
The role of gender in workplace stress: A critical literature review

Kristina Gyllensten¹ and Stephen Palmer²

Abstract

Objective The aim of this review was to evaluate research relating to the role of gender in the level of workplace stress. A further aim was to review literature relating to stressors of particular relevance to working women. These stressors included, multiple roles, lack of career progress and discrimination and stereotyping.

Design Systematic review.

Method Major databases were searched in order to identify studies investigating gender and workplace stress. A range of research designs were included and no restrictions were made on the basis of the occupations of the participants.

Results Much of the research indicated that women reported higher levels of stress compared to men. However, several studies reported no difference between the genders. Furthermore, the evidence for the adverse effects of multiple roles, lack of career progress and discrimination and stereotyping was inconsistent.

Conclusion The current review concluded that the evidence regarding the role of gender in workplace stress and stressors was inconsistent. Limitations of the research were highlighted and implications for practice were discussed.

Key words: workplace stress, gender, stressors

Introduction

Workplace stress

Stress in the workplace is a major problem for both organisations and employees, and it has been estimated that approximately 13.4 million working days in Britain is lost per year due to stress, depression or anxiety¹. According to the Health and Safety Executive

¹Doctorate student, Department of Psychology, City University. ²Honorary Professor of Psychology, City University, London.

Correspondence to: Stephen Palmer, Honorary Professor of Psychology, City University, Northampton Square, London UK EC1V 0HB. s.palmer-1@city.ac.uk

(HSE)² stress is defined as ‘the adverse reaction people have to excessive pressures or other types of demand placed on them’. Approaches to stress have distinguished between the concepts of stressor and strain. Environmental factors that may function as sources of stress are called stressors, and the individual’s reaction to the stressors is called strain³. Transactional approaches to stress emphasise the transaction between the cognitive and affective aspects of the individual and their environment^{4,5}. A cognitive definition of stress has been proposed by Palmer, Cooper & Thomas⁶ as ‘stress occurs when the perceived pressure exceeds your perceived ability to cope’ (p.2). The term stress has been conceptualised in a variety of ways and this can lead to confusion regarding the meaning of the term⁷. The current review will use the stress/stressor terminology employed in the articles reviewed.

Gender and workplace stress

Research suggests that working is generally related to positive health for women^{8,9,10}, and men⁷. However, as noted previously, workplace stress is a major problem, and it has been suggested that gender may be an important demographic characteristic to consider in the experience of stress¹¹. While on the one hand it has been reported that there are no differences between women and men in relation to workplace stress¹², it has also been noted that there are differences in both stressors and the severity of stress between the sexes^{9,13,14,15}. It has been reported that although women and men are exposed to the same stressors, women are also facing unique stressors^{16,13}. Indeed, Hofboll, Geller & Dunahoo¹⁷ suggest that it is important to consider the stressors that are unique to employed women, as this can increase the understanding of the specific needs of working women. This is particularly important according to Hofboll et al¹⁷ as several studies have found that the provision of workplace support was more effective in reducing occupational stress in men than in women^{8,18}. Research has reported that women in particular are exposed to the following stressors: multiple roles¹⁹; lack of career progress²⁰; and discrimination and stereotyping^{21,22}.

First, the current review will present and evaluate research that has investigated the role of gender in the level of workplace stress. Second, it will present and evaluate research and theory concerning working women and the stressors of ‘multiple roles’, ‘lack of career progress’ and ‘discrimination and stereotyping’. It is acknowledged that men also experience strain from particular stressors, but these will not be discussed in the present review (for further information see Burke²³). There have been several reviews of the literature within this area but most of these were conducted during the 1980s^{8,11,12,14}. A more recent review of the literature was focused on stress and female managers¹⁷. The literature in the current review includes evidence from previous reviews, from research studies and from theoretical accounts.

Limitations with current research

Prior to the review it is important to consider a number of limitations of the research in

this area. There has been a lack of research investigating women and workplace stress, and many studies of occupational stress have only included male participants^{15,17,24}. Failure to incorporate women in the research has led to impairment of the accuracy of conceptual models and research findings⁸. Consequently, it is not possible to draw firm conclusions regarding the role of gender in workplace stress as there is not yet enough research¹⁹. In addition, most of the research treats women as a homogenous group, and rarely includes analyses of race or socioeconomic differences. It has been argued that to gain a clear picture of stressors it is important to disaggregate the population of women⁸. Unfortunately, there has also been a lack of research investigating stress among women from ethnic minorities²⁵. Most of the studies have used a cross-sectional design and can therefore only provide a snapshot of work stress. Finally, most studies have measured stress using self-report questionnaires. Although questionnaires are a useful in measuring stress, it has been argued that it is important to use objective outcome measures as a supplement to self-report measurements²⁶.

Level of workplace stress

No difference between the genders

In an analysis of psychological research on sex and gender Deaux²⁷ concluded that in most research little variance is accounted for by sex. Martocchio & O'Leary¹² conducted a meta-analysis of fifteen studies that had examined gender differences in work stress, and they concluded that there are no gender differences in occupational stress. The authors pointed out that the research used in the analysis had several limitations including lack of information on reliability and validity of the stress measures. It is suggested that these methodological shortcomings could have influenced the results of the analysis. Despite the methodological limitations Martocchio & O'Leary¹² (p.500) assert that 'the burden of proof does, however, now lie with those researchers that suggests that sex differences exist'.

