have faculties or departments that have larger numbers of women than others. Ponter, Loveridge and O'Neill (1989) found that in 1988 Massey University had women teaching in only thirty-eight of it's fifty-four departments. Wilson (1986) found that the largest group of women academics, in New Zealand, are employed in the arts and social sciences. At Victoria University in 1990 (Hughes and Ahern, 1993) forty-seven percent of the academic staff in the faculty of languages and

literature were women, but only eleven percent of the academics in the science faculty were women. Departments with high numbers of women staff can be made to feel sidelined and not as important as other more male dominated departments for example, Bunkle (in Hughes and Ahern, 1993, p. 173) claimed that the women's studies department was "marginalised within the structure of the university". Wolf (1993) claims that women's studies departments in both the United Kingdom and the United States are constantly underfunded and often closed down. Some women academics who become involved in feminist issues risk their chances of promotion or tenure (Robbins and Kahn, 1985). Wilson (1986) found that in New Zealand many women had a problem with credibility when they did research in women's studies areas.

Some researchers feel that gender discrimination is "a natural consequence of the values of academe" (Fuehrer and Schilling, 1985, p. 40). Also present in academia is a 'sexual division of labour' (Stanley, 1990) where women perform teaching, secretarial, catering and other support positions. Wilson (1986) says that many people don't realise that discriminatory practices are often the result of the way that institutions are organised.

The underrepresentation of women in academia could result in a self-perpetuating problem, as women students are not encouraged to become academics. Younger women are increasingly rejecting traditional roles, but the proportion of academic staff is not representative of the numbers of female students. This means that female students have few role models or mentors to encourage them into an academic career. Sekaran and Kassner (1992) suggest that the lack of senior women academics affects the female students ability to carry out research in gender related topics. A study by Goldstein (1979, cited in Denmark, 1980) found that productivity of graduates was higher for those who had same sex dissertation supervisors. Smith (1992) states that female students do not aim for academic positions because the lack of women in the university creates a "hidden curriculum where students learn in largely negative terms about women's participation in the university" (p.110).

EXPERIENCES OF WOMEN IN ACADEMIA

A purely statistical description of women in academia does not provide a full picture of what women experience in their daily lives as academics. Many academics have written about their own experiences, and others have researched their colleagues in a range of studies, using interviews, surveys and other statistical methods. Despite the differing methodologies these studies reveal that academic women have similar experiences of discrimination. Conflict between family and professional lives, type of work, stereotypes financial inequities and relationships with others, all seem to be areas where women encounter discrimination.

## Conflict Between Family And Professional Lives

A strong theme that comes out when reading about the experiences of women in academia is the difficulty they have integrating their family and professional lives. Aisenberg and Harrington (1988) quote one of their interviewees who said "one source of constant strain is the experience of travelling between two domains - even figuratively" (p. 118). Aisenberg and Harrington (1988) termed this "women's superhuman effort at integration" (p.121). The women demonstrated huge reserves of stamina in their attempts to accomplish integration. Many women had to commute between their work in one city and their family in another.

Women are socialised to believe that they should act in a certain way and be married to a certain type of man (a breadwinner), "society is not constructed to aid women to have professional attainment and a rich domestic life, they are not supposed to want it all" (Aisenberg and Harrington, 1988, p. 133). Society pressures women into feeling that they must choose between a family and a career and that they should not wish for both. If the women fail in this attempt to go against society and combine the two they blame themselves.

Wilson (1986) found that more academic men than women have children. Vasil (1993) also found that more men than women have children, but that men spend less time in childcare and housework than women. Wilson (1986) also discovered that the male academics in her sample demonstrated traditional role expectations of women, (women with pre-school children should not work). Many women would encounter this attitude among their colleagues. Sekaran and Kassner (1992) also speak of the pressure placed on women by their male peers who tell women that they should stay home with their children. Smith (1992) even tells of a female academic who was told that she would not want to return to work after having a child because she would be "overcome with maternal emotion" (p. 115).

Wilson (1986) found that some women felt that having a child had affected their chances of promotion, because it was assumed that their priority would be their child not their career. Inadequate provision for parental leave and inadequate provisions for after school care and holiday care adds to the conflict between family and career. Marital status and having children were quoted as a basis for discrimination by the female academics in an Australian study by Cass et al (1983). Henry (1990) quoted one of her subjects who said " it would be wonderful if academic institutions actually built into the system means for women to be supported in having children, which society wants them to do" (p. 126).

The structure of an academic career also causes problems for many women, as it is modelled on that of a traditional man with continuous service. Sekaran and Kassner (1992) also point out that the old male tenure model is no longer appropriate for men

either. Many men who are in a dual earner family and take responsibility for their children, have trouble keeping up with the expected number of published research articles. Wilson (1986) found that many women came to an academic position late in their career, and that sex and age were together a double barrier. One woman commented "I waited so long to get the job I enjoy and am good at and now I am told I must retire" (p. 34).

Wilson (1986) discovered that more academic women live alone than men. Gornick (1983) found some of her women felt conflict between career and marriage. She quotes from two women who had experienced this pressure. "It seemed as though the only way I could become a scientist was to take a vow of lifetime celibacy" (p. 96). One women found that the pressure affected her work "Every woman receives a mixed message about love and work in her youth. For most, the contradiction is paralysing. The control required to work well becomes diluted and evaporates" (p. 104).

## Type Of Work

The types of duties that women in their academic positions undertake is often different to that of their male colleagues. Henry (1990) found that the women in her sample had assumed a caring student welfare role, even though their scholarship was more important to them. They had undertaken these tasks not only because women are "socially implicated as caregivers" (p. 128) but also because there was so many female students in their departments, and few female staff.

Simeone (1987) cites a study (Hallon and Gemmill, 1976) of faculty at public community colleges. This study found that compared to men, women felt that they had less participation in decision-making, less influence over their job situation, and greater difficulty getting their ideas to superiors. They also felt less influential in superiors' decisions and that they were consulted by their superiors less often. They also reported difficulty in getting information from colleagues.

Wilson (1986) discovered that women were often given large first year classes and were also expected to handle the individual student inquiries, the women felt that this hampered their ability to carry out research or complete their PhDs. Cass et al (1983) also found that the women in their study had heavier workloads and that they took on the large first year classes, while the men taught post-graduate students, who are more beneficial to research and publication. Vasil (1993) also found that women were more involved in teaching than other activities.

The university system creates a dilemma for many women (and men), although the academics are paid to carry out one duty (teaching) their worth, measured by promotion, is judged by their ability to carry out and publish research. Wilson (1986) mentions that for women in her study teaching was their priority. Teaching however does

often require research but it only counts when it has been published, this means that substantial works such as extramural study guides, and other course materials are not given the merit that they deserve. There was concern among Wilson's (1986) subjects that teaching is not given the recognition it deserves within the university system. Court (1994)

also expresses concern about the status of teaching in universities, and the lack of research by women. She suggests that without research, women's voices are silenced and they are prevented from rising to decision making posts within the university. The New Zealand Universities Review Committee (1987) agrees with this point they received many submissions mentioning the way that women's workloads prevented them from participating in leadership and decision making roles within the university.

Sekaran and Kassner (1992) mention that often women are placed on "insignificant committees as token members" (p. 176), which also prevents them from taking on research. They also mention the differential allocation of resources (such as computers and travel funds) to women and men, and that women very often do not receive as much research funding as men. Another problem that women frequently encounter is the fact that part-time work is often not considered tenure-track, so in order to receive promotions a move to a full-time position is often needed. (Aisenberg and Harrington, 1988).

Kagan and Lewis (1990) found that women who want to teach courses in women's issues may have trouble with the men in the department, who will not accept the course. They demonstrate this with a personal experience where a male colleague complained to them that in their exam paper for a 'women in psychology' course almost every question had the word 'oppression' in it. The male colleague complained that the course was 'politically biased'.

Stereotypes

Another problem that academic women encounter in their work is the stereotypes that others have of them as women. Simeone (1987) suggests that male colleagues see the academic women as a threat to themselves (perhaps to their own sense of masculinity) because the women have removed themselves from the role of serving men. Gornick (1983) recounts experiences of women who are in the same field as their partners. One woman felt that her partner's attitude towards her stemmed from his own insecurity, which made him "more aware of protecting himself than of seeing his behaviour toward me as unjust. And then there was the related, deeper truth that he never took me seriously as a physicist" (p. 83). She reports another woman who says that her husband's way to avoid competing with his wife was to make sure she never 'became anything'. Gornick (1983) goes on to comment that often when a man and women work together (in science particularly) most people assume that they man does the thinking and the woman does the subordinate technical work (carrying out the experiments). This makes it extremely hard for women to be taken seriously as scientists in their own right.

Gornick (1983) also found that the women had encountered stereotypes of what women in science were like. One woman reported a common conflict between beauty and brains, " I enjoyed being one of the few women in physics, but I certainly did not enjoy it when I realised women in physics were considered ugly, undesirable, clumsy eccentrics. I wanted to be sexually lovely and desirable, and still be a fine physicist" (p. 91). The women in the study by Cass et al (1983) reported being discriminated against because of their physical appearance.

Sekaran and Kassner (1992) mention that many women in non-traditional fields have trouble accessing departmental administrative positions in other universities. They also talk of the trouble women do have when they reach leadership positions. Chairwomen are expected to consult more with other staff, if they do not they are labelled autocratic, often they have to pass tests from the general staff who may not like taking orders from a woman. Chairwomen are really placed in a no-win situation because if they do consult other they are often labelled as too soft and indecisive. La Fontaine (1988, cited in Sekaran and Kassner, 1992) carried out a study that found in mixed groups men actively encourage and reward sex-appropriate behaviours and discredit, devalue or confront women who are "savvy, smart, competitive or assertive" or deviate from traditional roles.

Women in senior positions can also experience attempts by men to challenge their power by addressing the woman as 'honey' or 'sweetie' or subjecting them to sexual harassment. The attributes that are valued in academia are predominantly male, some of the women in Henry's (1990) sample found it difficult to conform to the competitive and individualistic nature of university life.

It is hard to accept but important to acknowledge that it is not only men who use stereotypes of women. Smith (1992) tells of her experience (at a social function) of being 'attacked' by the wife of one of her husband's colleagues for putting her career before her husband's. Smith says that this attack by a woman made her feel that she was doing something "distinctly deviant".

Financial Inequities

Kahn and Robbins (1985) found that women were often not appointed to 'real' positions, but were appointed on money provided by grants or held positions such as instructors or visiting faculty that reinforced their lower status. Women are not often found in authority positions such as in senior administration. Wilson (1986) found that the women in her sample commented that the questionnaire, raised concerns that they had about their own career progress. The subjects in the study by Cass et al (1983) reported being paid less than males, having slower promotions, and encountering differential hiring procedures. Smith (1992) encountered a refusal to pay travel and removal expenses for married women.

Sekaran and Kassner (1992) found that the longer the women stay at an institution the larger the inequities they experience. Differences in starting salaries between men and women continue, which leads to "a perpetual continuation of gender-based salary inequities that adversely affects the morale of women on campuses" (p. 177). Women also seem to work harder than their male colleagues and still get paid less. Henry (1990) recounts the experiences of one of her subjects who felt she was not getting the financial recognition she deserved, even though she had higher research productivity than her colleagues, had fuller classes and more graduate students, she was still getting paid the lowest salary in her department. This woman was told by male colleagues that she had a husband who worked so she did not need more money. To which the woman replied, as they all had wives who work maybe they did not need the money either.

Perceptions Of Discrimination

Cass et al (1983) found that the women were long-sighted about discrimination. The further away from themselves it was the more discrimination they acknowledged. Women in different groups perceived different amounts of discrimination. Seventy-four percent of non-married and sixty-six percent of married women in the study believed that women in universities experienced discrimination. Academics in medicine and veterinary science were less aware of discrimination, and older women were more aware of discrimination than younger women.

Reid (1987) also looked at perceptions of discrimination among the women in a university. In a departure from most other studies she compared the experiences of faculty women with those of the general staff women. She discovered that faculty women perceived more sex discrimination than general staff women, and that women in male dominated departments were less likely to perceive sex-discrimination, than women in departments that were not male dominated.

Johnsrud and Wunsch (1991) compared the attitudes of junior and senior faculty women. They found that senior women identified the following areas as preventing women from success in the university, feeling isolated, teaching loads, sexual harassment, insecurity, dual career issues, and single parenting. Junior women found the biggest barrier to be writing, this included time to write, editing, and motivation to write.

Many senior males and others in positions of power do not notice discrimination. Sekaran and Kassner (1992) tell of a situation where senior male administrators called all other males by their last names but the only woman was addressed by her first name. When confronted with this they did not acknowledge it as being inappropriate. Problems such as this can often begin at the top and filter down through the hierarchy.

<u>Relationships With Others</u>

The attitudes of male colleagues to the women they work with can play an important part in how the women feel about academia. Wilson (1986) found that nearly fifty percent of men felt superior to women. Cass et al (1983) found that the majority (eighty-two percent) of women in their study, felt that men viewed themselves as superior to women. They also asked the men in the study the same question most (sixty-nine percent) of them also agreed that men think they are superior to women.

Cass et al (1983) discovered that the women in their sample felt excluded from the informal information exchanges that occur in the staff bar or lunch room. They found that the unmarried women felt more excluded than the married women. They suggest this may be because informal contacts with married women are not so likely to be interpreted with a sexual connotation. Sekaran and Kassner (1992) also report that women are not included in informal corridor and luncheon conversations, and that they are not represented well enough in important networks that are formed from participation in 'significant' committees in the university. Smith (1992) also says that women are not given the informal signs of belonging that men are given, such as invitations to lunch, and informal visits to each other's offices. She also mentions a sense of 'otherness' experienced by academic women, this is demonstrated by the feelings of a young Maori feminist when she first became an academic, "If I didn't look or speak like a 'normal' academic, that was no loss, because I didn't feel like one either" (p. 114). Henry (1990) found that the women in her sample felt that men were more supportive to each other than the women who viewed each other as the competition. Aisenberg and Harrington's (1988) subjects also mention the feeling of isolation that many academic women experience. "It's very lonely to be working in your study day after day, wondering whether what you're writing is a lot of junk" (p. 172).

Sekaran and Kassner (1992) mention the feeling of powerlessness that women in universities have, they suggest that this may be due to the fact that women do not have the same opportunities to choose mentors as men. Mentors serve to 'socialise' the young academics into their professional careers. Sekaran and Kassner (1992) also mention the experiences many women have (especially when they are in a token position) of being ignored in meetings. The women feel that they are 'not heard' or listened to. This is demonstrated by the situation in which a male member will offer a suggestion or idea that a woman has just mentioned, and which was ignored until brought up by a man. Sekaran and Kassner (1992) suggest that this may lead the woman to doubt her own ability to communicate effectively.

## THE EFFECTS OF DISCRIMINATION

*"If a woman is not hysterical about what happens to her during a sex discrimination action, she doesn't understand the problem."*

( Pendergrass, Kimmel, Joesting, Petersen and Bush, 1976, p. 42).

Gettman and Pena (1986) claim that "Additional attention must be given to the association between gender relations in the workplace and the mental health problems of women workers"(p. 7). In many gender segregated occupations, male supervisors have a lot of control over the female workers. Often the supervisor will control mobility, breaks, and pace of work. Gettman and Pena (1986) suggest that stress related disorders among women may be the result of women's powerlessness compared to men. Carmen, Russo and Miller (1981) say that the combination of stress and feeling powerless to do anything about it leads to mental health problems such as depression

Most of the literature that considers the effects of gender based discrimination has concentrated on sexual harassment. Researchers like Crull (1982) have approached sexual harassment from a clinical viewpoint, and considered what implications the effects have for counselling. Crull (1984) found that sexual harassment led to "debilitating stress reactions" (p. 541). These stress reactions affected three areas, work performance and attitudes, psychological health and physical health. More research may have been carried out on harassment because it is more easily defined and measured than gender discrimination.

Although the effects of discrimination have seldom been investigated in a systematic manner, case studies, interviews with women and the experiences of clinicians provide some evidence of the effects that discrimination can have. Women have reported effects in the following areas, self-doubt, future expectations, self-efficacy, physical symptoms, job satisfaction, mental health, isolation, anger, self-blame, control, exhaustion, powerlessness and relationships.

### Self-Doubt

One of the effects of working in a male dominated field such as academia is self-doubt. Many women were unsure of their own abilities and emotionally and socially unprepared for academia, one woman sought counselling because she was so terrified of exams (Aisenberg and Harrington, 1988). Aisenberg and Harrington (1988) were surprised that female Harvard graduates were still being warned of the 'dangers of doubting themselves'. They found that women were aiming too low in what they hoped to achieve, and that support was very important for women's professional development.