The Bristol Stress and Health at Work Study²⁸ was a survey by the HSE of 17,000 randomly selected people from Bristol electoral register. This study in particular is important to consider in more detail in the current review, as the findings should be highly valuable in terms of generalisation as it was based on a large randomised sample of the UK population. It was found that approximately 20 per cent of the participants reported high or extremely high levels of work stress²⁸. The data on demographic and occupational variables from this study was analysed further in a report by the HSE²⁹. Stress levels were divided up into two groups, high and low stress, and there were no significant differences between men and women overall. Moreover, there were no significant effects of gender in the various marital status groups (married/cohabiting, single, widowed/divorced/separated). The pattern of stress across all age groups was very similar for males and females. Regarding education, there were significantly more males than females in the high stress group for employees without secondary school

academic qualifications, but there were no significant differences in the other educational groups. In addition, there were significantly more females than males in the high stress group for socioeconomic status group I, and the reverse was found in socioeconomic group III.2. It was also found that there were significantly more males than females in the high stress group for the lowest salary group. For all other salary groups, however, there were significantly more females than males in the high stress group, and this pattern increased with rising salary. Significantly more females than males in full-time employment were in the high stress category. Finally, no significant differences were found between the genders for any of the various job categories. In conclusion, there were no overall significant differences between the genders. Nevertheless, differences were found when the role of education, socioeconomic status and salary were further analysed²⁹.

A longitudinal cohort study investigated the effects of organisational downsizing on employees in a Finnish town³⁰. The main outcome measure was records of sickness absence and data was collected before downsizing, during downsizing, and after downsizing. Participants were 764 municipal employees who remained in their jobs after downsizing. One of the main findings was that sickness and absence was 2.17 times higher after major downsizing than after minor downsizing. The relationship between sickness absence and downsizing was not affected by sex. The methodology of the study had several strengths including the longitudinal design that allowed the employees to be followed during the downsizing process. Another advantage was that the sickness absence data was collected from each organisation, and previous research³¹ has found that this measure accurately reflects the health of employees³⁰.

Spielberger & Reheiser³² conducted a study with 1781 working adults, measuring gender differences in occupational stress using the Job Stress Survey (JSS) in American university and corporate settings. The JSS is a reliable measure of stress and it is a useful tool to measure occupational stress as it investigates both the perceived severity and the frequency of thirty stressors. The number of men and women were relatively equal, although, almost twice as many males were in the higher occupational groups, and over twice as many females were in the lower occupational group. It was found that there were no significant differences in the overall stress levels for the two genders, although occupational level was highly significant with managerial/professional participants reporting more frequency of the stressors compared to clerical/maintenance workers. However, Spielberger & Reheiser³² reported several differences in the perceived severity and frequency of certain stressors. Antoniou, Davidson & Cooper³³ conducted a cross-sectional study investigating occupational stress, job satisfaction and health state in junior doctors on Athens, Greece. The participants consisted of 193 males and 162 females, and the data was collected using the Occupational Stress Indicator (OSI) including 46 additional items covering work stressors associated with Greek doctors. No significant differences between the genders were found in relation to current state of mental and physical health, and three stressors, 'implications of mistakes', 'long working

hours', and 'conflicting job tasks and demands', were in the top five for both genders. However, females reported significantly higher levels of stress relating to the stressors of career and achievement and home/work interface, whereas men reported significantly higher levels of job satisfaction³³.

A cross-sectional Israeli study investigated stress and burnout in 657 male and female managers and human service professionals (57 per cent of them females) using a self-report questionnaire¹⁸. No differences between males and females were found in levels of stress at work, but women experienced higher levels of stress and burnout in general life. An American exploratory study of gender and perceptions of work related stress was conducted by Di Salvo, Lubbers, Rossi, and Lewis³⁴. A questionnaire measuring critical incidents of stress was used and 85 females and 63 males, from four professional organisations, completed the questionnaires. The data was analysed using content analysis and no gender differences were found in the overall clusters and there were no significant differences between the genders in the ratings of severity. However, the frequency and causes of stress differed between the genders in four out of the fourteen categories. Moreover, there may be some limitations with the validity of the analysis³⁴, thus it is uncertain to what extent it is possible to generalise from the findings.

Difference between the genders

Jick & Mitz¹¹ conducted a very well cited review of the empirical evidence of sex differences in stress. Nineteen studies were reviewed and in these studies women tended to report higher levels of psychological distress than men. The authors suggest that men and women are likely to be exposed to different stressors, and that gender moderates the relationship between stressors, the appraisal of stressors and coping, and the relationship between coping and strain¹¹. A further commonly cited review on gender and stress was conducted by Nelson & Quick¹⁴. The review comprised 99 different studies dealing with the issues of research on women and research on workplace stress. It was concluded that women suffer from more workplace stress than men, because, as well as experiencing stressors common to both genders women also experience certain unique stressors. The specific stressors faced by women included discrimination, stereotyping, marriage/work interface, and social isolation¹⁴. Both these reviews strongly suggest that gender plays an important role in level of workplace stress. However, it is important to note that the reviews are almost 20 years old and that both reviews used a qualitative method for synthesising the evidence.

The Whitehall II study³¹ was a longitudinal study of work related factors and ill health in 10,308 civil servants in the UK. In the same way that The Bristol Stress and Health at Work Study²⁸ was important, The Whitehall II Study provides important information about stress as it is a large scale longitudinal study with a large sample of British employees. It was found that women in the two highest graded job categories had the highest level of problem drinkers. This relationship between occupational grade and problem drinkers was not apparent in the male sample. According to the HSE³¹

national data also supports this finding. Level of psychiatric disorder, as measured by the General Health Questionnaire, was higher in women than in men in five out of the six occupational groups. High job demands and receiving low support were related to an increased risk of psychiatric disorder for both genders³¹. Bogg & Cooper³⁵ conducted a study, with 1051 British civil servants, in which gender differences in occupational stress and strain were investigated. The OSI was used to measure job satisfaction, mental health and physical health. It was found that the female participants were significantly more job dissatisfied, and had poorer mental and physical health compared to the male participants. They were also more concerned about their role at work, and the work and home interface. The male participants were mainly affected by level of control at work and their achievement oriented behaviour³⁵. A qualitative study investigated job stress in twelve managers in the English National Health Service³⁶. Semi-structured interviews were used to collect the data and two core categories were found, 'the fit manager' and 'the unfit manager'. It was further reported that female managers were more at risk from managerial stressors compared to male managers. The managers that were most psychologically fit used a combination of male and female attitudes and behaviours to cope with stress³⁶.

An Australian cross-sectional study investigated stress, mental health, and leadership styles, in 60 female and 60 male managers in male and female dominated industries³⁷. Male dominated industries included academia, automotive industry, IT, accounting consultancies and the timber industry. Female dominated industries included childhood education, nursing and hair dressing. The female and male participants were not matched. Job stress was measured using three scales from the Survey of Work Pressure and the GHQ was used to measure mental health. Women reported overall higher levels of job stress than men, but did not experience worse mental health. Female managers in male-dominated industries reported the greatest level of pressure from discrimination. It is concluded that the gender and the gender ratio of the industry influence stress, leadership style and mental health among managers. The authors highlight that the findings need to be replicated, and due to the small sample size there are limitations as to the ability to generalise to other male and female dominated industries³⁷. Davidson & Cooper³⁸ conducted a study investigating occupational stress in managers in various work sectors within the UK. Initially, 60 female managers were interviewed, and then 696 female managers and 185 male managers completed a stress questionnaire, based on the findings from the interviews and previous research. Stress outcomes were measured using the GHQ, drug use and job satisfaction. It was found that female managers reported higher levels of stress than male managers, and they also experienced higher pressure levels than men from the work, home/social and individual arenas³⁸. Davidson, Cooper & Baldini³⁹ studied stress in 126 female and 220 male graduate managers using the OSI. The female participants reported significantly higher scores on the seven subscales relating to sources of pressure compared to the male participants. The female managers were also more at risk of physical and mental

ill health and had lower job satisfaction scores. The authors conclude that the female managers are under considerably more pressure than their male counterparts³⁹.

A study investigated stress, job satisfaction and organisational climate in 2500 medical practitioners and auxiliary personnel in Germany⁴⁰. Job stress and dissatisfaction was measured using a 12-item questionnaire developed from previous work by the authors. Participants were randomly selected from national listings and 5000 were sent a questionnaire. It was reported that female doctors perceived higher levels of work stress compared to their male counterparts, and that female auxiliary personnel reported lower levels of stress compared to the male auxiliary personnel. A limitation of the study that had an effect on the generalisability included a low response rate. Conversely, a great strength of the study was the large randomised national sample that appeared to be relatively representative of the medical profession in Germany⁴⁰. A quasi-experimental study investigated the effects of a mentoring programme for US magistrate judges on stressors, strain and coping⁴¹. It was found that in both the experimental ($n=20$) and control group ($n=17$) the female participants reported significantly higher levels of stressors and strain, measured by Osipow's Occupational Stress Inventory-Revised, and significantly lower levels of coping skills compared to the male participants. Because of the small sample size the results should be treated with caution⁴¹. These studies highlight the importance of considering occupational groups in workplace stress. Indeed, it has been found that characteristics of specific occupations are important in stress⁴².

Miller, Greyling, Cooper, Lu, Sparks & Spector⁴³ conducted a cross-cultural study of occupational stress including participants from South Africa, UK, USA and Taiwan. The participants consisted of 822 managers and data was collected using the OSI-2. The interaction between country and gender was investigated but only a few significant differences were found. Considering the sample as a whole it was found that there were differences in strains, with females experiencing significantly lower levels of psychological and physical wellbeing compared to men. It was suggested that this difference could be a function of women being more willing to report or being more aware of symptoms than men. Regarding experience of stressors only one significant difference was found between the genders, with women experiencing more stress from organisational climate. The authors point out that a limitation of the findings is that they come from the combination of four different data sets. As almost no differences between men and women were found on work stressors the authors concluded that the research did not find support for gender differences in occupational stress⁴³.