The chronic self doubt that many women experienced was often linked to the perception that women had, that they had to prove their worth, " needing constantly to prove your worth, undermines self-confidence in even the strongest women" (Aisenberg and Harrington, 1988, p. 67). Even very experienced women still felt self-doubt, one

women described her self-doubt as incapacitating. Some women felt like imposters, that they should not really be in academia, for example Gornick (1983) tells of one woman's battle for tenure as "a recapitulation of her lifelong sense of herself as an outsider in chemistry, one who barely holds on, knows her hold to be precarious, and knows further that one day she must slip and fall" (p. 99). Henry's (1990) subjects also demonstrated self-doubt, claiming that even highly successful women are more self-doubting than men. Hamilton, Alagna, King and Lloyd (1987) found that very often it is a lack of appropriate feed-back on the woman's work that may cause the woman to discredit her own abilities. The women in their study also reported that their self-confidence was eroded by discrimination. The continual devaluation that women experience, which results in extreme self-doubt and lack of confidence in their abilities, can begin to effect the woman's performance. It can also make it more difficult for the woman to leave the situation and seek a new job, especially as she may fear encountering discrimination again. Nielsen (1979) also reported an undermining of her own self-confidence, beliefs in her own competence also changed, and her self-esteem became linked to male approval. Yoder's (1985) case study also reports the drop in her self-esteem that occurred as a result of the discrimination she had experienced

Other common effects of discrimination are self-effacement and self-denial. These reactions often lead to women blaming themselves for any negative comments on their work, or career reversals. This can in turn lead to women blaming themselves for discrimination, or the effects that discrimination has on their careers. Wills (1983) found that women are more likely to blame themselves and undervalue their own competence than to have negative attitudes towards the institutions they work in. Pendergrass et al (1976) also found that their clients experienced a loss of confidence after experiencing discrimination, they found that many women would disparage their own abilities at the same time as complaining about the injustice of their treatment. Many women were frightened of the consequences of the actions they took against the discrimination. Graham, O' Reilly and Rawlings (1985) discovered that discrimination leads to demoralisation, low self-esteem, and loss of confidence in professional competence. They claim that if discrimination is not acknowledged it can have devastating effects because it leads to the woman underestimating her own performance and abilities. Carmen Russo and Miller (1981) claim that discrimination leads to chronically low self-esteem and low aspirations.

Wan-Ping Pak, Dion and Dion (1991) studied discrimination against Chinese students, they found that those women who had experienced discrimination had lower self-esteem than women who had not experienced discrimination. They also discovered that women who had experienced discrimination had lower self-esteem than men who had experienced discrimination.

## Effects On Future Expectations.

Wilson (1986) found that women were less confident than men about their chances of promotion, she hypothesised that this may be a result of past experiences of discrimination. Cass et al's (1983) findings agree with those of Wilson. They found that sex discrimination affected the future plans and expectations of their subjects. Most of the women who were confident about their chances of promotion, had not experienced discrimination. The women who were not confident of their future chances of promotion, did not clearly cite discrimination against women as the cause. Their explanations however did reflect discrimination. For example a woman might say that she did not expect to be promoted to chairperson because "women are not considered suitable for many applied sciences" (p. 119), others gave reasons such as having family responsibilities, and the lack of women that ever reach the senior levels. The men in this study also anticipated that women would encounter discrimination in their attempts at promotion.

## Self-Efficacy

Schoen and Winocour (1988) attempted to explain women's overrepresentation in the lower ranks of the university system as a result of women's lower research self-efficacy. They found that women had higher self-efficacy for teaching tasks than research, and higher self-efficacy in administrative tasks than in research. Men also had highest self-efficacy for teaching tasks, but they were equally confident in their administrative and research abilities.

Landino and Owen (1988) carried out a similar study measuring self-efficacy in research, service, and teaching tasks. Surprisingly they found that those academics that were in a female dominated department had the lowest research self-efficacy. They suggest that this may be because the departments that are female dominated (nursing for example) often look for clinical experience rather than research experience, this may lead to an environment where research is not highly valued. Subjects who that felt that they were encouraged and rewarded by their department had higher research self-efficacy, and young subjects with PhDs had higher research self-efficacy. Vasil (1992) also looked at the self-efficacy of university staff. She found that males had significantly higher research self-efficacy beliefs, they also spent more time in research than females and had higher levels of productivity.

Vasil (1993) also looked at the research self-efficacy and research productivity in New Zealand universities. She found that women published less journal articles than men, although they published the same number of books and book chapters. Differences in research productivity between men and women were found in the fields of commerce, social sciences, mathematics and computer sciences. The male academics in this study had higher research self-efficacy and productivity than the female academics. The fact that more men than women held PhDs contributed to these results.

The above studies have attempted to explain women's position in academia by their lack of research self-efficacy. What these studies neglect to consider is the impact that women's position in academia has on their research self-efficacy, especially if their areas of scholarship are underfunded, and disparaged by male colleagues who do not understand the areas in which the women are researching. Hawkins and Schultz (1990) found that women were much less likely than men to apply for and be granted research funds.

Women may also have had trouble getting their research published by mainstream journals. Kagan and Lewis (1990) point out how few journals in their field (psychology) are edited by women. This means that masculine values are the norm, and it may make it difficult for women to have their research published if it is not 'mainstream'. For example women often prefer to do joint research and publish collectively. Women may also prefer to publish for a wider audience than their male peers and so publish in non-academic journals.

Aisenberg and Harrington (1988) found that many women do work that crosses disciplines, and does not fit neatly into one department, which may make it difficult to find a journal to publish the research. There does not seem to be any data on failed attempts to get work published. Aisenberg and Harrington (1988) and Gornick (1983), both found that the women in their studies became very emotionally involved in their research, and that rejection of their work, was often internalised as a rejection of themselves, and their identity as an academic. Kagan and Lewis (1990) discuss how their own personal and emotional lives influence their scholarship, but that the men they encounter do not seem to connect the two, they quote one man talking about his field of psychology, "There's nothing personal in it. No life links at all" (p. 277).

Physical Symptoms
Bursten (1985) gives a clinical perspective on women suffering from discrimination, he refers to this as 'psychiatric injury'. He discovered that his client reported many physical symptoms such as insomnia, loss of concentration and appetite, and fainting and crying spells. Unfortunately this can produce a no-win situation for women, because their symptoms (such as crying and fainting) can be used against them. For example crying and fainting could lead to the comment that women are too emotional to be managers. Reifman, Biernat and Lang (1991) also found that sex discrimination was a stressor that caused physical symptoms, they found that these were still present at a follow up study one year later. Pendergrass et al (1976) also found the reactions of shaking and crying in their clients when they talked about their discrimination. Graham et al (1985) report that for the women in their study discrimination led to the development or exacerbation of illnesses.

## Job Satisfaction

Bursten (1985) found that his client began to hate her job as a result of discrimination. Hamilton et al (1987) found that their subjects became disillusioned with their work and that their job satisfaction and ambition dropped, this often led to the women questioning their career choices. Harrell (1993) found that not being promoted to a management position was related to low job satisfaction. Korabik, McDonald and Rosin (1993) found that male subordinates often hold stereotypes that make it difficult for them to accept supervision by female managers. They have linked these experiences and the social isolation experienced by many women managers to low organisational commitment, low job satisfaction and high turnover. Aisenberg and Harrington (1988) found that their subjects were frustrated with the university system especially the way it emphasises individuality. Their subjects also reported disillusionment with their workplace and the values of academia, one women decided to have a child as a way of removing herself from the situation. Wilson (1986) claims that "discrimination results in [the] waste and under-utilisation of the skills and talents of half of the community" (p. 7). Sekaran and Kassner (1992) mention how the discouragement that is a result of being denied promotion, by the males who make these decisions, often results in women deciding to leave. They also report how frustration over discrimination in such areas as salary results in low morale among women academics. Reid (1987) also claims that perceived discrimination can result in low morale and substandard performance. She mentions that it is women's perceptions of discrimination that matter, and that leads to poor morale, whether discrimination has in fact occurred is irrelevant.

## Mental Health

A comprehensive article by Hamilton, Alagna, King and Lloyd (1987), who all work as clinicians with women who have suffered discrimination, has detailed the consequences of gender discrimination in the workplace. They say that women report "severe and far-reaching consequences" (p. 160) from gender discrimination, and that severe discrimination can be as stressful as divorce or a major illness. They have formulated a post-discrimination depression hypothesis, and their preliminary results show that the type and severity of reported symptoms are of clinical significance. Their subjects also reported suffering from despair.

Pendergrass, Kimmel, Joesting, Petersen, and Bush (1976) were also clinicians concerned with the counselling of women suffering after experiencing discrimination. They recount the experiences of one woman who felt depressed, paranoid, and sometimes lacking the energy to even get out of bed in the mornings, after experiencing discrimination. Reifman, Biernat, and Lang (1991) found that perceived sex discrimination was a potent stressor for married professional women, and that perceived sex discrimination was significantly related to measures of well-being. Sex discrimination was one of six stressors that predicted physical and depressive symptoms both at the time of the first study and one year later. Carmen, Russo and Miller (1981) report that the ultimate consequence of discrimination is depression.

Amaro, Russo and Johnson (1987) studied the experiences of discrimination among Hispanic women. The experiences of discrimination among these professional women were significantly related to mental health measures. They found that gender stereotypes impeded the women's ability to establish themselves as professionals. Eighty-two percent of the women in this sample had experienced discrimination. They found that, increased stress of balancing life roles, lower personal life satisfaction, and increased psychological distress were the results of discrimination.

Aisenberg and Harrington's subjects also reported suffering from depression. Wilson (1986) found that her subjects reported feeling frustration and despair as a result of discrimination. Gornick's (1983) subjects highlight the cumulative nature of the effects of discrimination on their mental heath, "it accumulates from more than one point of origin; is felt as an institutional assault, a psychological infliction" (p. 73). Another woman who was speaking about not being taken seriously as an academic said "it means sustaining a faint but continuous humiliation that, like low-grade infection, is cumulative in its power and disintegrating in its ultimate effect" (p. 74). Another woman reported how the strain mounted over the years until she felt it was 'suffocating' her. Gornick (1983) also recounts the experiences of one woman, who felt that other people thought that if she was any good she would have a real job (instead of a peripheral position). She agreed with them and eventually "she fell into depression, began not to want to go out. I didn't want to meet people who were visiting the university. I began feel bad about myself. It began to eat at me" (p. 111). Another woman in Gornick's study claimed that "the worst thing about discrimination is having to be cheerful about it" (p. 95).

A case study by Nielsen (1979) acknowledges the "profound personal impact" (p. 469) of suffering discrimination. Her initial reaction was pain which then lead to the emotions of fear, sombreness and tension. Another case study by Gallant and Cross (1993) also mentions the distress caused by discrimination, she chose to go through formal proceedings of complaint and this caused her "unrelieved distress over the next ten months" (p. 249).

Isolation

Hamilton et al (1987) found that often women do not think of their experiences as discrimination, but report confusion, bewilderment and isolation. Once the women do realise they have experienced discrimination, they often recall other incidents that occurred previously that they did not acknowledge as discrimination. Bursten (1985) found that his client became increasingly alienated from the colleagues that she worked with, her sense of alienation was exacerbated by the fact that her colleagues were all males. Sekaran and Kassner (1992) also mention the isolation of academic women especially the women that do reach senior positions. Simeone (1987) found that the women she interviewed felt isolated, and that psychological support seemed to be critical to keep the women trying and succeeding.

A case study by Gallant and Cross (1993) tells how the woman experiencing discrimination felt very alone. Yoder (1985) also mentions the isolation she felt while experiencing discrimination.

## Anger

Hamilton et al's (1987) subjects reported pain and rage. One of Aisenberg and Harrington's (1988) subjects told of the amount of anger she felt "I've spent a good deal of time in the last year being angry at academia, because it doesn't live up to the dream, and I hate a lot of what it does to people. I find myself getting white angry, rage full of rage...at what I see going on" (p. 194). Gornick (1983) found that many women suffered from anger and weariness.

## Self-Blame

Hamilton et al (1987) found that many of their subjects experienced self-blame and guilt. They suggested that this might be because women are socialised to feel responsible for the behaviours of men, and so when women are discriminated against they wonder why they have not coped successfully with the situation and blame themselves. The way that many women devalue themselves is also exacerbated by discrimination and this leads to self-blame. Wills (1983) discovered that many women tended to have the attitude that "competent women academics don't get discriminated against" (p. 115), which could lead to women feeling that they were incompetent if they did experience discrimination. Nielsen (1979) in a case study of her own suffering, mentions the self-blame, guilt and inability to act, that she experienced. She claims that self-blame is a common response in victims of discrimination. Another case study by Yoder (1985) also found that many women blame the victim of discrimination.

## Control and Powerlessness.

Hamilton et al (1987) mention that control is also a factor in discrimination. The discrimination is irrational, and the women often feel powerless because the feedback they receive does not rely on their performance. If the woman can rationalise the discrimination it gives them a sense that change is possible. Sekaran and Kassner (1992) mention how the isolation, stereotyping and powerlessness that women in academia experience, results in them being seen as "non-significant entities within the university system" (p. 167).

## Relationships with Others

Hamilton et al (1987) mention the negative carryover that occurs from the workplace to home. This can affect the gender relations in the family, and in some cases caused guilt in the women's mothers for not preparing their daughters, or for not speaking out about their own discrimination. Reifman et al (1991) found that social support did not insulate women from the stress effects of sex discrimination and other work stressors.

Repetti (1987) found that the mental health of an employee is related to the social environment at their work. Relations with supervisors were more crucial for this than with co-workers.

Exhaustion.

One of Gornick's (1983) subjects reported that when she became aware of feminist issues she felt so tired that she could not longer work effectively. Gornick's (1983) subjects also reported how 'wearing' it is for them to be constantly reminding colleagues that they are a "thinking working being just like themselves" (p. 90). Many women had such a hard and long battle for tenure that by the time they eventually received it they were totally worn out. Gornick (1983) claims that tenure is not "a stimulation to do new and good work, but a relaxation of the guard against an exhaustion that has unconsciously already set in for most academics" (p. 149). A woman in Gornick's (1983) study reported that by the time the university actually gave her tenure she did not care anymore. Some women saw tenure as "a jail sentence" (Aisenberg and Harrington, 1988, p.194). Nielsen (1979) also reported experiencing a draining of energy as a result of discrimination.

COPING WITH DISCRIMINATION

Although women have talked of their experiences of gender discrimination in academia and in the general workplace, there is a lack of information about the coping strategies that women use to deal with it. Hamilton et al (1987) say that "there are few if any role models for successfully responding to severe discrimination" (p.167).

Some women found that support from colleagues was helpful in giving them back some of the confidence they had lost. For example Nielsen (1979) often wondered whether she should remain in the situation where she was experiencing discrimination, but she found that the support she received from other women helped her to cope. She claims that "female encouragement is essential to help a woman recognise sexism, to assuage guilt and fear" (p. 473). Gallant and Cross (1993) also found support helpful, unfortunately in this case, the support came from feminist circles and this was then used against her, as she was identified as a "feminist troublemaker". Gornick (1983) also tells of how many women became more involved with feminist politics after they had suffered discrimination. For some it became more important than their previous work in science, "So now her real life is the women's movement" (p.148). Gornick (1983) also mentions how the women's involvement with feminism provided a release for many of the emotions the women were feeling, "and their feminist politics has given them a context within which disappointment and belligerence become tools of useful obsession" (p. 149). Yoder (1985) found that her attempts to gain support from other women professionals was interpreted as lesbian by her male colleagues. Although eventually it was the support of female colleagues at a conference that gave her the confidence to leave the situation.

Hamilton et al (1987) found that the women in their study often protected themselves by using denial and suppression of affect. They also found that women would consider each incident of discrimination in isolation and separate from the role of women in society, often the women would not see the pattern of discrimination. Hamilton et al (1987) also say that for a woman to exhibit symptoms of discrimination is risky, because these can be used as evidence that the woman really is incompetent and deserves the discrimination.

Looking at the more practical ways which women use to deal with the daily discrimination they encounter, Henry (1990) found that some women use humour. One woman used it to point out how absurd her position was, the woman was working harder than anyone else in the department but still getting paid less so she told her Head of Department that she would "take six months out and grow a penis". The amazing thing about this experience is that the Head replied "If you can do it, you're in" (p. 128).

Not all coping methods used by women are successful. For example many women make an effort not to be seen as overly feminine (because femininity is not associated with being a good scholar), but the result is often the other extreme and others see them as inhuman. Henry (1990) also found that many women quietly resisted attempts of their colleagues to force them into the stereotypically female roles, such as doing secretarial duties and looking after visiting scholars. The woman in this situation also used humour, by saying that she was unavailable but that her husband could do it. Another woman in the study by Gornick (1983) encountered males on a personnel selection committee who kept asking women applicants why they should employ them when "everyone knows you are going to take ten years off to have children" (p. 98). She informed her colleagues that if they did not stop asking this question, she was going to demand of all male applicants why they should be employed when they were going to die ten years earlier.

Another woman in Henry's (1990) sample discovered that if she lowered and slowed her voice in meetings she could get the attention of her male audience. Yet another woman who found that she was ignored in meetings, discovered that if she directly called the men by their names they could not longer ignore her. Also in Henry's sample a woman formed a research group so that she had an opportunity to get together with others, to discuss the research they were carrying out and to give each other feedback. Many women report eventual withdrawal from the situation in which they were experiencing discrimination (Nielsen, 1979; Yoder, 1985).

# THE PRESENT STUDY

There has been a lack of systematic research into discrimination as a stressor in the working lives of women. For example discrimination is not included as a stressor in many stressful life events scales, and in many works that look at the lives of working women it is not even considered. Hughes and Galinsky (1994) carried out research into job and family role conditions, but they failed to consider the impact that discrimination may have on women's acceptance of their roles.

Hamilton et al (1987) suggest that the neglect of researchers to inquire into the psychological effects of discrimination, maybe because many do not believe that discrimination has significant effects. They even encountered this attitude among their male colleagues, one of whom claimed that women might be "demoralised by employment discrimination, but not depressed" (p. 159). Their colleagues also did not seem to realise that many of their own actions could be interpreted as discriminatory,

for example use of gender stereotyped words, and use of gender stereotypes to describe women's personalities. They also found a (male) psychiatrist giving a student victim of harassment the advice to "appear less attractive" (p. 160).

Hamilton et al (1987) say that in order to understand the effects of discrimination on women, recognition of the "internalisation of social stereotypes and prejudices that devalue women" (p. 165) is necessary. They suggest that the socialisation of women that results in self-devaluation is a background to women's experiences at work.