Contrary to all of the previous studies presented in this section, which reported higher levels of stress among women, a study conducted by Swanson, Power & Simpson⁴⁴ found that male medical doctors experienced more occupational stress and less job satisfaction than their female counterparts. In this study the Occupational Stress Inventory was completed by 547 Scottish general practitioners and 449 consultant doctors, during a period when the Scottish Health Service was in the process of structural

changes. A strength of the study was that the sample was randomly selected from the national register of GPs and consultants, and the responders were representative of GPs and consultants in Scotland. It should also be noted, as with all cross-sectional studies, that it only provides a snapshot of levels of occupational stress and job satisfaction⁴⁴. Finally, it is important to note that this is the only study identified within the current review which reports higher stress levels among men than women.

Sources of workplace stress – stressors

Multiple roles

As the numbers of dual-earner households are rising, the potential conflicts between the demands of family and career are also increasing – these conflicts being well documented for both women and men⁴⁵. Work and family conflict, as a stressor, has been related to negative consequences including reduced life satisfaction, lower mental health, and decreased productivity, and it is therefore of great concern for both organisations and individuals^{46,47}. Although, there have been big changes in family structure and women's labour force participation, there have been only minor changes in responsibility for domestic chores. Women continue to be responsible for the majority of domestic chores and are therefore experiencing the stress of coping with a double day^{17,48,49}. Women are also more likely to take on other family-related roles such as caring for elderly parents, and finding appropriate childcare^{17,50}.

Multiple roles as a stressor

Langan-Fox⁵¹ proposes that the more roles an individual is involved in, the higher the potential for stress. According to Nelson & Burke⁴⁷ women are particularly likely to suffer from role overload (conflicting demands from different roles). Nelson & Quick¹⁴ conclude from their review of the literature, on stress and women, that the career-family conflict is one of the main sources of stress for working women. Similarly, Davidson & Cooper³⁸ found that female managers reported greater pressure than men from work and home stressors. McDonald & Korabik¹⁶ investigated stressors and coping in 19 male and 20 female managers in Canada. It was found that work and family interfaces were more often sources of stress among the female participants than among the male. Although both the qualitative (description of stressful experiences) and quantitative methods (work-stressor questionnaire) resulted in similar findings, the authors suggest that the findings should be treated with caution due to the small sample size. In Davidson et al's³⁹ study it was found that female managers reported higher levels of stress on the home/work interface compared to the male participants.

Greenglass, Pantony & Burke⁵² conducted a study with 555 teachers investigating the relationship between work stress, social support and role conflict, the latter referring to the conflicting pressures from two or more sources. The role-conflict scales were used and it was found that role conflict was significantly higher in women than in men,

and women had more role conflict between their work role and each family role. The results suggested that job stress was related to role conflict more often for women than for men⁵². An American study compared gender differences in the antecedents and consequences of work-family conflict⁴⁶. The participants consisted of 109 women and 131 men. To be included in the study the participants had to be married with somebody who worked full-time, have children living at home, and be in a managerial or professional job. The data was collected by a survey instrument consisting of various standard scales investigating the following concepts: work and family involvement, work and family expectations, work and family conflict, role-strain, quality of work life, quality of family life, and life satisfaction. Significant differences were noted in eleven out of seventeen gender comparisons. It was found that it was more difficult for women than for men to achieve control over competing demands generated from the various roles. It was stated that 'professional women are expected to be committed to their work just like men at the same time that they are normatively required to give priority to their family roles'⁴⁶ (p.71).

Multiple roles as a source of wellbeing

The literature presented in the previous section suggests that multiple roles is a source of stress. However the effects of multiple roles are ambiguous and it has been suggested that multiple roles can be a source of wellbeing. According to Rodin & Ickovics⁵⁰ it has been suggested that being involved in multiple roles expands possible resources and rewards, such as different sources of self-esteem and social support. However, it is pointed out that not all roles are good for women, and that the nature and the quality of the experience within the roles are important factors to consider in relation to women's wellbeing⁵⁰. Malley & Stewart⁹ assume that work and family roles may be sources of both strength and stress. One advantage of women having multiple roles is that the dissatisfaction in one role is not as important as a more rewarding role can create a balance. However, it is recognised that there may be a problem, when a new role is added, if the woman is not able to relax the level of expected performance in the various roles⁹.

Lack of career progress

The glass ceiling

The workplace is often portrayed as gender neutral by management, but evidence suggests that gender bias exists, and this bias contributes to working women's unique stressors¹⁷. Lack of career progress has been suggested as a major source of work stress for women and it has been linked to negative health consequences and reduced satisfaction^{13,14}. Women are still not properly integrated in many organisational systems¹⁷, and there is evidence that women face a 'glass ceiling' within the workplace. The glass ceiling refers to a subtle but powerful barrier that limits women's career advancement to top management in big organisations^{19,53}. Studies have found that

women are less likely to be promoted than men in professions such as engineering and medicine^{54,55}. In addition, management is male dominated even in traditional female professions⁵⁶. Davidson & Cooper³⁸ conducted a study with 940 British managers and it was found that women were more likely to work in lower level management compared to men. Contrary to the male managers the female managers were likely to be the first individual of her sex to hold that position. Cox & Harquail⁵⁷ investigated the relationship between gender, career paths, and career success in 502 female and male MBAs. It was found that the female managers and male managers did not differ on overall promotions and career satisfaction. However, the female managers experienced lower salary increases, less management promotions, and lower hierarchical levels in comparison to male managers with similar education, experience, age, performance and career path⁵⁷. However, not all research has found evidence for a glass ceiling effect. Powell & Butterfield⁵⁸ examined the role of gender in the promotion (to top management) decisions for US federal government. In contrast to hypotheses, it was found that gender worked to women's advantage, although the greatest effect upon promotion was an applicant's employment in the hiring department⁵⁸.

The 'old boy network'

Women are underrepresented in the levels of the organisation where the decisions are made, and the informal networks where many power transactions occur are often closed to women⁷. Corporate politics may be specifically stressful for women because of the lack of opportunities to gain experience in the exercise of power and the exclusion from the social informal networks¹³. Women's difficulties in finding mentors, their social isolation, and lack of career advancement have been linked to the incapability to access the 'old boy network' which included activities important for recognition and advancement in many organisations^{17,14,59}. Brass²⁰ conducted a study investigating gender differences in networks, interaction patterns, and influence in organisations. It was found that participants' positions in interaction networks had a strong association with levels of influence. Women were rated as less influential than men, and were not well-integrated into men's networks including the most senior network. In a follow-up it was found that promotions were significantly related to level of inclusion in the dominant interaction networks²⁰.

Discrimination and stereotyping

In the Supreme Court (in an Amicus Curiae Brief in the case Price Waterhouse v Ann B Hopkins) the American Psychological Association²¹ stated on the basis of five decades research on sex stereotyping, that evaluation of women's work performance is commonly attributed to factors not relating to ability. This has a vital effect upon women's career progress and organisational rewards. Moreover, it was stated that women tend to be punished when they act in a manner that is viewed as not fitting into sex-related expectations. According to the American Psychological Association²¹ (p.1063) 'research

conducted in the past 15 years has systematically revealed the cognitive structures of sex stereotypes and the psychological process by which they influence behaviour, including behaviour in the workplace⁷.

A study investigated stressors and coping in 19 male and 20 female managers in Canada¹⁶. It was found prejudice and discrimination were more often sources of stress among the female participants than among the male. Similarly, Bhatnagar⁵⁹ states that men and women of comparable competence are not evaluated or rewarded in an equal manner, rather women tend to be underrated, but it is concluded that further research is needed in order to investigate the stressful effects of this discrimination. In a study Martell, Parker, Emrich, Crawford & Swerdlin⁶⁰ investigated sex stereotyping in the perceptions of executives. An executive attribute inventory was developed and the participants, 123 male managers, each rated one of four groups – women middle-managers (MMs), men MMs, successful women MMs, and successful men MMs. Sex differences were reported on all but one of the attributes, with men being favoured. The results provided support for sex stereotyping on the attributes related to successful executives. The authors suggested that the findings help to explain why few women executives exist. It was demonstrated that women in MM are perceived to be lacking what is needed to succeed as an executive. This perception may have a negative influence on performance ratings and promotions⁶⁰. Similarly, Fielden & Cooper⁷ suggest that the belief that women lack what is needed to succeed is often accountable for the discrimination women managers experience in the workplace. In Davidson et al's³⁹ study, described earlier, women scored significantly higher than men on the subscale relating to pressure from discrimination and prejudice. Moreover, when the data was analysed using multiple regression with job satisfaction and current state of health as dependent variables it was found that the 'pressure from organizational structure and climate' was the strongest predictor variable for the female participants. The authors suggest that this finding is in accordance with the problems linked to 'old boy network' culture inherent in many organisations. Hofboll et al¹⁷ propose that there are conflicting expectations of women in the workplace. On one hand they gain approval if they convey traditionally female characteristic such as warmth and expressiveness, but on the other hand they must behave in an individualistic power-centred manner if they want to succeed professionally¹⁷. In addition, there is still a wage gap between the genders. Less qualified women earn less than comparably qualified men⁶¹, and having lower salaries has been reported to be a stressor for females¹⁴.