Yoder (1985) recommends exploring the effects of tokenism by measuring both personal data, such as demographics, attitudes and personality measures, and situational factors. She also suggests that future researchers should look at the "turning inward and the accompanying loss of self-esteem, self-efficacy and life satisfaction" (p. 66) experienced by tokens and other victims of discrimination. Bursten (1985) says that there is a lack of information on "whether certain women are more vulnerable to certain types of reactions to sexual discrimination or harassment" (p. 404). Wills (1983) recommends the use of personal experiences as well as more statistical data as this can be "more sensitising" for those who read it, and personal experiences have greater impact than statistics alone.

The literature shows that gender discrimination is present in the academic workplace, and that it does have an impact on the women who encounter it. However previous research has concentrated on proving the existence of gender discrimination in universities. There are few studies on the effects of gender discrimination and they have approached it from a clinical viewpoint. The effects that gender discrimination has on women's well-being at work and the methods that they use to cope with discrimination have not been systematically studied. The present study aims to explore academic women's perceptions and experiences of gender discrimination, and the effects that this has on their well-being at work.

The coping strategies that women use to deal with discrimination will also be studied. Both qualitative information from interviews with academic women, and information from the administration of psychometric scales will be used to achieve these aims.

# METHOD

After ethics committee approval had been granted the following method was used to carry out this study. Two types of methodology were used in this study. Qualitative data from interviews and quantitative data from the administration of psychometric scales. The qualitative data increases the relevance and impact of the numerical data by providing insights into the subjects experiences.

## SAMPLE

The University Calendar for 1994 was used to identify the female academics. A random sample of these women were sent a personalised letter asking for volunteers to participate in a study of EEO issues, specifically gender based discrimination in the university. The sample consisted of forty-seven randomly chosen female academics from Massey University. This sample constitutes seventeen percent of the total 279 female academics at Massey. The subjects came from all faculties and ranged in rank from assistant lecturers to heads of departments. As shown in Table one, ninety-six percent of the subjects were employed full-time, and sixty percent of the subjects held tenured positions. This is very similar to Wilson's (1986) sample of female academics, in which fifty-eight percent had tenure and seventy-seven percent worked full-time.

Table 1. Employment Type. N = 45

|  | Freq. | % |
|---|---|---|
| Full-Time | 43 | 96 |
| Part-Time | 2 | 4 |
|  |  |  |
| Tenured | 27 | 60 |
| Non-Tenured | 18 | 40 |

Table two shows the age range of the sample. The majority of subjects (forty-four percent) placed themselves in the thirty to thirty-nine age bracket, thirty-eight percent were between forty and forty-nine years, eleven percent were between fifty-and fifty-nine years, four percent were between twenty and twenty-nine years, two percent were over sixty years old.

Table 2. Age Range. N= 45

| Age | Freq. | % |
|---|---|---|
| 20-29 | 2 | 4 |
| 30-39 | 20 | 44 |
| 40-49 | 17 | 38 |
| 50-59 | 5 | 11 |
| 60+ | 1 | 2 |

As shown in Table three most of the subjects (forty-five percent) were married, a further twenty-seven percent were living with a partner, sixteen percent were separated, divorced or widowed, and eleven percent were single.

Table 3. Marital Status. N = 44

|  | Freq. | % |
| --- | --- | --- |
| Married | 20 | 45 |
| Living with Partner | 12 | 27 |
| Separated/divorced/widowed | 7 | 16 |
| Single | 5 | 11 |

As shown in Table four, fifty-three percent of the subjects had children, forty-two percent had no children, and four percent were pregnant. For most of the women with children (thirty-three percent), their youngest child was over twenty years of age. Twenty-nine percent had a youngest child under five years of age, twenty-five percent had a youngest child aged between eleven and fifteen years and eight percent had a youngest child aged between six and ten years, four percent had a youngest child aged between sixteen and nineteen years.

Table 4. Children. N= 45

|  | Freq. | % |
| --- | --- | --- |
| Children | 24 | 53 |
| No Children | 19 | 42 |
| Pregnant | 2 | 4 |
| Age of youngest child: |  |  |
| 0-5 | 7 | 29 |
| 6-10 | 2 | 8 |
| 11-15 | 6 | 25 |
| 16-19 | 1 | 4 |
| 20+ | 8 | 33 |

# PROCEDURE

The study was conducted in two phases. The first phase involved semi-structured interviews and the second phase included the administration of psychometric scales. Biographical information was also collected from all subjects. The subjects in phase one also participated in phase two.

## PHASE ONE

Twenty-four of the subjects who returned the response form, saying they were willing to participate in the study, were contacted by telephone and an interview was arranged. They were interviewed by the researcher in the middle term of 1994. The interview was a semi-structured focussed interview which was tape recorded, and transcribed by the researcher. The standardised interview schedule, according to Patton (1990), creates a systematic and thorough interview, it ensures that the same information is covered with each subject but because of the open-ended nature of the questions, neither are subjects restricted in their answers. As qualitative interviews are deep and information rich less subjects were needed for this phase than phase two.

## PHASE TWO

In addition to those subjects who had participated in phase one, the remainder of the subjects who had volunteered to participate, were sent the psychometric scales and biographical questionnaire to fill in, and return. Twenty-three of these subjects returned their completed scales. Many of these included additional comments about their experiences in the university. All but two of the subjects who had been interviewed returned their scales.

# MEASURES

## PHASE ONE: THE INTERVIEW SCHEDULE

A semi-structured focussed interview schedule was developed. This allows a systematic approach to the interviews and ensures the same information is elicited from each subject. The interview schedule contained sixteen questions. These focussed on areas which did not seem to be fully explored by previous research, or had been indicated as needing further exploration and clarification. These included women's own perceptions of gender discrimination in the workplace, the psychological effects of gender discrimination and the coping strategies used to deal with gender discrimination. (see Appendix 1).

The interview was designed to take about half an hour but the length varied from about fifteen minutes to fifty minutes, depending on the amount of discrimination experienced by the subject.

Patton (1990) gives advice on the sequence that questions in an interview should follow, he recommends that the questions at the beginning of an interview should be easy to

answer and be non-personal. For this reason the interview schedule begins with more general questions, and gradually becomes more focussed on the personal experiences of the subject. The questions were based on previous questions used in studies of female academics such as Cass, Dawson, Temple, Wills and Winkler (1983); Wilson (1986) and Ponter, Loveridge and O'Neill (1989).

## PHASE TWO: PSYCHOMETRIC SCALES
Phase two of the study consisted of a series of psychometric scales and a brief biographical questionnaire.

### The Work Locus of Control Scale
The Work Locus of Control Scale (WLCS) was developed by Spector in 1988. This scale was designed to measure control beliefs in a work setting. Locus of control is the belief that outcomes are controlled either by the subjects own behaviour (internal locus of control) or by other forces (external locus of control). In an occupational setting outcomes are such things as promotions, pay rises, and career advancement.

The WLCS is a sixteen item scale that deals with situations specific to work, such as "getting the job you want is mostly a matter of luck" (see Appendix 2). The subjects rate their agreement with the items on a six point Likert scale. The scale is scored so that a low score represents internal control beliefs and high scores external control beliefs.

Spector (1988) provides evidence of the reliability of the WLCS, it has adequate internal consistency with cronbach alphas of 0.75 or above, and it correlates with Rotters more general I-E measure (Spector 1988). Construct validity is also provided, by Spector, who shows that the WLCS correlates significantly with other organisational variables such as job satisfaction, intention of quitting, perceived influence at work, role stress and perceptions of supervisory style.

Blau (1993) found the WLCS was a better predictor of employee behaviour (particularly compliant and initiative performance) than Rotter's I-E scale which is not work focussed. Orpen (1992) provides evidence of the scales construct validity. He found that the WLCS correlated significantly with more organisational variables than did the IES (a general I-E scale developed by Valecha and Ostrom). The WLCS correlated significantly with job satisfaction ($0.38$, $p < 0.01$), work motivation ($0.29$, $p < 0.05$), organisational commitment ($0.54$, $p < 0.001$), perceived influence ($0.28$, $p < 0.05$), work stress ($-0.48$, $p < 0.001$), and job performance ($0.29$, $p < 0.05$). The general I-E scale only correlated significantly with two of these variables. Orpen (1992) concluded that the WLCS will be better at predicting work behaviour than the more general control measures.

<u>Self-Efficacy</u>

The occupational self-efficacy scale was developed by Wells-Parker, Miller and Topping (1990). Self-Efficacy is a self generated judgement "of how well one can execute [the] courses of action required to deal with prospective situations" (Bandura, 1982, p. 122). Wells-Parker et al (1990) designed the scale specifically for use with women at work. It is a five item scale (see Appendix 2). Subjects rate their agreement with the items on a seven point Likert scale. Wells-Parker et al (1990) give evidence of the scales reliability, the scale's Cronbach's alphas were 0.84 in their first study, and 0.73 in their second study. Construct validity was also demonstrated by Wells-Parker et al. (1990) lower self-efficacy was correlated with higher levels of depression as measured on the Beck Depression Inventory (BDI), (0.30, $p < 0.01$). Low self-esteem was also associated with low self-efficacy. Self-Esteem was measured on the Rosenberg Self-Esteem Scale, ($B =-0.271$, $p < 0.05$). They also found that their role specific scales were good predictors of coping responses and stress.

<u>Warr's Well-Being and Mental Health</u>

Warr's Well-Being and Mental Health Measure (1990) consists of two scales that were presented separately to the subjects.

Occupational Mental Health:

The first scale measures occupational mental health. This is a sixteen item scale which measures three factors, job competence, job aspiration and negative job carry-over. Subjects rate how strongly they agree with the items on a five point Likert scale. These factors rely on self-report or subjective evaluations, and are specific to work settings. Warr (1990) defines competence as having "adequate psychological resources to cope with experienced difficulties". Aspiration measures the subject's tendency to set themselves goals and engage in goal directed activity. The third factor is negative job carry-over, this measures the extent to which subjects bring their work problems into other non-work situations.

Sevastos, Smith and Cordery (1992) provide details of the scales construct validity. They found the expected relationship between the mental health scale and the Job Diagnostic Survey (Hackman and Oldham, 1975). Positive scores on this scale were associated with high competence and aspiration and lower negative job carry over. Warr (1990) found that competence and aspiration showed the expected relationship to age. He also carried out a factor analysis, which showed that carry-over and aspiration were independent dimensions, and that competence loaded onto two factors, job difficulty and competence.

Affective Well-Being:

The second of Warr's (1990) scales measures affective well-being. This scale lists a series of adjectives such as gloomy, calm, and enthusiastic, and asks the subjects how often in the last few weeks their job has made them feel that way.

Subjects can chose from never (1) through to all the time (6).

This scale has two sub-scales, one measures depression-enthusiasm and the other anxiety-contentment.

Warr (1990) provides evidence of the scales reliability with Cronbach's alphas of 0.76 for anxiety-contentment and 0.80 for depression-enthusiasm. Construct validity is demonstrated by the scales expected association with other measures, such as occupational level, opportunity for skill use and task variety and high workload. Sevastos et al (1992) also demonstrate the reliability of the scales with Cronbach's alphas, which were 0.82 for anxiety-contentment and 0.85 for depression-enthusiasm. Construct validity was assessed by the relationship of Warr's scales to other measures. Subjects reporting high job scope (measured on Hackman and Oldham's, 1975, Job Diagnostic Survey), reported higher levels of affective well-being than those low on job scope.

Cybernetic Coping Scale

The fourth scale measures coping behaviour. The Cybernetic Coping Scale (CCS) was developed by Edwards in 1991. Edwards and Baglioni (1993) describe stress according to cybernetic theory as caused by a "discrepancy between the perceived state and the desired state of an individual" (p. 18), coping is an attempt by the individual to reduce the effects of the stress. The CCS identifies five forms of coping; changing the situation (changing the situation to match desires), accommodation (changing the desires so they fit the situation), devaluation (reducing the importance of the difference between desires and the situation), symptom reduction (directly trying to reduce the symptoms of stress), and avoidance (drawing attention away from the situation).

Only the 20 most reliable items from the CCS were used as recommended by Edwards and Baglioni (1993). This scale asks subjects how often they used various methods to cope with problems they encountered in their job. The scale ranges from did not use at all (1) to used very much (7) (see Appendix 2).

The CCS has demonstrated adequate construct validity, through confirmatory factor analysis. Edwards and Baglioni (1993) also provide evidence of the scale's reliability, with all 20 items used in this study having internal consistency alphas of 0.79 or more.

The Dimensions of Stress Scale.

The last psychometric scale is the Dimensions of Stress Scale (DSS), which was developed by Vitaliano, Russo, Weber, and Celum (1993). The stress process is influenced by, the subjects appraisal of the situation, the stressor properties and self-attributions. This scale sets out to measure these factors that mediate the stress process. It measures the primary and secondary appraisals of salience, and control, and the stressor properties of novelty, duration and predicability, and the self-attribution of causality.

For the present study the scale was adapted for specific use with perceived gender discrimination (see Appendix 2), replacing the original words, 'my problem' with 'sex discrimination'. The predicability sub-scale was not included, as this is not as reliable as the other sub-scales, and was not considered relevant for the present study. The scale has twenty items, subjects rate their agreement with the items on a four point Likert scale.

Vitaliano et al (1993) found in their study that internal consistency alphas all exceeded 0.70. They also demonstrated construct validity, the DSS showed the expected relationship to stressor type, coping, and depressed mood.

Biographical Information

Oppenheim (1992) suggests that subjects see demographic information as 'boring' and that it should be placed at the end of a questionnaire. He also recommends explaining why the information is needed (see Appendix 2).

Biographical information was requested so the sample could be described, and because previous studies have shown that some of these factors effect perceptions of sex discrimination. For example Temple (1983) found that the older women in her study had a greater awareness of discrimination than the younger women. Ponter, Loveridge and O'Neill (1989), found that twelve percent of their sample reported discrimination on the basis of their marital status. The last question in this section asks the subjects to rate on a six point scale how much gender based discrimination they have encountered in their work at Massey. Due to the small sample size, care had to be taken that none of the questions in this section could be used to identify the subjects. For this reason the ethics committee recommended that some questions originally proposed, be omitted from the questionnaire, these were the subjects faculty, position, and length of time they had been employed at Massey University.

# RESULTS

## PHASE ONE

The interviewees responses to the interview schedule were transcribed from the audio tapes. Content analysis was then performed on the transcriptions by the researcher. To ensure the confidentiality of the subjects only one analyst was used. Content analysis, according to Miles and Huberman (1994), is a process of searching for 'repeatable regularities'. Content analysis is described by Dey (1993) as a process of finding categories, and themes from the data. Categories begin large and are gradually refined into smaller subcategories.

The questions were clustered into five main areas, perceptions of discrimination, experiences of discrimination, effects of discrimination, coping with discrimination, and relationships with colleagues. The questions in these areas were further analysed into categories and subcategories. Many respondents gave long answers that included a number of comments, for this reason the subcategories do not always equal the number of respondents, and can sum to more than the number in the original broad category. Counting the numbers in each category is an important part of content analysis, according to Miles and Huberman (1994). They say that the use of numbers is a useful way to look at distributions, and helps to keep the analyst analytically honest.

## 1) PERCEPTIONS OF DISCRIMINATION

The subject's were asked to define gender based discrimination. Table five shows the categories into which their perceptions were coded. Most of the definitions (twenty-five percent) provided by the interviewees described gender based discrimination in terms of perceptions or expectations which others (usually men) had of them because they were women. As shown in Table five, category one was further divided into three sub-categories; evaluation, roles, and assumptions. The sub-category evaluation, contained definitions that described discrimination; as people assessing, judging or evaluating women (or their work), using the preconceptions they have of women. For example one woman described gender based discrimination as "people's inbuilt perceptions of women compared to men...which they use to evaluate and judge you." The next sub-category roles, covered the perceptions and expectations of the roles that women fill, this includes the expectations associated with traditional subject areas and roles for women and men. For example "it's often, sometimes conscious but often unconscious, conviction that, men are the norm and that everything centres around them, and that for women to step outside what's seen as their stereotypical role is wrong and probably going to lead to the downfall of civilisation as we know it". The last sub-category, assumptions, describe discrimination as making assumptions based on sex.

This included assuming all women are distracted by their family or the assumption that because you are a woman you will be a good teacher.

Table 5. Definitions of Gender Based Discrimination. (N=24)

|  | Freq. | % of total definitions. |
|---|---|---|
| 1) Expectations and Perceptions: | | |
|     Evaluation | 4 | |
|     Roles | | 3 |
|     Assumptions | 3 | |
| | 10 | 25 |
| 2) Basis of Gender: | | |
|     Disadvantage | 2 | |
|     Opportunities | 3 | |
|     Basis of Sex | 3 | |
| | 8 | 20 |
| 3) Promotion and Pay: | | |
|     Promotion | 5 | |
|     Pay | 2 | |
| | 7 | 18 |
| 4) Lack of attention to Women's Needs: | 4 | 10 |
| 5) Other: | | |
|     Subtlety of discrimination | 2 | |
|     Blatant discrimination | 2 | |
|     Networks and access to information | 2 | |
|     Different cultures | 2 | |
|     Teaching Loads | 2 | |
|     Change over years | 1 | |
| | 10 | 25 |

Category two, basis of gender is the next largest category (twenty percent). These definitions had the common theme of people using gender as a basis for treatment or behaviour.

This category was divided into the subcategories of disadvantage, opportunities and basis of sex. Disadvantage defines discrimination as actions that disadvantage one sex over another solely because of their sex. Opportunities includes definitions that refer to discrimination as one sex not receiving opportunities or receiving extra opportunities because of their sex. The last subcategory basis of sex refers to differential treatment using sex as the only reason for the difference in treatment.