Sexual harassment in the workplace has been identified as a significant job stressor for women²⁴. Sexual harassment has been defined as 'any behaviour of a sexual nature that an individual perceives to be offensive and unwelcome'⁶² (p.265). Women report more sexual harassment compared to men, and women working in traditionally masculine occupations are particularly likely to experience this stressor¹⁷. A study²² investigated sexual harassment experiences, coping and psychological outcomes of 747 women employed in the private-sector and at universities. Sexual harassment

experiences were measured with The Sexual Experiences Questionnaire, and it was found that low-level but frequent experiences of sexual harassment had negative effects on psychological wellbeing. Multiple-group discriminant function analyses indicated women who had experienced low, moderate and high levels of harassment and those who had not experienced any harassment could be ordered on the basis of their psychological (mental health index, Post traumatic stress disorder symptoms) and job-related outcomes (job-satisfaction measurements). High levels of harassment were related to the worst outcomes, and no harassment was related to least negative outcomes. Interestingly a majority of the women who had experienced harassing behaviour in the workplace answered 'no' to the question asking if they had experienced sexual harassment at their present workplace²². Similarly, Morrow, McElroy & Phillips⁶³ found that women who had experienced harassing behaviour at work reported higher levels of stress than women who had not.

Work stress and women from ethnic minorities

There is a lack of research investigating work stress and ethnic minorities^{7,24}. Nevertheless, it has been reported that perceived discrimination is a stressor for individuals from ethnic minorities⁶⁴. Mirrashidi²⁵ compared stress and social support between white women and women from ethnic minorities. The study found no significant differences between the two groups in the level of work stress or work/family conflict. Similarly, white women and minority women experienced the same levels of perceived co-worker support. However, minority women experienced significantly lower levels of organisational support²⁵. Snapp⁶⁵ interviewed 100 black and 100 white professional women to explore occupational stress, social support and depression. Women were not randomly selected for the study, rather women were recruited in accordance to the objective of the study. The interview instrument included both closed-ended and open-ended questions, and depression was measured with 'the Centre for Epidemiological Studies Depression Scale'. The data was analysed using multiple regression and it was found that there were multifaceted differences in occupational stress levels, social support and depression across race, class, background, supervisory status, marital and parental status. For example, it was found that white women reported more support from co-workers than black women⁶⁵.

Implications for practice

Although no clear conclusions could be drawn on the basis of the research reviewed in this paper it may still be relevant to consider implications for practice in relation to the possible effects of the highlighted stressors, multiple roles, lack of career progress, and discrimination and stereotyping.

On the basis of research evidence the HSE⁶⁶ has presented new stress management standards that recommend good practice in six key stressor areas: demands, control, support, relationships, role, and organisational change. The first step is to conduct a

risk assessment of the organisation's state. In accordance with this approach Nelson & Hitt⁶⁷ suggest that in order to develop policies and programmes, aiming to improve women's health, it is important to understand the stressors working women are facing. When conducting HSE risk assessments within organisations it could be useful to also be aware of the possible stressors reviewed in this article.

If risk assessments highlight that employees are suffering from any of these stressors it is important that steps are taken to reduce or eliminate these hazards⁶⁸. Flexitime within the workplace could allow women and men to deal with home conflicts and thereby reduce the pressure from multiple roles⁶⁷. Women still have most of the responsibility for childcare¹⁷. Allowing greater flexibility for both genders could encourage men to take more responsibility for childcare, therefore reducing stress for working women and possibly improve the overall quality of family life. Another option could be to introduce more corporate childcare facilities as this could ease the home/work conflict for working parents⁶⁷. Programmes could be introduced to support the practical implementation of equal opportunities policies aiming to reduce discrimination. Such programmes could encourage an open dialogue about discrimination and highlight the organisation's commitment to equal opportunities. Moreover, reduction of workplace discrimination would most likely improve career opportunities for women. Finally, mentoring programmes could be a great source of support for working women and, ultimately, help them break through the glass ceiling¹⁴.

Conclusion

The current review has presented and evaluated research investigating the role of gender in the level of workplace stress. Moreover, it has reviewed the literature relating to several stressors reported to be particularly relevant for working women – multiple roles, lack of career progress, and stereotyping and discrimination.

It is important to highlight a number of limitations within the current review and the field of occupational stress research. The meaning of the concept 'stress' varied between the studies, and this review has adopted the terms as they were used in the individual articles and chapters. Moreover, it has been suggested that personality characteristics may contribute to the experience of stress⁷, but this aspect of stress was not discussed in this review. Most of the studies used a cross-sectional design and only used questionnaires to measure stress. Bogg & Cooper³⁵ suggest that ideally stress research should adopt longitudinal designs involving quantitative (psychological and physiological measures) and qualitative methods. In addition, several of the studies were conducted in different countries and it is uncertain to what extent it is possible to generalise these findings between countries. Another issue that has been highlighted is that there are difficulties making appropriate gender comparisons in work stress research, as males often hold more senior positions than females¹¹. Furthermore, there is an imbalance in the level of attention various groups of working women have received

from researchers; with women from ethnic minorities receiving little attention²⁴, and female managers receiving a lot.

In conclusion many of the studies suggested that gender played an important role in the level of work stress, with women experiencing higher levels of stress than men. However, several of the studies and reviews suggested that gender was not an important factor in the level of workplace stress. Moreover, the quality of the studies and the ability to generalise from the studies varied greatly on both sides of the argument. Consequently, considering the evidence presented in the current review, it is impossible to draw any firm conclusions regarding the role of gender in the level of workplace stress. The literature concerning stressors suggested that multiple roles, lack of career progress, and discrimination and stereotyping were more common for women than for men, and had a negative impact upon women in particular. However, it is important to highlight that the research was not conclusive regarding the negative effects of these stressors. Finally, it may be useful if further variables are considered in future research/reviews examining the role of gender in workplace stress. Variables that may be important to consider include occupation, education, ethnicity, culture, age, socioeconomic group, social support, rank, personality variables, family roles and responsibilities.

References

- 1 Health and Safety Executive. *Health and Safety Statistics Highlights*. Retrieved 10 May 2004, from www.hse.gov.uk/statistics/overall/hss0102pdf, 2001/2002.
- 2 Health and Safety Executive. *Tackling Work-Related Stress: A Manager's Guide to Improving and Maintaining Employee Health and Well-being*. Suffolk: HSE, 2001.
- 3 Cooper CL, Dewe PJ, O'Driscoll MP. *Organizational Stress: A Review and Critique of Theory, Research and Applications*. London: Sage Publications, 2001.
- 4 Briner RB, Harris C, Daniels K. How do work stress and coping work? Toward a fundamental theoretical reappraisal. *British Journal of Guidance & Counselling*, 1990: **32**: 223–234.
- 5 Palmer S. Stress management and prevention programmes. In: R Wolfe, W Dryden, S Strawbridge (Eds), *Handbook of Counselling Psychology* (pp.536–551). London: Sage, 2003.
- 6 Palmer S, Cooper C, Thomas K. *Creating a Balance: Managing Stress*. London: The British Library, 2003.
- 7 Fielden S, Cooper CL. Managerial stress: Are women more at risk? In: DL Nelson, RJ Burke (Eds), *Gender, Work Stress, and Health* (pp.19–34). Washington: American Psychological Association, 2002.
- 8 Baruch GK, Biener L, Barnett RC. Women and Gender in Research on Work and Family Stress. *American Psychologist*, 1987: **42**: 130–136.
- 9 Malley JE, Stewart AJ. Women's work and family roles: Sources of stress and sources of strength. In: S Fisher, J Reason (Eds), *Handbook of Life Stress: Cognition and Health* (pp.175–190). Essex, UK: John Wiley & Sons, 1988.

- 10 Repetti RL, Matthews KA, Waldron I. Employment and women's health: Effects of paid employment on women's mental and physical health. *American Psychologist*, 1989; **44**: 1394–1401.
- 11 Jick TD, Mitz LF. Sex differences in work stress. *Academy of Management Review*, 1985; **10**: 408–420.
- 12 Martocchio JJ, O'Leary AM. Sex differences in occupational stress: A meta-analytic review. *Journal of Applied Psychology*, 1989; **74**: 495–501.
- 13 Nelson D, Campbell Quick J, Hitt MA, Moesel D. Politics, lack of career progress, and work/home conflict: Stress and strain for working women. *Sex Roles*, 1990; **23**: 169–183.
- 14 Nelson DL, Quick JC. Professional women: Are distress and disease inevitable? *Academy of Management Review*, 1985; **10**: 206–218.
- 15 Decker P, Borgen FH (1993). Dimensions of work appraisal: Stress, strain, coping, job satisfaction, and negative affectivity. *Journal of Counselling Psychology*, 1993; **40**: 470–478.
- 16 McDonald LM, Korabik K. Sources of stress and ways of coping among male and female managers. *Journal of Social Behaviour and Personality*, 1991; **6**: 185–198.
- 17 Hofboll SE, Geller P, Dunahoo C. Women's coping: Communal versus individual orientation. In: MJ Schabracq, JAM Winburst, CL Cooper (Eds), *The Handbook of Work and Health Psychology* (pp.237–258). Wiltshire: John Wiley & Sons, 2003.
- 18 Etzion D. Moderating effect of social support on the stress-burnout relationship. *Journal of Applied Psychology*, 1984; **69**: 615–622.
- 19 Burke RJ. Work experiences, stress and health among managerial women: Research and practice. In: MJ Schabracq, JAM Winburst, CL Cooper (Eds), *The Handbook of Work and Health Psychology* (pp.259–278). Wiltshire: John Wiley & Sons, 2003.
- 20 Brass DJ. Men's and women's networks: A study of interaction patterns and influence in an organization. *Academy of Management Journal*, 1985; **28**: 327–343.
- 21 American Psychological Association. In the Supreme Court of the United States, Price Waterhouse v Ann, B. Hopkins. *American Psychologist*, 1991; **46**: 1061–1070.
- 22 Schneider KT, Fitzgerald LF, Swan S. Job-related and psychological effects of sexual harassment in the workplace: Empirical evidence from two organizations. *Journal of Applied Psychology*, 1997; **82**: 401–415.
- 23 Burke RJ. Men, masculinity, and health. In: DL Nelson, RJ Burke (Eds), *Gender, Work Stress, and Health* (pp.35–55). Washington: American Psychological Association, 2002.
- 24 Kelly-Radford L. *Diversity*. Retrieved 10 May 2004, from www.cdc.gov/niosh/stress, 1999.
- 25 Mirrashidi T. Integrating work and family: Stress, social support and well-being among ethnically diverse working women. *Dissertation Abstracts International*, 1999; **60**(5-B): 2355.
- 26 Beehr TA, O'Hara K. Methodological designs for the evaluation of occupational stress