Category three, promotion and pay (eighteen percent) included definitions that defined discrimination in terms of differences in promotion or pay between men and women, this could be at the level of first appointment or later in their career.

The fourth category (ten percent) is lack of attention to women's needs. This included the need for part-time employment, acknowledgment of the demands a family makes on a woman, and other things like the fact that women need more confidence building before they will apply for positions and research funding.

The final category (other) included twenty-five percent of definitions. These were comments that highlighted differences between subtle and blatant discrimination, feelings of exclusion from male networks and sources of information, comments on discrimination in New Zealand, teaching loads and task allocation, and how discrimination has changed over the years.

Table six shows the responses the interviewees gave when asked which faculties discriminate most against women. There are two main categories, with fifty percent of the interviewees in each. Category one includes those who replied don't know. These interviewees gave four reasons for the don't know responses; no contact, determination of discrimination, too new, and not enough information. The largest group said they did not know because they had no contact with women in other faculties or departments. The "too new" category included all the respondents who felt that they had not been working in the university long enough to know which faculties discriminate against women. Subjects whose responses were included in the "determination of discrimination" category felt that perceptions depended on the definition of discrimination. Those subjects in the "not enough information" category felt that without personal experience of discrimination or exact statistics about discrimination they could not say which faculties discriminate against women.

Table 6. Perceptions of Discrimination in University Faculties. (N= 24)

| | Freq. | % |
|---|---|---|
| 1) Don't Know | | |
| No Contact | | 7 |
| Too New | 3 | |
| Determination of discrimination | 2 | |
| Not enough information | 2 | |
| | 12 | 50 |
| 2) Do Know | | |
| Hearsay | 8 | |
| Underrepresentation | 7 | |
| Evidence | 3 | |
| Traditional subject areas for males | 3 | |
| Individuals | 3 | |
| Treatment of women | 2 | |
| | 12 | 50 |

The second category were those respondents who perceived that there is discrimination in university faculties. The reasons why faculties were seen as discriminating against

women were divided into six subcategories. "Hearsay" was the largest group, these subjects claimed they had no facts about discrimination only hearsay or speculation. "Underrepresentation" includes the views of respondents who saw the small number or non-existence of women in a faculty as discrimination. The next group of subjects had actual evidence of discrimination in faculties. Another group felt that discrimination was most common in those subject areas that were traditionally male dominated. The subjects in the group "individuals" felt that discrimination was really a result of the behaviour or attitudes of individuals. The last group "treatment of women" felt that discrimination was reflected by how a faculty treated the women working in it.

Table seven shows the frequency with which a faculty was mentioned as discriminating against women. The most commonly mentioned faculties were agricultural and horticultural science, followed by science and technology. The education and humanities faculties were not mentioned.

Table 7. Named Faculties (N= 12)

|  | Freq. | % |
|---|---|---|
| Agriculture and Horticulture | 5 | 31 |
| Sciences | 4 | 25 |
| Technology | 3 | 19 |
| Veterinary Science | 2 | 13 |
| Business Studies | 1 | 6 |
| Social Sciences | 1 | 6 |

## 2) EXPERIENCES OF DISCRIMINATION

Table eight shows the respondents experiences of feeling discriminated against. The majority of interviewees (seventy-one percent) felt that they had been discriminated against because of their gender, at some stage of their career. This category consisted of two distinct groups. Those who felt discriminated against in their present job (fifty-four percent) and those who had experienced discrimination before they came to Massey (seventeen percent). Category two, reflects those respondents who have not felt discriminated against, (twenty-one percent) in their present position or previously.

Category three (eight percent) reflects women who had had an experience about which they were unsure whether it was discrimination because of their gender or whether the incident was due to other factors.

Table 8. Experiences of Discrimination. (N=24)

| | | Freq. | % |
|---|---|---|---|
| 1) | Felt discriminated against: | | |
| | In present position | 13 | 54 |
| | In previous position. | 4 | 17 |
| | | 17 | 71 |
| 2) | Have not felt discriminated against | 5 | 21 |
| 3) | Not identified as discrimination | 2 | 8 |

The types of gender based discrimination shown in Table nine are varied. Some women had experienced more than one type of gender based discrimination. The most common type of discrimination reported was from an individual (twenty-nine percent). This type of discrimination is where an interviewee had trouble with one person who they worked for or with. The discriminatory actions included; males trying to take advantage of the woman because they assumed she was not assertive, trying to take over the women's research, general harassment (not sexual) and general chauvinistic attitudes.

Table 9. Types of Discrimination Reported. (N= 20)

|                              | Freq. | %  |
|------------------------------|-------|----|
| Individuals                  | 7     | 29 |
| Promotion and Pay            | 6     | 25 |
| Ignored                      | 4     | 17 |
| University Structure         | 3     | 13 |
| Marital Status and Pregnancy | 2     | 8  |
| General Behaviour            | 2     | 8  |

Twenty five percent experienced discrimination in relation to promotion and pay, this was both at the level of first appointment, which was often a failure to recognise prior experience outside the university, or during later promotion applications.

Seventeen percent reported an experience where they felt that they had been totally ignored by the male they worked with. This included instances where it was felt that junior staff disliked taking orders from a woman. Also mentioned was the failure of men to accept different value systems and incidents where men had not listened to ideas or requests from the women.

Thirteen percent of interviewees mentioned that they felt the university structure was discriminatory this included, a general feeling of alienation, and the expectations attached to an academic position such as the time needed for research. Eight percent reported discrimination on the basis of marital status (being divorced), or being pregnant. Eight percent reported general discriminatory behaviour such as sexist comments and jokes.

Table ten shows whether or not the interviewees felt judged by the same standards as their male peers. Fifty-four percent of interviewees felt that they were not judged by the same standards as their male peers. This category was further divided into three groups.

The first sub-group felt that they had to work harder and faster than their male peers. For example one woman said " there's certainly the perception amongst women, and I would fall into that category, that women must achieve, and a mediocre woman, in a top performing job is subject to substantially more attention and negative comment than a mediocre man in a top position".

Table 10. The Standards By Which Women Feel Judged. (N= 24)

| | Freq. | % |
|---|---|---|
| 1) Don't feel judged by the same standards as male peers:<br>    Must work harder<br>    Stereotypes<br>    Different Values | <br>7<br>5<br>2 | |
| | 13 | 54 |
| 2) Feel judged by the same standards as male peers: | 9 | 38 |
| 3) Don't Know: | 2 | 8 |

The second sub-group who felt judged by different standards, felt that they were judged according to stereotypes of women. One woman felt that if she was a man, she would be seen as assertive but because she is a woman, the men saw her as aggressive. Another woman felt that age was used to make assumptions about women more often than for men (especially for younger women). The third sub-grouping, different values, reflects women who felt that others did not share the same values as them, and this resulted in them judging the women and their work differently.

Category two includes thirty-eight percent of interviewees who felt that they were judged by the same standards as their male peers. Eight percent of interviewees (in category three) were unsure whether they were judged by the same standards as their male peers.

Table eleven shows how the interviewees felt that their careers had differed compared to similarly qualified male colleagues. Forty-two percent of subjects are in category one, those who felt that their careers had differed. The majority of these (sixty percent) felt that they were not paid as much or promoted as quickly as their male colleagues. There were also perceived differences at the level of the first appointment. For example one woman said: "if you've earned the degree and it's a good degree, then I don't see why the males are getting the jobs ahead of the females."

The other forty percent of interviewees who felt their career differed mentioned a variety of reasons such as; taking time out to have a family, not having as much time as some male colleagues for research because of household duties, not getting needed materials and not getting support as they entered a male dominated field.

Table 11. Women's Careers Compared to Similar Males. (N= 24)

| | | Freq. | % |
|---|---|---|---|
| 1) | Career differed | | |
| | Promotion and Pay | 6 | |
| | Other | 4 | |
| | | 10 | 42 |
| 2) | Career was the same | | |
| | Felt advantaged | 3 | |
| | Other | 3 | |
| | | 6 | 25 |
| 3) | Don't Know | | |
| | Don't Know | 4 | |
| | Career Changers | 4 | |
| | | 8 | 34 |
| 4) | Comments on Family: | | |
| | Positive without | 4 | |
| | Maternity Leave | 2 | |
| | Time Out | 2 | |

Twenty-five percent of interviewees felt that their career had been the same as a male colleague. Fifty percent of these subjects in category two actually felt that being a woman had been an advantage. These advantages included receiving a terms release research award, and standing out of a crowd of job applicants because of being a woman.

Category three, "don't know" (thirty-four percent) was divided into two main groups. Half of the don't know's were career changers, these women found it difficult to compare themselves with colleagues who had very different backgrounds.

Category four includes those subjects who made comments about the effects that a family can have on a career. Two subjects had taken substantial time out from their careers to raise a family, one felt that women in general never caught up after having a break, she had found it especially difficult that she had spent fifteen years without carrying out any research. Four interviewees felt that the reason that their careers were the same as their male colleagues was because they did not have a family, or had a grown up family when they entered academia. Two interviewees had taken maternity leave from their current Massey job, one took leave over the Christmas break, the other took five months off.

Table 12. Additional Comments About Career Progress. (N= 13)

| | | Freq. |
|---|---|---|
| 1) | PhDs: | |
| | Time pressures | 3 |
| | The effect of being without | 3 |
| | | |
| 2) | Work Experience outside academia: | |
| | Considered when first appointed | 3 |
| | Not considered when first appointed | 5 |
| | | |
| 3) | Entry into Academia: | |
| | Mature Students | 7 |
| | Work experience outside | 4 |
| | Standard | 1 |

Table twelve shows additional comments that were made about the career progress of the interviewees, but were not directly linked to comparing their career with similar male colleagues. These comments were categorised into three main groups; PhDs, work experience and how the women entered the university.

The comments about PhDs were divided into two groups. The first group of comments were from women who had recently completed or who were in the middle of a PhD. They talked about the pressures of balancing research time, teaching loads, and time for their personal lives. The second group of comments came from three women who did not have PhDs. One women felt that it had held her back from promotion, another woman felt that it only held her back in her own head and the other woman felt that she had been appointed without a PhD because of her work experience and professional qualifications.

The second category of comments on career progress, were about work experiences the women had had before being appointed to an academic position. Five of the interviewees felt that their previous experience had not been considered relevant when they were initially appointed to a position or pay scale. Three interviewees felt that their previous experience was considered relevant for their appointment.

The third category reflected how the interviewees first came to be appointed to a university position. Seven interviewees came to university to do their degrees as mature students, after having work experience or having raised a family. Four interviewees mentioned that they had worked outside the university first, and they talked of how following an atypical career path had affected their progress. One woman felt that she had followed a fairly standard progression to an academic position.

Table 13. Experiences of Positive Discrimination.  (N= 23)

| | | Freq. | % |
|---|---|---|---|
| 1) | Have experienced positive discrimination: | | |
| | Favourable treatment | 5 | |
| | Committees | 3 | |
| | Position | 3 | |
| | Advantage | 3 | |
| | | 11 | 48 |
| 2) | Have not experienced positive discrimination | 8 | 35 |
| 3) | Don't Know | 4 | 17 |

Table thirteen shows the interviewees experiences of positive discrimination. Category one reflects the forty-eight percent of interviewees who had had experiences of positive discrimination. The interviewees had experienced four types of positive discrimination. The largest group of interviewees felt that they had experienced favourable treatment from individuals because they were women. This covered experiences such as men being generally more helpful, opening doors, and in a male dominated area making allowances they would not have made for a similar male. The second type of positive discrimination was being asked to sit on committees because there was a need for women to be represented on committees. The third type of positive discrimination was when the interviewees felt that the actual position they held was due to positive discrimination. This included positions such as supernumerary lectureships and women's issues lecturers, that were only held by women. The last category, "advantage" reflects those interviewees who felt that they were generally advantaged by being a woman, particularly on a structural level. This included getting interviews because of being a woman, superiors trying to keep the only woman in a department and being fast-tracked because of being a woman.

Category two included those who felt that they had never experienced positive discrimination (thirty-five percent). Some women had been careful to avoid positive discrimination, others were very sure there was no positive discrimination for example one woman who exclaimed "No! I think I've been given the most horribliest jobs that nobody else would want". The final category of "don't know" (seventeen percent) reflects those who were unsure whether what had occurred was positive discrimination or not. For example one woman who was appointed to a male dominated department could never say for certain whether or not she was appointed to "address the gender balance".

## 3) EFFECTS OF DISCRIMINATION

Interviewees reported some negative effects as a result of discrimination. The interviewees were questioned in five main areas; personal effects, emotional effects, effects on work life, effects on relationships and the affect on future aspirations and goals.

Table 14. Personal Effects of Discrimination. (N= 19)

|  | Freq. | % |
|---|---|---|
| Withdrawal or Avoidance | 5 | 26 |
| Other Changes in Behaviour | 5 | 26 |
| Future Goals | 4 | 21 |
| Feelings of Isolation | 2 | 11 |
| Other | 3 | 16 |

Table fourteen shows the types of personal effects the interviewees reported. Twenty six percent reported withdrawal or avoidance. This was withdrawal from a situation (such as resigning or retiring) or avoidance of a particular person. Other changes in behaviour (twenty-six percent) were also reported, for example, focussing on writing a book instead of trying for promotion, keeping quiet, not getting involved in socialising with others in the department and working harder. Perceived discrimination also affected the interviewees future goals (twenty-one percent). Some of these women felt that any upward movement in their career was blocked. Others felt that they had to work harder to get any recognition at all.

For women who were already in a male dominated department discrimination increased their feelings of isolation (eleven percent).

The last category, other (sixteen percent) included feelings of not fitting, and one women who described discrimination as a weight: " I go home and I just feel, an incredible weight, that it doesn't matter what I do, it doesn't matter how positive I am to other peoples ideas, that they're not going to give me the same consideration".

Table 15. Emotional Effects of Discrimination. (N=15)

|  | Freq. | % |
|---|---|---|
| Anger | 8 | 30 |
| Undermining of Confidence | 5 | 19 |
| Disappointment | 3 | 11 |
| Annoyed | 2 | 7 |
| Depression | 2 | 7 |
| Fear | 2 | 7 |
| Sickness | 2 | 7 |
| Discomfort | 2 | 7 |
| No Effect | 1 | 4 |

The most commonly reported emotional reaction to discrimination, as shown in Table fifteen, was anger (thirty percent), followed by feelings of undermined confidence in oneself (nineteen percent) and disappointment. The less frequently reported emotions included, annoyance, depression, fear, sickness and discomfort. One interviewee reported no emotional effects of discrimination.

Table 16.  Effects of Discrimination on Work-Life. (N= 16)

| | Freq. | % |
|---|---|---|
| Less Effort | 5 | 29 |
| Worked Harder | 4 | 24 |
| Changed Behaviour towards an individual | 3 | 18 |
| No effect | 3 | 18 |
| Stress | 1 | 6 |
| Doubts about continuing | 1 | 6 |

Table sixteen reflects perceptions held regarding how discrimination affected the interviewees work life.  Twenty-nine percent of the interviewees felt that discrimination had resulted in them putting less effort into their work.  This involved not carrying out as much research,  not taking on extra jobs,  not being whole heartedly involved with their job, and having less enthusiasm for work.  The second group felt that the result of discrimination was to cause them to work harder (twenty-four percent).  This was done in order to achieve and to be noticed.  As one women said " Well I tend to work reasonably hard, so that I'm noticed."

Discrimination also resulted in changes in behaviour towards certain people (eighteen percent)  particularly when dealing with individuals who were perceived to be discriminatory.   For example one woman who worked with a blatantly chauvinistic senior said "I'm quite wary, and I think I probably behave quite differently with him than I do with the other men".   Two less common effects (six percent respectively) were stress and questioning whether it was worth carrying on. Eighteen percent of interviewees reported no effect on their work-life.

Table 17.  The Effects of Discrimination on Relationships at Work.  (N=8 )

| | Freq. | % |
|---|---|---|
| Avoidance | 4 | 44 |
| None | 3 | 33 |
| Jealousy | 1 | 11 |
| Wariness | 1 | 11 |

Table seventeen shows the effects that the respondents perceived discrimination,  to have had on their relationships with people at work.  Forty-four percent of interviewees reported avoiding a particular colleague (one woman took sabbatical leave);  thirty-three percent  reported no effect on work relationships and eleven percent felt a little bit jealous towards others who seemed to have enough time to do everything.  Another reaction was one of wariness (eleven percent), this interviewee felt that she had to work out who was on her side and who was against her before she spoke to her colleagues.

Table 18.  The Effects of Discrimination on Personal Relationships.  (N=12)

| | Freq. | % |
|---|---|---|
| Extra Support | 6 | 43 |
| Problems | 3 | 21 |
| Additional Stressor | 3 | 21 |
| Time | 2 | 14 |

Discrimination also affected the subjects personal relationships, as shown in Table eighteen. Forty-three percent talked about the extra support they needed and received from their personal friends or partners. Twenty-one percent of the respondents mentioned that discrimination caused some problems in their relationships, and another twenty-one percent did not have serious problems but said that it was just another general stressor within their relationships. Fourteen percent felt that they did not have enough time to put into their personal relationships.

Table 19. The Effect of Discrimination on Future Aspirations and Goals. (N= 17)

|  | Freq. | % |
|---|---|---|
| Leave | 6 | 33 |
| Blocked | 3 | 17 |
| Lowered Goals | 3 | 17 |
| None | 2 | 11 |
| Other | 4 | 22 |

Discrimination affected the future aspirations and goals of the interviewees. As shown in Table nineteen, the majority (thirty-three percent) of interviewees reported that they had left their job because of the discrimination or that the discrimination had contributed to their willingness to leave. One women had left a better paid job because of the discrimination: "you could say, if it hadn't happened I wouldn't have come here, I would have remained in the job I was in, which was better paid".

Seventeen percent of interviewees reported having felt blocked in their career and that they had progressed as far as they could at Massey. While a further seventeen percent felt that their goals had been lowered and they no longer expected as much as quickly.

The Other category (twenty-two percent) reflects a variety of unrelated effects, including decisions to change career direction, being more aware of discrimination in the future and changing methods of working to try to achieve more in less time.

Table 20. The Effects of Discrimination on Witnesses. (N= 24)

|  | Freq. | % |
|---|---|---|
| General negative effect | 9 | 36 |
| Discouragement | 4 | 16 |
| Don't know | 3 | 12 |
| Students | 3 | 12 |
| Don't Notice it | 2 | 8 |
| Wariness | 2 | 8 |
| Other | 2 | 8 |

Table twenty shows what effect the interviewees thought, that witnessing discrimination would have on other staff and students. The majority of the interviewees (thirty-six percent) thought that witnessing discrimination would have a negative effect on others, especially creating anger and reinforcing any injustice and negative feelings from past discrimination others had experienced.

Sixteen percent of interviewees felt that the lack of women in senior positions in the

university and other types of discrimination that younger women witnessed, discouraged young women from achieving and made them question whether they wanted to fight those battles. For example one woman said: "women are a tiny minority and haven't risen very far, so for a woman going through in that sort of area you'd have to look, at the staff and say to yourself even if I'm really brilliant it'll be a miracle if I get a job and even if I get a job it'll be a miracle if I ever even get to, senior lecturer so why knock myself out, I mean it's just absolutely crazy, I'd prefer to look at a job where you know..."

There was also a very strong feeling among twenty-one percent of the women that especially if the witness is in a senior position they should take action, to help prevent or stop discrimination. One woman mentioned her frustration when others will not act to stop discrimination "I think if it is somebody more senior, who's the observer, then I think you feel very much in a position of wanting to change those things...I at times feel a frustration, when people are not prepared to act, when they see others discriminated against."

Twelve percent of interviewees answered with a 'don't know', these were usually women who had very little experience of discrimination. A further twelve percent discussed incidences of discrimination that involved the students, these covered students requesting more female lecturers on course evaluation forms, and incidences of harassment. Eight percent of interviewees thought that people only notice discrimination when it happens to themselves and not to others. Eight percent thought that it makes people more wary about other people and situations, to the extent that they may avoid them. The last category "other" (eight percent), was made up of one interviewee who felt that witnessing discrimination caused people to take sides, and another interviewee who felt that it created doubts in the mind of the witness about the victim's competence.

## 4) COPING WITH DISCRIMINATION

Table twenty-one shows the strategies that the interviewees reported using to help them cope with discrimination. The most common way of coping with discrimination was by changing the situation (forty-one percent). This could either be formal change, which was used by twenty-seven percent of interviewees or self change which was used by fourteen percent of interviewees. Formal changes were actions such as bringing a case against the discriminator, and seeing the EEO coordinator.
One woman put herself in a position where she could go to the HoD or Dean and tell them when she saw discrimination occurring and what she wanted them to do about it. The actions of self change were planning in order to increase research production, anticipating discrimination and learning to ignore minor things (such as being called luv) or as one interviewee put it: "fighting the battles that are worth fighting, learning actually not to fight every battle".

Talking about the situation (with either peers or partners) was also popular. Eighteen percent of interviewees mentioned using this as a coping strategy. A further eighteen percent used avoidance to cope with the discrimination. These interviewees reported withdrawing emotionally from a situation, gradually becoming less involved and total removal such as taking early retirement. Symptom reduction strategies were also used by fourteen percent of interviewees. These were activities like going swimming before going home at night, doing the gardening or riding a bike. Devaluation was used by four percent of interviewees, this entailed learning to live with the little things that surface when working in a male dominated environment, such as language used or attitudes towards females.

Table 21. Ways of Coping with Discrimination. (N= 18 )

|  |  | Freq. | % |
|---|---|---|---|
| 1) | Change the Situation |  |  |
|  | Formal Change | 6 | 27 |
|  | Change Self | 3 | 14 |
|  |  | 9 | 41 |
| 2) | Talking it Over | 4 | 18 |
| 3) | Avoidance | 4 | 18 |
| 4) | Symptom Reduction | 3 | 14 |
| 5) | Devaluation | 1 | 4 |
| 6) | Other | 1 | 4 |

Table twenty-two demonstrates how interviewees found social support to help them cope with discrimination. Most of the subjects (sixty-nine percent) found that social support was helpful in dealing with the discrimination. This social support came solely from other women (fifty-percent), or from both men and women (fifty-percent). These were mainly work colleagues (fifty-seven percent).

Table 22. Coping with Discrimination Through Social Support. (N= 16)

|  | Freq. | % |
|---|---|---|
| Found social support helpful | 11 | 69 |
| Undecided | 2 | 13 |
| Didn't find social support helpful | 3 | 19 |

Seventeen percent of interviewees talked of differences between the support they got from men and women. Some of them found that women were very sympathetic and willing to moan with you, but had the attitude of that's what life's like. Men on the other hand, had the attitude that the woman should do something about the discrimination.

Table 23. Aids that Would Help Women Cope with Discrimination. (N= 24)

|  | Freq. | % |
|---|---|---|
| Education | 11 | 32 |
| More Support | 8 | 24 |
| Mentoring | 7 | 21 |
| Structural Change | 4 | 12 |
| Recognition of Family Needs | 4 | 12 |

Table twenty-three shows what type of assistance women would like, to help them cope with discrimination. The majority of the interviewees (thirty-two percent) wanted more education and information, covering statistics on women in the university, career planning and knowing where you should be on the promotional ladder at which stage of your career. Opportunities to learn the necessary skills to address discrimination, and raising men's and women's awareness of discrimination were also requested as ways of preventing discrimination or dealing with it.

More support was also requested by twenty-four percent of interviewees. Support for some women was simply having more female academic staff in their department. Others wanted counselling facilities and a system similar to the harassment contact procedures. An EEO coordinator specifically for academic staff was also recommended, as was more opportunities for contact with women from other faculties.

Mentoring and provision of role models by older women was also seen as very helpful (twenty-one percent). Three of the seven women who talked positively of mentors, spoke of the benefits they had received from their own mentors.

Twelve percent of interviewees thought that structural change was necessary to address discrimination. These changes included; the university recognising that there was discrimination inherent in their system, and policies for the recruitment of women. Recognition that women have demands from families, and the effects that these demands can have on their involvement with work, were also requested by twelve percent of interviewees.

Table twenty-four reflects the interviewees opinions of how the move away from the victim mentality has affected the acknowledgment of discrimination. The majority of interviewees (fifty percent) felt that the move away from the victim mentality did *not* make it harder to acknowledge discrimination. Twenty-nine percent of interviewees thought that it was possible to acknowledge discrimination without casting yourself as a victim, another twenty-one percent felt that the move away from the victim mentality had made women a lot stronger and therefore more likely to acknowledge discrimination and to do something about it. Thirty-three percent of interviewees did think that there was some pressure not to cast yourself as a victim by acknowledging discrimination. A further seventeen percent did not know what effect it had had.

Table 24. The Effects of the Demise of the Victim Mentality on Women's Willingness to Acknowledge Discrimination. (N= 24)

| | Freq. | % |
|---|---|---|
| 1) Willing to acknowledge discrimination: Able to acknowledge discrimination without becoming a victim | 7 | 29 |
| More likely to acknowledge discrimination now | 5 | 21 |
| | 12 | 50 |
| 2) Pressure not to acknowledge discrimination | 8 | 33 |
| 3) Don't know | 4 | 17 |

## 5) RELATIONSHIPS WITH COLLEAGUES

As shown in Table twenty-five the majority of interviewees (sixty-seven percent) reported no problems with the way that they were generally treated by their male peers.

They described their male colleagues as respecting the women they work with, and treating them very well. The women also described the male colleagues as friendly, that they treated women as equals and as polite.

Only seventeen percent of interviewees had problems with their male colleagues these were either because they were perceived as a threat by their male colleagues, or because they felt totally unnoticed by their male colleagues. For example one woman said "you're not so much a second class citizen in that you're overtly regarded as a second class citizen, you, simply aren't a person that they would, think of or consider or, yeah you are invisible basically".

Seventeen percent of the interviewees felt that they had a problem with one specific individual that they worked with. For example one woman said of her male colleagues: "Some of them are horrible, but again I think it's an individual thing, some of them that know me and respect the work I do and respect the person I am are fine, but you've got to take them, you've got to sort of pick them off one by one, and some of them are just obnoxiously bluh!"

Table 25.  Descriptions of Treatment by Male Colleagues.(N=24)

| | | Freq. | % |
|---|---|---|---|
| 1) | No Problems experienced. | | |
| | Respect | 7 | |
| | Very well | 6 | |
| | Friendly | 3 | |
| | Equals | 3 | |
| | Polite | 1 | |
| | | 16 | 67 |
| 2) | General Problems experienced | | |
| | Threat | 3 | |
| | Ignoring | 2 | |
| | | 4 | 17 |
| 3) | Problems with specific individuals. | 4 | 17 |

Table twenty-six shows how the interviewees described their relationships with their female colleagues.  Only one interviewee felt that she was treated by her female colleagues in the same way as her male colleagues.  Most interviewees (forty-two percent) described their female colleagues as supportive.  This category was divided up into three groups:  Those who found other women generally supportive, for example "They tend to be more supportive and understanding, and helpful, and say give you some suggestions".    There were also those who provided support to more junior colleagues.  The third group were those who described it as a relationship, with the women in the department doing things like having lunch or going walking together.

Table 26.  Descriptions of Treatment by Female Colleagues.  (N= 24)

| | | Freq. | % |
|---|---|---|---|
| 1) | Same as Males | 1 | 4 |
| 2) | Supportive | | |
| | General Support | 5 | |
| | Providing Support to junior colleagues | 2 | |
| | Relationship | 3 | |
| | | 10 | 42 |
| 3) | Problems | | |
| | Time | 2 | |
| | Competitive | 2 | |
| | Exclusion | 2 | |
| | Solidarity is a myth | 2 | |
| | | 8 | 33 |
| 4) | No Colleagues | 1 | 4 |
| 5) | General Staff | 4 | 17 |

Thirty-three percent of interviewees reported some sort of problems with their female colleagues.  There were four types of problems with women colleagues; time, competitiveness, exclusion and the feeling that solidarity among women is a myth.  Time was a

complaint that the women did not have enough time to develop relationships with their colleagues. Competitiveness reflects those respondents who felt their colleagues treated them as the competition. There was also two interviewees who felt excluded by other women who were more overtly feminist than they were. In the words of one interviewee "and I think too there was a sense in which you either regarded yourself as one of the oppressed minority, or you were outside that and sided with the patriarchy." Two interviewees also mentioned that they felt the notion of solidarity among women was a myth, and they felt that the supportiveness of other women was in a sense a bit false. Four of the women with no female academic colleagues in their departments talked of their relationship with the general staff from their departments, some found this relationship supportive some found it had problems.

Table 27. Experiences of the Informal Networks. (N= 24)

|  | Freq. | % |
|---|---|---|
| Women do not feel included in informal networks | 10 | 42 |
| Maybe | 6 | 25 |
| Women do feel included in informal networks. | 4 | 17 |
| Uninvolved by choice | 4 | 17 |

Table twenty-seven shows the interviewees feelings about whether they are made to feel included in the informal networks that operate in the university. The majority of interviewees (forty-two percent) did not feel included in the informal networks in the university. They felt that there was a lot of informal networking that went on in the university that the women missed out on. One woman mentioned that this networking was important for the formation of research teams, and another mentioned it as important for getting information about funding sources. Three women commented that they thought responsibilities for families made it difficult for women to be included, especially in after hours networking.

Seventeen percent of the interviewees had chosen to remain uninvolved in the informal networks. Twenty-five percent felt that maybe women were included, some of these said that women really had to work hard and push to be included. Seventeen percent of interviewees did feel included in the informal networks.

Many positive comments were made about the women's networks. These were networks that the women had formed for themselves, although one women suggested that this might cut women off even more, from the male dominated networks, because the men saw them as doing their own separate thing.

Table 28. Separation between Male Dominated and Female Dominated Networks. (N=8)

|  | Freq. | % |
|---|---|---|
| separate | 5 | 20 |
| overlap | 3 | 13 |
| integrated | 0 | 00 |

Table twenty-eight shows the additional comments that were made concerning the separation between the male dominated networks and the female networks. Twenty percent of interviewees saw the networks as two separate networks, a man's and a woman's. One interviewee made the comment that she felt the women's was the less powerful. Thirteen percent of interviewees felt that their was a area of overlap between the male dominated and female dominated networks.

The qualitative results show that most of the women academics had encountered discrimination against them or in their favour because they were women. The discrimination had a negative effect on the women's emotions, affected their attitudes to work and their future goals. Most women coped with discrimination in a direct way, usually by changing the situation they were in. Many of the academic women did not feel included in the male dominated informal networks of the university, although some were involved in strong women's networks.

# PHASE TWO

To analyse the relationship between scores on the psychometric scales, Pearson's product moment correlation coefficients were produced for all variables. The analysis was carried out using the SPSS/PC (version 4) package. Table twenty-nine shows the means and standard deviations for all variables. Tables thirty and thirty-one show the correlation coefficients.

Table 29. Means and Standard Deviations of the Work Locus of Control Scale, Warr's Well-Being, Self-Efficacy, the Cybernetic Coping Scale, the Dimensions of Stress Scale, Discrimination and Number of Promotions.

|  | M | SD |
|---|---|---|
| Work Locus of Control | 39.83 | 8.87 |
| | | |
| Warr's Well Being: | | |
| Competence | 23.12 | 3.40 |
| | | |
| Aspiration | 26.29 | 2.61 |
| Negative Carry-Over | 12.75 | 3.78 |
| Anxiety-Contentment | 22.39 | 4.68 |
| Depression-Enthusiasm | 27.73 | 4.46 |
| | | |
| Self-Efficacy | 12.78 | 5.11 |
| | | |
| Cybernetic Coping Scale: | | |
| Change the Situation | 20.58 | 5.32 |
| Accommodation | 12.89 | 4.91 |
| Devaluation | 12.88 | 6.22 |
| | | |
| Avoidance | 10.84 | 4.81 |
| Symptom Reduction | 13.41 | 5.59 |
| | | |
| Dimensions of Stress Scale: | | |
| Control | 11.16 | 2.69 |
| Salience | 12.75 | 2.99 |
| Novelty | 11.68 | 3.38 |
| Duration | 4.55 | 2.52 |
| Causality | 3.23 | 2.84 |
| | | |
| Discrimination | 3.21 | 1.36 |
| Number of Promotions | 1.36 | 1.19 |

Table 30: Pearson's Product Moment Correlations between the Work Locus of Control Scale, Warr's Well Being, Self Efficacy, and the Cybernetic Coping Scale.

|  | WLOC | CO | ASP | NC | AC | DE | SE | CS | ACC | DV | AV | SR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WLOC | 1.0000 | | | | | | | | | | | |
| CO | -.1726 | 1.0000 | | | | | | | | | | |
| ASP | -.2368 | .4547 ** | 1.0000 | | | | | | | | | |
| NC | .0198 | -.0618 | .0864 | 1.0000 | | | | | | | | |
| AC | -.3633 * | .3873 * | .3228 * | -.4969 ** | 1.0000 | | | | | | | |
| DE | -.4392 ** | .4405 ** | .5505 *** | -.1564 | .6048 *** | 1.0000 | | | | | | |
| SE | .2103 | -.2956 | -.4786 *** | .0115 | -.0911 | -.2057 | 1.0000 | | | | | |
| CS | -.5247 ** | .2380 | .3843 ** | .1219 | .1576 | .6080 *** | -.2053 | 1.0000 | | | | |
| ACC | .2552 | -.2658 | -.2305 | -.1823 | -.0563 | -.0507 | .2956 | -.1164 | 1.0000 | | | |
| DV | .2092 | -.4937 ** | -.5241 *** | -.0916 | -.3282 * | -.5268 *** | .1848 | -.3247 * | .3284 * | 1.0000 | | |
| AV | .0675 | -.3247 * | -.4123 ** | -.1211 | -.0061 | -.4343 ** | .1217 | -.1979 | .2011 | .6378 *** | 1.0000 | |
| SR | .1985 | -.1930 | -.1098 | .2097 | -.2577 | -.2767 | .0992 | -.0480 | .2576 | .3884 ** | .4352 ** | 1.0000 |
| C | -.3332 * | -.2171 | -.2239 | -.0207 | -.0164 | .0872 | -.0559 | .2295 | .1826 | .1127 | .1223 | |
| S | -.0152 | -.1216 | .1639 | .2423 | -.3097 * | -.1649 | .0239 | .0073 | -.1005 | -.0682 | -.2420 | -.0718 |
| N | -.0717 | .1835 | .2244 | .3197 * | -.0830 | .1160 | -.1208 | .2427 | -.2445 | -.2291 | -.2168 | -.2666 |
| DU | -.0897 | -.1203 | -.3384 * | -.2499 | .1215 | .0986 | .0696 | .1003 | .0693 | .0689 | -.0284 | -.1691 |
| CA | -.1308 | -.0030 | -.1335 | .1889 | .1113 | .0069 | .3080 * | -.0638 | -.1852 | .0568 | .2516 | .1580 |
| DI | .3314 * | .0770 | .3311 * | .1606 | -.1868 | -.2186 | -.1605 | -.1173 | -.1310 | -.0667 | -.0444 | .0322 |
| AGE | .1116 | -.0163 | -.1041 | -.1029 | .1888 | .0451 | -.1139 | -.0470 | -.0609 | .1695 | .0891 | -.1762 |
| PROM | -.2631 | -.0225 | .0408 | -.0413 | .2248 | .3342 * | -.0676 | .1438 | -.1278 | -.0792 | -.2421 | -.3940 ** |

Table 31: Pearson's Product Moment Correlations between the Dimensions of Stress Scale, Discrimination, Age and Number of Promotions.

|  | C | S | N | DU | CA | DI | AGE | PROM |
|---|---|---|---|---|---|---|---|---|
| C | 1.0000 | | | | | | | |
| S | .1585 | 1.0000 | | | | | | |
| N | .0406 | .2349 | 1.0000 | | | | | |
| DU | .0403 | -.2533 | .0571 | 1.0000 | | | | |
| CA | -.0821 | -.3359 * | -.1340 | .0005 | 1.0000 | | | |
| DI | -.5581 *** | .2801 | .1212 | -.3073 * | .0405 | 1.0000 | | |
| AGE | -.1962 | -.1192 | -.1053 | .0842 | .0457 | .0764 | 1.0000 | |
| PROM | .0726 | -.2538 | .4138 ** | .1603 | -.0721 | -.3183 * | .2800 | 1.0000 |

KEY:

WLOC - Work Locus of Control

Warr's Well-Being:
CO - Competence
ASP - Aspiration
NC - Negative Carry-Over
AC - Anxiety-Contentment
DE - Depression-Enthusiasm

SE - Self-Efficacy

Cybernetic Coping Scale:
CS - Change the Situation
ACC - Accommodation
DV - Devaluation

AV - Avoidance
SR - Symptom Reduction

Dimensions of Stress Scale:
C - Control
S - Salience
N - Novelty
DU - Duration
CA - Causality

DI - Discrimination
AGE - Age
PROM - Number of Promotions

* = $p < 0.05$
** = $p < 0.01$
*** = $p < 0.001$

## 1) PERCEPTIONS OF DISCRIMINATION

Subjects perceptions of the duration of discrimination were significantly negatively correlated with their experiences of discrimination (-0.3073, $p < 0.05$) and their aspirations (-0.3384, $p < 0.05$). Therefore the perception that discrimination is a long term phenomenon is related to degree of discrimination experienced as well as the degree of aspiration, which is the subjects tendency to set and achieve goals and participate in other motivated behaviour such as looking for new opportunities.

Causality was negatively correlated with salience.(-0.3359, $p < 0.05$). The feeling that discrimination is personally relevant (or highly salient) is related to feelings of not being responsible for discrimination. Causality was also positively correlated with self-efficacy (0.3080, $p < 0.05$) the belief in ones ability to carry out future tasks. High self-efficacy is related to not feeling responsible for discrimination.

The Work Locus of Control Scale (WLCS) was negatively correlated with control (-0.3332, $p < 0.05$). Internal control beliefs were related to the feeling that there is something that the subject can do about discrimination.

The women who saw discrimination as long-term were those who reported having experienced discrimination, and who had high aspirations. The women who did not feel that they caused discrimination were high in self-efficacy and/or felt that discrimination was important to them. Women with internal control beliefs felt that they could do something about discrimination.

## 2) EXPERIENCES OF DISCRIMINATION

The amount of discrimination the subjects had experienced was positively correlated with aspiration (0.3311, $p < 0.05$) and work locus of control (0.3314, $p < 0.05$). Experiences of discrimination are related to high aspiration and external control beliefs. Experience of discrimination was also negatively correlated with control (-0.5581, $p < 0.001$) and number of promotions (- 0.3183, $p < 0.05$). Experiences of discrimination are related to not receiving promotion, and feelings of not being able to do anything about discrimination.

Familiarity with discrimination (high scores on the novelty scale), was positively correlated with negative carry-over (0.3197, $p < 0.05$) and promotion (0.4138, $p < 0.01$). Familiarity with discrimination was related to high negative carry over of work issues to other situations, and having been promoted.

Women who had reported having experiences of discrimination were high in aspiration, had external control beliefs, felt that there was nothing they could do about discrimination and had not received many promotions.

The women who were most familiar with discrimination experienced more negative carry over from work to other situations, and had received more promotions.

## 3) EFFECTS OF DISCRIMINATION

Anxiety-contentment was negatively correlated with salience (-0.3097, $p < 0.05$) and with work locus of control (-0.3633, $p < 0.05$). Anxiety is related to the importance of discrimination for the subject and to external control beliefs. Anxiety-contentment correlated (positively) with competence (0.3873, $p < 0.05$), aspiration (0.3228, $p < 0.05$) and depression-enthusiasm (0.6048, $p < 0.001$). Anxiety is related to low competence, low aspirations and depression. Anxiety-contentment was also negatively correlated with negative carry over (-0.4969, $p < 0.01$). Anxiety is related to the high negative carry-over from work to other areas.

Aspiration correlated positively with depression-enthusiasm (0.5505, $p < 0.001$) and competence (0.4547, $p < 0.01$), low aspiration is related to low competence and depression. Aspiration negatively correlated with self-efficacy (-0.4786, $p < 0.001$). Subjects low in aspiration were also low in self-efficacy.

Competence was negatively correlated with self-efficacy (-0.2956, $p < 0.05$). Low competence is related to low self-efficacy. Competence was positively correlated with depression-enthusiasm, (0.4405, $p < 0.01$) low competence is related to depression.

Depression-enthusiasm was positively correlated with the number of promotions the interviewees had received. (0.3342, $p < 0.05$) Not having been promoted is related to depression. Depression-enthusiasm was negatively correlated with the WLCS (-0.4392, $p < 0.01$). External control beliefs were related to depression.

Women who were anxious found discrimination important, had external control beliefs, low competence, low aspiration, were depressed and had high negative carry-over from work to other situations. Women who had low aspiration were depressed, had low self-efficacy, and low competence. The women who had low beliefs in their own competence also had low self-efficacy, and were depressed, and women who were depressed had received fewer promotions and had external control beliefs.

## 4) COPING WITH DISCRIMINATION

Relationships were found between the different types of coping strategies. Change the situation was negatively correlated with devaluation. (-0.3247, $p < 0.05$). High use of one strategy is associated with low use of the other. Accommodation was positively correlated with devaluation (0.3284, $p < 0.01$). Use of accommodation, changing wishes to match the situation, is related to use of devaluation.

Devaluation is also positively correlated with symptom reduction  (0.3884, p < 0.01) and avoidance (0.6378, p < 0.001).   The frequent use of devaluation is related to the frequent use of both symptom reduction and avoidance.  Avoidance and symptom reduction were also positively correlated,  (0.4352, p < 0.01), high use of avoidance is related to high use of symptom reduction.

Change the situation was positively correlated with aspiration (0.3843, p < 0.01) and depression-enthusiasm (0.6080, p < 0.001).  High aspiration and enthusiasm are related to the use of change the situation as a coping strategy.  Change the situation was negatively correlated with WLCS (-0.5247, p < 0.01).  Internal control beliefs are related to the use of the change the situation coping strategy.

Avoidance was negatively correlated with competence (-0.3247, p < 0.05),  aspiration (0.4123, p < 0.01) and depression-enthusiasm (-0.4343, p < 0.01).  Low competence, low aspiration and depression were related to the use of avoidance as a coping strategy.

Devaluation was negatively correlated with anxiety-contentment  (-0.3282, p < 0.05), competence (-0.4937, p < 0.01),  aspiration  (- 0.5241, p < 0.001)  and depression-enthusiasm  (-0.5268, p < 0.001).  Anxiety, low competence, low aspiration and depression are related to the high use of devaluation as a coping strategy.

Symptom reduction was negatively correlated with promotion (-0.3940, p < 0.01).  Not being promoted is related to the high use of symptom reduction as a coping strategy.

Women who tried to change the situation made less use of  devaluation,  but women who often used devaluation also often used accommodation and avoidance.  Women who made use of the strategies of devaluation and avoidance also used symptom reduction.

Women who were high users of  change the situation were high in aspiration,  had internal control beliefs and were enthusiastic.  Women who used devaluation as a coping strategy were anxious,  depressed and low in aspiration and competence.  Women who used avoidance as a coping strategy were depressed and were low in competence and aspiration.  Women who used symptom reduction as a coping strategy had received few promotions.

# DISCUSSION

## PERCEPTIONS OF DISCRIMINATION

The majority of academic women studied perceived the presence of gender discrimination in the university. What stood out for most women is the underrepresentation of women academics in the university, especially in relation to the number of female students. This was demonstrated by their responses when asked which faculties in the university discriminate most against women. The majority of women mentioned the faculties that are seen to be traditional subject areas for males, and where few women academics work. One woman mentioned the problems that women who enter a male dominated department may have with "men [who] have never worked with females, as colleagues, they may have worked with them as students or had females as secretaries, the danger then is when a woman walks into an environment like that, that they are treated like a secretary or student". However another woman who did work in a male dominated department, did not feel discriminated against on an individual level, although she claimed that her department was discriminatory because of the lack of women and their positions within the department.

The gender discrimination that women perceived to be present in the university was of two broad types, structural discrimination and individual discrimination. Individual was the most common, for example the majority of women perceived gender discrimination in terms of the expectations and perceptions that men had of them because they were women. The women spoke of evaluations "the fact that I was a female would stand in the way of them actually evaluating the work". They also mentioned assumptions "an assumption that women are inferior...even if the man is lazy and stupid, he's still better". Thirdly women spoke of the roles they feel they are expected to fulfil such as being good teachers or only good at traditionally female subjects. The women also perceived gender discrimination to be; being disadvantaged, given or denied opportunities, or differential treatment because of their gender. Structural discrimination was also mentioned in the definitions of gender discrimination. These were such things as perceived differences in pay and promotion. Differential appointment was not mentioned perhaps because all the women were successful in getting through that phase. Women who work in academia have been referred to as survivors of discrimination because they have been appointed and remain in their jobs (Hawkins and Schultz, 1990).

The academic women also had various perceptions about the nature of gender discrimination in the university. The perceived duration of the discrimination was affected by the amount of discrimination they had experienced. Women who had experienced discrimination perceived discrimination to be a long term phenomenon.
This perception reflects the length of the discrimination that many women had experienced, one woman had an experience that continued for about a year and a half. Some-

times an incidence of discrimination may be resolved but if the woman remains in the department, the effects that the discrimination had on her relationships with colleagues may linger. Alternatively women who have experienced gender discrimination may see it as long term because they are more aware of the impact of discrimination. So that they are more likely to recognise it when they next encounter it. One woman said that her experience of discrimination would make her " more mindful, of the ways in which discrimination can occur".

Gender discrimination was also perceived to be long term by women who scored highly on the aspiration scale. Aspiration measures involvement with the environment reflected in such behaviour as setting and achieving goals. These attributes may cause the women to be more aware of the effect of discrimination on their long term goals, and so they consider discrimination to be a long term problem.

The women who felt in some way responsible for gender discrimination were those who felt that discrimination was not important to them. Women for whom discrimination is not important may be able to admit that they contributed to discrimination precisely because it isn't important to them. Women who felt responsible for discrimination also had low self-efficacy. This suggests that these women may be blaming themselves and their own incompetence for the discrimination. This is a demonstration of the popular belief that competent women do not get discriminated against, that was mentioned by Wills (1983).

Women with external work control beliefs perceived discrimination to be more uncontrollable than those with internal beliefs. Women with external control beliefs believe that work outcomes are not controlled by their own actions and this leads them to feel that there is nothing that they can do about discrimination. Folkman (1984) considers the relationship between generalised control beliefs and situational control beliefs, she suggests that generalised beliefs have the most influence when the situation in unclear.

## EXPERIENCES OF DISCRIMINATION

The majority of interviewees felt that they had been discriminated against at some stage of their career. For fifty-four percent of the women the gender discrimination had occurred at Massey. This is a larger number than that found by Ponter, Loveridge and O'Neill (1989) who report that thirty percent of their sample felt discriminated against because of their sex at Massey. However in their study a further twenty-one percent felt that they had been discriminated against because of their marital status or because they had responsibility for children. Wilson (1986) found that thirty-five percent of her sample of New Zealand women academics had encountered discrimination. Women may be becoming more aware of discrimination as more EEO initiatives are introduced into universities. One woman in the present study said that in a previous study she had answered that she had never experienced discrimination because she "didn't want to be

sort of pushed into the bunch of victims feeling sort of miserable". The wording of the questions also influences responses, the present study focussed on perceived discrimination, so it was whether the women *felt* discriminated against that was important.

The previous studies of women academics in New Zealand (Wilson, 1986; Ponter et al, 1989) have not included information about the type of gender discrimination that the women have experienced. Some women in the present study had experienced more than one type of discrimination, and some women had at different stages of their career experienced discrimination in their favour as well as discrimination against them. The discrimination that the women experienced was divided into two broad categories, structural and individual. The most common type of gender discrimination that the women reported was from individuals. This may reflect efforts by the university such as EEO initiatives, which may be helping to bring about changes at a structural level, but which are not resulting in the changing of attitudes. For example Crossan (1994) says "no one now is going to say, 'we don't believe in EEO'. They might want you barefoot and pregnant in the kitchen, but they're not going to say that any more" (p. 253). The discriminatory attitudes are demonstrated in interactions with female colleagues. The interviewees in the present study had encountered men who tried to take over their research, a man who "didn't think that women should be opening their mouths at all", general chauvinism, and harassment (sexual and non-sexual). Some women had experienced instances of being ignored by their male colleagues, especially in meetings. This type of discrimination is mentioned by Sekaran and Kassner (1992) and Henry (1990), Sekaran and Kassner suggest that it can lead to women doubting their communication skills.

In addition to the individual discrimination and confirming other research findings (Cass et al, 1983; Sekaran and Kassner, 1992) a large number of women felt discriminated against in the area of pay and promotions. Which suggests that structural barriers to women's success are still in place. Access to facilities such as computers were also mentioned, this problem was also reported by Sekaran and Kassner (1992). Cockburn (1991) also found two types of discrimination present in the organisation she studied. She termed these "institutional and cultural" barriers to sex equality. She saw institutional barriers as being structures, procedures and rules, cultural barriers surface in discourse and interaction. She also mentions that there is a two way interaction between cultural and institutional discrimination "Structures can be changed in the right cultural environment. But structures predispose how people think and act" (p. 45).

Gender discrimination should be considered in it's social context. Gender discrimination is about power and control. Cockburn (1991) says that "organisation is precisely and uniquely the means by which power is effected. Men are not about to let down the drawbridge on their castles" (p. 17). Gender discrimination as experienced by academic women, fits into Colwill's (1993) concept of organisational power. Colwill

(1993) suggests that there are three types of power in organisations. The first is personal power which includes individuals control beliefs, the second, interpersonal power is the individuals ability to influence others and finally organisational power is the individuals ability to mobilise resources. Gender discrimination fits into these three interactive levels. The first level of personal power reflects the stereotypes and other socialised beliefs about themselves that women hold, for example women should be at home with their families. The second level of interpersonal power is affected by the stereotypes and beliefs that others have about women, for example the attitude that all women are distracted by their families. The third level is that of organisational power, this could be illustrated by the provision of childcare facilities by the university.

Colwill (1993) suggests that the level of organisational power is where women have the most control. The experiences of discrimination in the women studied reflect this, the most common form of gender discrimination against women was from individuals and the most common form of positive discrimination was organisational, such as being asked to sit on committees. Which suggests that women are bringing about change on an organisational level.

The majority of women felt that they were not judged by the same standards as their male peers. Some women mentioned that they have to work harder and faster than their male peers. The feeling that women have to work harder than male colleagues has been reported by other researchers, for example Henry (1990) who suggest that women tend to be over-achievers because "the system is such that those who aren't fall away" (p. 128). Gornick (1983) found many women in her study felt that they had to prove their competence. Other women in the present study said that they were judged according to stereotypes of women held by their male peers. For example some male colleagues assumed that a family is disruptive to women academics but in fact one woman reported that " in fact a lot of the males around here, go away more than the women in the school holidays looking after the children". Wilson (1986) found that many women felt that after they had had their first child it was assumed by others that they would not want to advance their career. Other women in the present study felt that they had different values to the men they worked with and that this led to their work being judged differently.

When asked to compare their careers with a similarly qualified male, the majority of academic women felt that their career paths were different, mostly in terms of their pay and promotion which had been slower than men's. Other factors were also mentioned such as only working part-time which affected promotion chances, not carrying out research while raising children, and the trouble that academic women in a dual earning relationship have competing with colleagues that have no home duties. Aisenberg and Harrington (1988) highlight that this is a problem for both men and women in a dual earner partnership, in fact in their study most of the male partners in dual earner couples were not involved in the career oriented fast-tracks of their professions.

One woman mentioned her struggle to get into a male dominated field and how she was discouraged by careers advisers.

Other comments were also made about career progress, many of the women felt that their work experience outside academia was not considered relevant experience. This however was dependent on the area of specialisation. Some fields valued professional qualifications and experience, and this was reflected in pay and promotions. Other fields who had a greater emphasis on research did not value non-academic experience. These findings seem contrary to findings by Cass et al (1983) who found that more men (seventy-three precent) than women (fifty-five percent) had relevant work experience outside the university. But they also found that those women in higher positions had had more work experience outside academia. Wilson (1986) also found that more men than women had spent time in related employment outside academia, and she also feels that related employment enhances qualifications.

Women with high aspiration reported experiencing more discrimination. This may reflect that these women have had more opportunities to be discriminated against. Women with higher aspirations may be seen as threatening by male colleagues. Simeone (1987) reports the experiences of one academic who suddenly realised that the men felt threatened by her presence in the workplace. She realised that women were "in power not in their place, not serving men, not serving them, They were worried about themselves " (p. 81). La Fontaine (1988, cited in Sekaran and Kassner, 1992) found that women who were "savvy, smart, competitive, or assertive "(p. 179) were discredited, devalued and confronted by men in a group situation. One of the women interviewed by Ponter et al (1989) felt that "ambitious women" was used in a negative way whereas "ambitious men" was positive.

In the qualitative interviews some women did indeed report feeling that their male colleagues saw them as a threat. One woman talked of the attitudes of some of her male colleagues to the women in the department: " it was said by one person in the department...that there were already too many strong women in this department and so they did not want to interview a particular person [woman], for a position". Wills (1983) quotes a woman who felt that she had encountered more discrimination in recent years "When I was content to try to be a girl among the boys, I seemed to be accepted at that level. These days I seem to constitute a threat". This may help to clarify findings such as that of Temple (1983) who discovered that "women in science tend to believe less in discrimination against women within universities and to be more optimistic about promotion this, in spite of the concentration of their numbers near the bottom rungs of the hierarchy to a greater extent than in the arts faculties" (p. 171). In fact because there are fewer women in these areas they may not be seen as threat by colleagues and those in power, and so may encounter less discrimination on a personal level.

Women who had external work locus of control beliefs had experienced more discrimination than those with internal beliefs. Discrimination is irrational and breaks the rule that hard work gets rewarded, which could result in the women who experience discrimination seeing external forces has having more influence than internal strivings which may not be rewarded. Discrimination reinforces women's sense of powerlessness this may make it very difficult for women to do anything about discrimination. Women who had experienced discrimination felt that they could not do anything about discrimination. Folkman (1984) says that appraisals of control can change as a stressful event occurs, and as a result of new information about the situation. This creates an almost circular trap for the women who are unable to do anything about the discrimination because of this loss of control.

Subjects who had received more promotions did not feel discriminated against. This is probably in fact because they had received promotions. Although the women with more promotions had not had so many experiences of discrimination at Massey, they were still familiar with discrimination. They may have experienced discrimination in previous positions or it could be that these women took an interest in discrimination and it's prevention, which suggests that the women in more senior positions, are not ignoring the problem of discrimination. This is reflected in the qualitative interviews where a number of women mentioned that they felt that they would do something if they saw discrimination happening to someone else. For example one woman said that she would in some situations take the discriminator aside and ask them if they realised the consequences of what they are doing. Familiarity with discrimination also led to higher negative carry over from work to other situations.

Some women had also experienced positive discrimination, most of the women did not feel negative towards this but supported EEO initiatives. Some of the incidences that the women reported as positive discrimination could be interpreted as negative, in fact some women's experiences of positive discrimination were other women's experiences of negative discrimination. One woman reported that she held a supernumerary lectureship that was due to positive discrimination, but another woman reported her supernumerary lectureship as discrimination against her, because the department was using the position to avoid giving her a real job. This also meant that she could not apply for promotion from the position. Another example of positive discrimination that may not have positive consequences was the tendency to give women favourable treatment such as "possibly not subjecting you to as... many rigorous questions". The effect on women's scholarship of not being as intellectually challenged as men may be negative. An article by Kitzinger (1994) sees intellectual criticism and challenge as having a positive effect on work, and feels that being easier on women "perpetuate[s] the old stereotype of women as sensitive blossoms unsuited to the cut and thrust of academic debate" (p. 15). She felt complimented by the attacks on her work as it was an indication that she was being taken seriously and that she was "worthy of insult challenge and engagement" (p. 15).

Another example of positive discrimination that could lead to negative effects is being asked to sit on committees. Hawkins and Schultz (1990) warn against this saying that women should not sit on committees until they have tenure (and then they should sit on the status of women committee). Sekaran and Kassner (1992) also mention the danger of committee work, and the fact that "placing women in insignificant committees as token members" (p. 176) prevents them from producing research publications. The interviewees did mention their committee work, one woman said that "it's very hard when someone else on the committee, says young females shouldn't be on his committee, they should be off, doing the research and furthering their career". She had justified her committee work because she felt that the type of committee she was on benefited her research. Another woman spoke of the problems that she saw women in her department were having "women are actually getting overloaded, because they are having positive discrimination because they're women, you've got to have a woman on this committee".

Stereotypes are a common base of discrimination. The interviewees mentioned stereotypes in the answers to many questions. When asked to define discrimination the women talked of roles and assumptions men had of women, many of these were stereotypes such as "women won't work as hard or they're unreliable or scatty or distracted by their family". In the types of discrimination that women experienced women reported discrimination from individuals who often held stereotypical attitudes about women, that they would not be assertive in protecting their work, should do as they are told, or shouldn't speak out. The women also felt that the men judged them according to stereotypes, these were being seen as aggressive not assertive, thinking that women are soft markers and making assumptions about the interaction between age and gender.

Stereotypes may affect women because they highlight many attitudes that women are socialised to believe. Stereotypes are insidious and covert and women might not realise how many they have internalised. Aisenberg and Harrington (1988) mention how women encounter stereotypes and traditional norms projected from others, and also their own internalisation of stereotypes. They say that "unavoidably, women follow the old scripts even as they embrace the new, which means to a certain extent they are carrying on a battle within themselves, as well as with the outer world" (p. 7). Aisenberg and Harrington (1988) were referring specifically to marriage and family, but this conflict applies to other internalised stereotypes. Hamilton, Alagna, King and Lloyd (1987) also suggest that discrimination activates the internalised social stereotypes that women hold. Gallant and Cross (1993) also comment on the use of stereotypes against women, "while at the level of collective myth there is the vision of a future free from demeaning gender stereotypes ... in fact there is little change in the values typically used to interpret women's acts" (p. 250).

The feelings of being discriminated against that the women reported did lead to effects on their mental health. Anxiety was common in those women for whom discrimination was an important and salient issue. Anxiety was associated with more negative carry over from work to other situations. This relationship was also found by Warr (1990). Crull (1984) also reported that the effects of sexual harassment were not limited to the work setting.

Women with external work control beliefs were anxious and depressed. Previous research on stress and control has shown that perceived control over a stressor reduces the psychological effects. For example Carmen, Russo and Miller (1981) mention that women's stress is more affected by events they cannot control. Heaney (1993) found that depression was reduced when workers had control over work pace and participated in decision making. Warr (1987) also says that mental health is enhanced by perceived control. Hamilton et al (1987) mention the importance of control, they say that if women believe discrimination is irrational this increases their perceived loss of control.

Women who had received few promotions were depressed. This adds to the findings of Harrell (1993) who found that not being promoted to a management position was related to low job satisfaction. Greenglass (1990, cited in Korabik, McDonald and Rosin, 1993) states that women managers who are in jobs that do not fully use their skills, suffer from anxiety, depression, psychosomatic symptoms and low job satisfaction.

Poor affective mental health, anxiety and depression, were associated with each other and with lower levels of other aspects of well-being such as competence, aspiration and self-efficacy. Warr (1990) also found his measures of well-being to be interrelated.

There also appears to be a relationship between aspiration, self-efficacy and competence. Women with low competence do not believe that they have the ability to cope with problems they encounter on the job, this is associated with lower self-efficacy or belief in one's ability to carry out future tasks. Low competence is also associated with feelings of anxiety and depression.

Women with low aspiration have a reduced involvement with their environment and are more likely to accept work conditions even if they are unsatisfactory. Withdrawal and avoidance were common effects of discrimination reported by the academic women. Low aspiration is associated with low competence low self efficacy, depression and anxiety.

Discrimination often has the effect of reducing the confidence of women in their own abilities. This has been shown by previous research (Nielsen, 1979; Hamilton et al,

1987; Aisenberg and Harrington, 1988) and in the interviews some of the women mentioned their feelings of undermined confidence. If discrimination does have the effect of reducing the confidence of women (for example their competence and self-efficacy) then discrimination has a potential negative impact on the mental health of women. Low levels of competence, aspiration, and self efficacy are linked to depression and anxiety. A few of the women reported feeling depressed as a result of experiencing discrimination.

The academic women found that experiencing gender discrimination lead to a variety of emotional effects, the most common of these were anger, and disappointment. Anger is a common reaction that has been documented in the previous literature (Aisenberg and Harrington, 1988; Hamilton et al, 1987). Crull (1984) found that a common result of suppressing anger was depression.

The women also felt that gender discrimination had an effect on their work life, some women felt that it resulted in them putting less effort into their work. For other women discrimination had the effect of making them work harder sometimes in an effort to overcome the discrimination. One woman mentioned the negative effects that can occur when a woman works too hard. "I'm trying to achieve and maybe will achieve more than if I wasn't discriminated against but then sometimes that can also go against you, in the fact that you work so hard that you get sick because of it, you get overworked and stressed".

The academic women studied also felt that gender discrimination had an effect on their future aspirations and goals. Many women had left a situation as a result of discrimination, others felt that their goals had been lowered or blocked. This supports the findings of Cass et al (1983) that the women who were most confident about receiving promotion were those who had not experienced discrimination. The women also felt that discrimination had a negative effect on others that witness it, especially if they regard the person who encounters discrimination as a role model.

There did tend to be levels of discrimination with some women experiencing severe and long term discrimination and others reporting experiencing one incidence or milder discrimination. The correlational data used in this study indicates that those women who reported more severe discrimination are experiencing more severe psychological effects.

## COPING WITH DISCRIMINATION

In addition to the effects of gender discrimination, the methods that women used to cope with discrimination were also explored, both with the Cybernetic Coping Scale and in the qualitative interviews. There are relationships between the different coping strategies.

Two of the strategies were related negatively, women who often tried to change the situation, made less frequent use of devaluation. Devaluation may not be used with change the situation, because the problem must be seen as important for the effort to change the situation to be made.

The frequent use of accommodation was related to the frequent use of devaluation. Edwards and Baglioni (1993) also found that there was a correlation between the accommodation and devaluation scales. They say that this correlation is caused by two items in the accommodation scale that load onto the devaluation factor. Only twenty items were used in the present study, so the scale only included one of these items. Devaluation and accommodation may then be related, for example one of the interviewees said "so I said as long as I get enough time and equipment to do my research I don't care if I'm a lecturer a senior lecturer or whatever" she went on to say how she had received some new equipment. This has elements of both accommodation and devaluation, decreasing the importance of the discrimination by saying that she does not care if she is a senior lecturer or a lecturer, and changing her wishes would be her emphasis on having equipment for her research.

The frequent use of devaluation is related to the frequent use of both symptom reduction and avoidance. Edwards and Baglioni (1993) found a relationship between the devaluation and avoidance scales which they interpreted to suggest that avoidance may be preceded by deciding that the problem is unimportant. Symptom reduction may also only be used when the women have devalued the problem. Avoidance is also used frequently with symptom reduction. Avoidance is directing attention away from the situation and an effective way of doing this may in fact be to improve well-being by using symptom reduction strategies.

As expected those women with internal work locus of control beliefs were more likely to try to change the situation in dealing with problems at work. Heaney (1993) stated that active problem solving strategies were used when people had perceived control over the situation. She also says that those who believe that they can change the situation are more persistent in their attempts. Women with high aspiration are involved in their work, set goals and make efforts to achieve them, these women also frequently use change the situation as a coping strategy, as do enthusiastic women.

Colwill (1993) says that "it is possible that locus of control and gender interact in some way, so that for women even moderate levels of internal locus of control may result in high levels of managerial effectiveness" (p. 81). It may be that it is not the relationship between locus of control and gender in isolation that results in increased effectiveness, the relationship to coping strategies and mental health may also contribute to this effect.

The use of coping strategies was related to the women's mental health. Women with low competence, low aspiration and depression were most likely to use avoidance as a

coping strategy. Women who used devaluation as a coping strategy were anxious had low competence, low aspiration and were depressed. Women who had not received promotions frequently used symptom reduction as a coping strategy. Women with low competence may make more use of avoidance and devaluation because they do not believe they have the skills to cope in a more direct manner.

The pattern that emerges from this data is that mental health is associated with the coping strategies the women used. The women who exhibited poorer work related mental health were the ones who used the more emotion focussed strategies, for example depressed women made use of devaluation and avoidance. Women with internal control beliefs, high aspiration and enthusiasm made direct efforts to change the situation. The women with poorer mental health may chose to use the emotion focussed strategies, or poor mental health may be a result of using these strategies which may make it increasingly difficult to cope with the situation. Carmen, Russo and Miller (1981) claim that the "expectation of powerlessness and the inability to control one's own destiny prevents effective action" (p. 1322).

The qualitative data provide more information on the coping strategies used by the women to cope with gender discrimination. The majority tried to change the situation, in one of two ways, either by changing themselves or by changing the situation. Self-change was most commonly used in situations where formal change had proved ineffective or was inappropriate to the situation. Talking about discrimination with friends or partners was also popular, this was most often for emotional support. The majority of women did find that this emotional support helped them cope with discrimination, this support came mainly from female work colleagues. McDonald and Korabik (1991a, cited in Korabik, McDonald and Rosin, 1993) found that direct action was the most common method of dealing with employment-related stress and that women mangers talked to others about their problems more than men. Colwill (1993) also found that women cope through seeking the support of other people, she also found that women were more likely to talk to people outside their workplace than men. McDonald and Korabik (1991b, cited in Korabik et al, 1993) found that women found their spouses more helpful in supporting them than men did.

McDonald and Korabik (ibid) also found that women preferred emotional support (having someone listen) and the men preferred practical help such as information. This may be reflected in the type of support that is provided by men and women. Some of the interviewees commented that they found other women very ready to listen to their discrimination problems, but they tended to have the attitude of that is what life is like. The men were more action oriented and wanted the women to do something about the situation. Those women who did not find social support helpful mentioned the lack of advice from other women, their lack of female colleagues and the confidentiality of the situation which prevented sharing it.

Few women mentioned coping strategies that could be categorised as devaluation or accommodation this may be because if these strategies were used the women may not see the incidents of discrimination as a problem. For example, one woman claimed she didn't experience discrimination but that she "just put[s] up with the sexist comments and things like that". This woman may in fact have been using devaluation to deal with these incidents. Colwill (1993) says that "denial of personal discrimination may make it possible for women to get on with the day to day business of effective and competent work behaviour" (p. 83).

The women also talked about the things that they thought would help them cope with discrimination. Most women wanted more information and education, this covered a wide range of requests from career planning to raising peoples awareness of discrimination. More support and mentoring were also requested, this could be a key to academic success. Simeone (1987) found "that psychological support may mean at least as much as initial qualifications in giving women the courage to try and the will to succeed" (p. 91).

The coping strategies used to deal with discrimination may also fit into Colwill's (1993) framework of power in organisations. On the level of personal power some women made attempts to change themselves by adding to their research publications. The level of interpersonal power, reflects such actions as that of one woman who put herself in a position where she felt she could go to her HoD or Dean when she encountered discrimination, or the feeling among some of the women that women in senior positions should do something about discrimination when they see it happen. The third level organisational power would include bringing a case against the discriminator, or recruitment policies to encourage more women into certain fields.

Most women thought that women were able to acknowledge gender discrimination, some felt that discrimination can be acknowledged without becoming a victim and others felt that women were more likely to acknowledge discrimination now that the victim mentality was no longer popular. Some women however thought that there is possibly a pressure to be strong and not acknowledge discrimination. One woman felt that sometimes there is an expectation that you should always stand up and fight. She felt that this might be a pressure for some women. She felt that fighting is not the best thing to do for everybody, " I would be very loathe to say to any woman to go to court or anything like that to try and prove it" because of the effects such action has on the woman. Another women spoke of her reluctance to confront the discrimination she experienced " I was quite reluctant to say anything for awhile because that's not the way I like to work I don't like to be pushy".

There is also sometimes a blame the victim attitude, even among women, which may discourage women from fighting discrimination. Wills (1983) reports this tendency among women to blame the victim, it is characterised by the belief that competent

women do not get discriminated against. This attitude is still present even in women, one of the interviewees reported feeling doubts about women's competence if they had experienced discrimination, "I think to a certain extent it puts a question mark in your mind ...like perhaps it's partly their fault".

## RELATIONSHIPS WITH COLLEAGUES

The women felt that they did not have much contact with women in other departments or faculties. This increased the isolation that was felt by some women who were not sure if they were the only ones experiencing discrimination. One woman for example said "I wasn't too sure if it was just happening here, and I don't like to go asking other people you know it's sort of not the thing you like to say, I don't know that many other women around".

The women also felt excluded from the male dominated informal networks in the university. The women made comments about male networking and one woman suggested that it was important for the formation of research teams, and funding sources. Another woman thought that men tend to work in a political manner, those at the top will 'buy' other men off, if they think that these men are a threat to their position, and then assist each other to hold power, she though that this had the effect of "keeping the males quite but also excluding the women". This is similar to previous findings such as Cass et al (1983) and Sekaran and Kassner (1992) who have found that women often feel excluded from informal networking, such as conversations in corridors and lunchrooms.

One woman who did feel included in the male networks, thought that it was up to the individual women to include themselves. Many women felt that women had to really push and make an effort to be included. Some women had chosen to remain uninvolved on purpose, because they did not want to become involved in political manoeuvring. Some women spoke positively of the women's networks that they had set up for themselves.

These findings agree with those of Smith (1992) who says that women feel less excluded now than previously because they have formed their own networks. Women's networks may not be the complete answer to making women feel included in the university however. The women mentioned the separateness of the male and female networks and how the women's network was in fact not as powerful as the men's. One woman suggested that this may be a result of time spent in the university rather than consciously men and women. She suggests that new people tend to stick together and because the majority of new staff are women, this results in a gender power division. Cockburn (1991) found that the men in the organisation she studied thought of their organisation as a " male hierarchy with women in it" (p. 56). The men express this by forming a masculine culture that make women feel out of place. This is reflected in the comment by one interviewee who said "I definitely feel alien".

Sekaran and Kassner (1992) found that many of the men that women academics work with do not respect women. Cass et al (1983) found that the women in their sample felt that male colleagues treated women as though they were "superficially equal but basically inferior and beneath serious consideration". In the present study the majority of women reported no problems with the way they were treated by their male colleagues. Contrary to Sekaran and Kassner's (1992) findings many women mentioned that the men respect the women. Some women had experienced problems with specific individuals with whom they did not get on and others had problems with all their male colleagues.

Simeone (1987) found that the informal conversations with male colleagues stuck to subjects that would not threaten the men, for example "how's the baby? not what are you working on?" (p. 88). This also serves to remind women of their family life when they are trying to think of work issues. A woman in the present study made a similar comment that the men were not willing to speak of their research with her, " from the very day I arrived nobody has ever asked me what I do, the people I work with don't know the research I do, nobody has ever asked me, and I've been here for years". Another woman felt that she could not speak to the men in her department about her family even though many of them were involved with their own families because "it's as if you're admitting that you can't do two jobs at once". This reflects the attitudes found by McDonald (1994) who says that "Women have worked hard to ensure personal family situations impact as little as possible on their ability to carry out their jobs". Aisenberg and Harrington (1988) also found that women do not feel that they can speak of problems or their personal lives when they are at work.

On the whole the women got on well with their female colleagues, and only one woman felt that she was treated the same way by her male and female colleagues. Most of the women felt they had a supportive relationship with their women colleagues. Others felt that networking between women was all an act and false, so chose not to become involved. Some women had problems with their female colleagues. Some women felt that they did not have the time to have a relationship with their colleagues. Other women found their women colleagues very competitive and others felt excluded from the networks of female colleagues, because they were not considered feminist enough. Henry (1990) found that the women at the university she studied, felt that women were so competitive that they did not offer each other support or co-operation.
Some women made comments about their relationship with the general staff (office workers and technicians), some women who had no fellow academics spoke of the support they had received from the general staff. Other women had trouble with the general staff, one woman said " I've always found that women don't like, having a woman boss, they're more comfortable, being told what to do by a man". Another woman felt that one of the staff women was jealous of her position as an academic. Cockburn (1991) found that male subordinates were also unwilling to accept the authority of women.

Gender discrimination also affected the women's relationships with others at work and home. At work discrimination often resulted in the woman avoiding a particular person. Many women spoke of the extra support that they needed from their personal friends to help them through discrimination. However some women did feel that discrimination had caused some problems in their relationships.

Academic women at Massey do perceive the various types of gender discrimination that occur in the university. The gender discrimination is affecting women's well-being at work, but the majority of women are coping with the discrimination.

# CONCLUSION

Academic women do perceive the gender discrimination that is still present in the university. The majority of women had experienced gender discrimination at some stage of their career. Most women had encountered individual discrimination against them and structural discrimination in their favour. Most academic women did not feel included in the informal networks of the university. The women's networks women have set up for themselves have helped women feel less isolated, but they still do not have the power of the male dominated networks. The gender discrimination did lead to a variety of negative effects on the women who experienced it. Most of the academic women studied dealt with discrimination in a direct way, usually by trying to change the situation.

In order for universities to prevent gender discrimination they need to increase women's power on three levels. Firstly women's sense of personal power, this would cover such things as increasing the research self-efficacy of women. Secondly women's interpersonal power, by increasing education for men about the effect that their attitudes have on women. On the third level (organisational power) there is already evidence of efforts to empower women such as EEO policies. These three levels are interactive, this means that change on only one of the three levels may not always be effective.

Changing the overall policies towards women in the university does not change the attitudes of the individual men who the women work with. Change on a structural level has resulted in many women encountering positive discrimination. However many men in the university still hold attitudes about women, their roles and position that lead to discriminatory actions against women.

Further study into the effects of discrimination is still necessary. The use of correlational data does not establish causality, further systematic research needs to establish whether discrimination is in fact the cause of lower work related mental health, and whether some women may be more susceptible to the effects of gender discrimination than others.

There is a need for more research into the different types of gender discrimination. Some types of discrimination may result in more severe effects than others. In addition to researching the effect that type of discrimination has on women's mental health, the effect of severity and duration of the discrimination should also be explored. Discrimination is not static but changes with time. future research should consider the new ways that discrimination is manifested. For example recent EEO policies that have increased the representation of women on committees actually prevent women from carrying out the research necessary for promotion.

More research on the coping strategies of women who are dealing with gender discrimination is also needed. Particularly to discover if there are links between the type of gender discrimination encountered and the coping strategies used to deal with it. For example some women had the attitude that it was impossible to change the behaviour of an individual. This type of individual gender discrimination may be perceived as less likely to respond to direct action and so women may resort to more internal coping strategies. Many women had experiences of discrimination that continued on for some time, for this reason the use of coping strategies over time should be researched, women may begin with one strategy and change if it is ineffective.

Women can hope that the increased understanding of the causes and impact of discrimination, provided by future research, will help to provide a workplace environment that becomes increasingly positive towards women and their work.

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# APPENDICES

## APPENDIX ONE: INTERVIEW SCHEDULE

1) In your opinion which are the three faculties that discriminate most against women and why?

2) What do you personally think gender-based discrimination is?

3) Do you think that women are made to feel included in the informal networks that operate in the university?

4) Do you feel that you are judged by the same standards as your male peers.

5) How would you describe the way you are treated by your male colleagues?

6) How would you describe the way you are treated by your female colleagues?

7) Compared to a man of similar qualifications how do you think your career has differed?

8) Have you ever felt that you were being discriminated against because you were a woman?

9) Have you ever felt that there was discrimination in your favour because you were a woman?

10) What effect did the discrimination have on you personally?
   on you emotionally?
   on your work life?
   on your personal relationships?

11) What effect did the discrimination have on your future aspirations and goals?

12) How did you cope with the discrimination?

13) Did you find social support helpful?
   (Was this from professional colleagues or personal friends or family were they male or female).

14) How do you think that noticing discrimination against others, effects other staff and students?

15) What aids would you like to see made available to help women cope with discrimination?

16) Do you think that the decrease in the popularity of the victim mentality among women, (if you think it has decreased) affects women's willingness to acknowledge discrimination, because they do not want to be seen as a victim.

# APPENDIX TWO: PSYCHOMETRIC SCALES

## QUESTIONS ABOUT YOUR JOB:

| circle the number that best describes what you believe | disagree very much | disagree moderately | disagree slightly | agree slightly | agree moderately | agree very much |
|---|---|---|---|---|---|---|

1) A job is what you make of it. ............ 1 ............ 2 ............ 3 ............ 4 ............ 5 ............ 6

2) On most jobs, people can pretty much accomplish whatever they set out to accomplish. ............ 1 ............ 2 ............ 3 ............ 4 ............ 5 ............ 6

3) If you know what you want out of a job, you can find a job that gives it to you. ............ 1 ............ 2 ............ 3 ............ 4 ............ 5 ............ 6

4) If employees are unhappy with a decision made by their boss, they should do something about it. ............ 1 ............ 2 ............ 3 ............ 4 ............ 5 ............ 6

5) Getting the job you want is mostly a matter of luck. ............ 1 ............ 2 ............ 3 ............ 4 ............ 5 ............ 6

6) Making money is primarily a matter of good fortune ............ 1 ............ 2 ............ 3 ............ 4 ............ 5 ............ 6

7) Most people are capable of doing their jobs well if they make the effort. ... 1 ............ 2 ............ 3 ............ 4 ............ 5 ............ 6

8) In order to get a really good job you need to have family members in high places. ............ 1 ............ 2 ............ 3 ............ 4 ............ 5 ............ 6

9) Promotions are usually a matter of good fortune. ............ 1 ............ 2 ............ 3 ............ 4 ............ 5 ............ 6

10) When it comes to landing a really good job, who you know is more important than what you know. ............ 1 ............ 2 ............ 3 ............ 4 ............ 5 ............ 6

11) Promotions are given to employees who perform well on the job. ............ 1 ............ 2 ............ 3 ............ 4 ............ 5 ............ 6

12) To make a lot of money you have to know the right people. ............ 1 ............ 2 ............ 3 ............ 4 ............ 5 ............ 6

13) It takes a lot of luck to be an outstanding employee on most jobs. ............ 1 ............ 2 ............ 3 ............ 4 ............ 5 ............ 6

14) People who perform their jobs well generally get rewarded for it. ............ 1 ............ 2 ............ 3 ............ 4 ............ 5 ............ 6

15) Most employees have more influence on their supervisors than they think they do. ............ 1 ............ 2 ............ 3 ............ 4 ............ 5 ............ 6

16) The main difference between people who make a lot of money and people who make a little money is luck. ............ 1 ............ 2 ............ 3 ............ 4 ............ 5 ............ 6

| | strongly disagree | disagree | neither disagree nor agree | agree | strongly agree |
|---|---|---|---|---|---|

1) I can do my job well. .............................. 1 ............. 2 ............. 3 ............. 4 ............. 5

2) In my job, I make a special effort to
keep trying when things seem difficult. ................. 1 ............. 2 ............. 3 ............. 4 ............. 5

3) I am not very interested in my job. ...................... 1 ............. 2 ............. 3 ............. 4 ............. 5

4) I find my job quite difficult. ................................ 1 ............. 2 ............. 3 ............. 4 ............. 5

5) In my job I often have trouble coping. ................. 1 ............. 2 ............. 3 ............. 4 ............. 5

6) I enjoy doing new things in my job. ...................... 1 ............. 2 ............. 3 ............. 4 ............. 5

7) I sometimes think I am not very
competent at my job. ........................................ 1 ............. 2 ............. 3 ............. 4 ............. 5

8) In my job I like to set myself
challenging targets. .......................................... 1 ............. 2 ............. 3 ............. 4 ............. 5

9) I prefer to avoid difficult activities
in my job. ........................................................ 1 ............. 2 ............. 3 ............. 4 ............. 5

10) I am not very concerned how
things turn out in my job. .................................. 1 ............. 2 ............. 3 ............. 4 ............. 5

11) I can deal with just about any
problem in my job. ........................................... 1 ............. 2 ............. 3 ............. 4 ............. 5

12) I feel I am better than most people
at tackling job difficulties. ............................... 1 ............. 2 ............. 3 ............. 4 ............. 5

13) After I leave my work,
I keep worrying about job problems. ................... 1 ............. 2 ............. 3 ............. 4 ............. 5

14) I find it difficult to unwind at the
end of a workday. ............................................ 1 ............. 2 ............. 3 ............. 4 ............. 5

15) I feel used up at the end of a workday. ............... 1 ............. 2 ............. 3 ............. 4 ............. 5

16) My job makes me feel quite exhausted
at the end of a workday. ................................... 1 ............. 2 ............. 3 ............. 4 ............. 5

1) Sometimes I think I can't resolve job
problems as well as my
fellow employees. ..................... 1 .............. 2 ............. 3 ............. 4 ............. 5 ............. 6 ............. 7

2) Job pressures and problems that I experience
are often due to the fact that I am not as capable
of controlling what happens on the job
as other people would be ....... 1 .............. 2 ............. 3 ............. 4 ............. 5 ............. 6 ............. 7

3) If I'm being treated unfairly on the job, I am as
competent and capable as anyone else would be
of changing the situation. .... 1 .............. 2 ............. 3 ............. 4 ............. 5 ............. 6 ............. 7

4) Even when I'm under a lot of pressure on the job,
I am at least as good at solving job problems as the
other people at work. ............ 1 .............. 2 ............. 3 ............. 4 ............. 5 ............. 6 ............. 7

5) When job problems occur, I seem to be at least as
skilful at solving them as most of the other people
that I work with. .................... 1 .............. 2 ............. 3 ............. 4 ............. 5 ............. 6 ............. 7

Thinking of the past few weeks, how much of the time has your job made you feel each of the following:

| | never | occasionally | some of the time | much of the time | most of the time | all the time |
|---|---|---|---|---|---|---|
| 1) Gloomy | 1 | 2 | 3 | 4 | 5 | 6 |
| 2) Calm | 1 | 2 | 3 | 4 | 5 | 6 |
| 3) Uneasy | 1 | 2 | 3 | 4 | 5 | 6 |
| 4) Enthusiastic | 1 | 2 | 3 | 4 | 5 | 6 |
| 5) Cheerful | 1 | 2 | 3 | 4 | 5 | 6 |
| 6) Worried | 1 | 2 | 3 | 4 | 5 | 6 |
| 7) Contented | 1 | 2 | 3 | 4 | 5 | 6 |
| 8) Tense | 1 | 2 | 3 | 4 | 5 | 6 |
| 9) Depressed | 1 | 2 | 3 | 4 | 5 | 6 |
| 10) Optimistic | 1 | 2 | 3 | 4 | 5 | 6 |
| 11) Relaxed | 1 | 2 | 3 | 4 | 5 | 6 |
| 12) Miserable | 1 | 2 | 3 | 4 | 5 | 6 |

Please circle the number which best reflects how you deal with problems that you encounter in your job.

|  | did not use at all | | | | | | used very much |
|---|---|---|---|---|---|---|---|
| 1) I tried just to let off steam. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2) I tried to convince myself that the problem was not very important after all. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3) I tried to keep myself from thinking about the problem. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4) I told myself the problem was unimportant. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5) I tried to turn my attention away from the problem. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6) I just tried to relieve my tension somehow. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7) I tried to change the situation to get what I wanted. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8) I told myself the problem wasn't so serious after all. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9) I made an effort to change my expectations. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10) I refused to think about the problem. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11) I focused my efforts on changing the situation. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12) I tried to convince myself that the way things were, was in fact acceptable. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13) I told myself the problem wasn't such a big deal after all. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14) I tried to just get it off my chest. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15) I tried to adjust my expectations to meet the situation. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16) I worked on changing the situation to get what I wanted. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 17) I tried to avoid thinking about the problem. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 18) I just tried to relax. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 19) I tried to fix what was wrong with the situation. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 20) I tried to adjust my own standards. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

## QUESTIONS ABOUT DISCRIMINATION

|  | strongly disagree | disagree | mixed feelings | agree | strongly agree |
|---|---|---|---|---|---|

1) I believe that sex
   discrimination is controllable.. 0 ................. 1 ................. 2 ................. 3 ................. 4

2) The issue of sex discrimination
   is very important to me. ........ 0 ................. 1 ................. 2 ................. 3 ............. 4

3) I am quite familiar with
   sex discrimination. ................. 0 ................. 1 ................. 2 ................. 3 ................. 4

4) I believe sex discrimination
   is only temporary. ................. 0 ................. 1 ................. 2 ................. 3 ................. 4

5) My actions have contributed
   to sex discrimination . ............. 0 ................. 1 ................. 2 ................. 3 ................. 4

6) Sex discrimination is nothing
   to be concerned about ............. 0 ................. 1 ................. 2 ................. 3 ................. 4

7) I have experienced sex
   discrimination before. ............. 0 ................. 1 ................. 2 ................. 3 ................. 4

8) Sex discrimination will
   not go away. ............................. 0 ................. 1 ................. 2 ................. 3 ................. 4

9) Sex discrimination is the
   result of my own doing. .......... 0 ................. 1 ................. 2 ................. 3 ................. 4

10) I believe that sex discrimination
    is out of control. ..................... 0 ................. 1 ................. 2 ................. 3 ................. 4

11) Sex discrimination is of serious
    concern to me. ......................... 0 ................. 1 ................. 2 ................. 3 ................. 4

12) Sex discrimination is a new kind of
    experience for me. ................... 0 ................. 1 ................. 2 ................. 3 ................. 4

13) Sex discrimination is just
    a short lived problem. ............. 0 ................. 1 ................. 2 ................. 3 ................. 4

14) There is something that can be done
    about sex discrimination ......... 0 ................. 1 ................. 2 ................. 3 ................. 4

15) Sex discrimination is *not* the result
    of my own behaviour. ............. 0 ................. 1 ................. 2 ................. 3 ................. 4

16) Sex discrimination is really
    *not* a big deal. ........................ 0 ................. 1 ................. 2 ................. 3 ................. 4

17) Sex discrimination is something
    new to me. ................................ 0 ................. 1 ................. 2 ................. 3 ................. 4

18) Sex Discrimination will
    probably last a long time. ........ 0 ................. 1 ................. 2 ................. 3 ................. 4

19) I have *not* played a part in the practice
    of sex discrimination. ............. 0 ................. 1 ................. 2 ................. 3 ................. 4

20) Little can be done to change
    sex discrimination. ................... 0 ................. 1 ................. 2 ................. 3 ................. 4

BIOGRAPHICAL INFORMATION
In order to analyse the answers you have given me, I need to know some background information, please circle the number that describes your situation:

1) In which age range do you fit?
   1 20-29
   2 30-39
   3 40-49
   4 50-59
   5 60+

2) What is your current marital status:
   1 Single
   2 Married
   3 Living in a relationship
   4 Separated/divorced or widowed

3) Do you have children?
   1 Yes   How many?.............How old are they?
   2 No

4) Have you received any promotions during your time at Massey?
   1   Yes:   How many times have you been promoted?
                1
                2
                3
                4 or more
   2   No

5) What is the nature of your employment, is it?
   A)   1 Part Time
        2 Full Time
        0 Other...............................

   B)   1 Temporary
        2 Contracted
        3 Tenured
        0 Other...............................

6) On a scale of 1 to 6 how much gender-based discrimination have you encountered in your work at Massey?

None at All                                        An Awful lot
   1          2          3          4          5          6