- interventions. In: SV Kasl, CL Cooper (Eds), *Research Methods in Stress and Health Psychology* (pp.79–112). Chichester: Wiley, 1987.
- 27 Deaux K. From individual differences to social categories: Analysis of a decade's research on gender. *American Psychologist*, 1984; **39**: 105–116.
- 28 Health and Safety Executive. *The Scale of Occupational Stress: The Bristol Stress and Health at Work Study*. Sudbury: HSE, 2000.
- 29 Health and Safety Executive. *The Scale of Occupational Stress: A Further Analysis of the Impact of Demographic Factors and Type of Job*. Retrieved 10 May 2004, from www.hse.gov.uk, 2000.
- 30 Kivimaki M, Vahtera J, Pentti J, Ferrie JE. Factors underlying the effect of organisational downsizing on health of employees: Longitudinal cohort study. *British Medical Journal*, 2000; **320**: 971–975.
- 31 Health and Safety Executive. *Work Related Factors and Ill Health: The Whitehall II Study*. Sudbury: HSE, 2000.
- 32 Spielberger CD, Reheiser EC. The job stress survey: Measuring gender differences in occupational stress. *Journal of Social Behaviour and Personality*, 1994; **9**: 199–218.
- 33 Antoniou ASG, Davidson MJ, Cooper CL. Occupational stress, job satisfaction and health state and male and female junior doctors in Greece. *Journal of Managerial Psychology*, 2003; **18**: 592–621.
- 34 Di Salvo V, Lubbers C, Rossi AM, Lewis J. Unstructured perceptions of work-related stress: An exploratory qualitative study. In: R Crandall, PL Perrewe (Eds), *Occupational Stress: A Handbook* (pp.39–50). Washington: Taylor Francis, 1995.
- 35 Bogg J, Cooper CL. An examination of gender differences for job satisfaction, mental health, and occupational stress among senior UK civil servants. *International Journal of Stress Management*, 1994; **1**: 159–172.
- 36 Jenkins D, Palmer S. Job stress in National Health Service managers: A qualitative exploration of the stressor–strain–health relationship. The 'fit' and 'unfit' manager. *International Journal of Health Promotion & Education*, 2004; **42**: 48–63.
- 37 Gardiner M, Tiggemann M. Gender differences in leadership style, job stress and mental health in male- and female-dominated industries. *Journal of Occupational and Organizational Psychology*, 1999; **72**: 301–315.
- 38 Davidson MJ, Cooper CL. Occupational stress in female managers: A comparative study. *Journal of Management Studies*, 1984; **21**: 185–205.
- 39 Davidson MJ, Cooper CL, Baldini V. Occupational stress in female and male graduate managers. *Stress Medicine*, 1995; **11**: 157–175.
- 40 Kirkcaldy B, Brown J, Furnham A, Trimpop R. Job stress and dissatisfaction: Comparing male and female medical practitioners and auxiliary personnel. *European Review of Applied Psychology*, 2002; **52**: 51–61.
- 41 Bremer CF. Impact of a mentoring program on occupational stress, personal strain, and coping resources in newly appointed United States magistrate judges. *Dissertation Abstract International*, 2003; **63**(12-A): 4185.

- 42 Bacharach S, Bamberger P. Casual models of role stressor antecedents and consequences: The importance of occupational differences. *Journal of Vocational Behaviour*, 1992; **4**: 13–35.
- 43 Miller K, Greyling M, Cooper C, Lu L, Sparks K, Spector PE. Occupational stress and gender: A cross-cultural study. *Stress Medicine*, 2000; **16**: 271–278.
- 44 Swanson V, Power K, Simpson R. A comparison of stress and job satisfaction in female and male GPs and consultants. *Stress Medicine*, 1998; **12**: 17–26.
- 45 Wiley MG, Eskilson A. Gender and family/career conflict: Reactions of bosses. *Sex Roles*, 1988; **19**: 445–464.
- 46 Duxbury LE, Higgins CA. Gender differences in work–family conflict. *Journal of Applied Psychology*, 1991; **76**: 60–74.
- 47 Nelson DL, Burke RJ. A framework for examining gender, work stress and health. In: DL Nelson, RJ Burke (Eds), *Gender, Work Stress, and Health* (pp.3–18). Washington: American Psychological Association, 2002.
- 48 Reskin B, Padavic I. *Women and Men at Work*. USA: Pine Forge Press, 1994.
- 49 Voydanoff P. Women, work, and family. *Psychology of Women Quarterly*, 1988; **12**: 269–280.
- 50 Rodin J, Ickovics R. Women's Health. *American Psychologist*, 1990; **45**: 1018–1043.
- 51 Langan-Fox J. Women's careers and occupational stress. *International review of Industrial and Organizational Psychology*, 1998; **13**: 273–302.
- 52 Greenglass ER, Pantony KL, Burke RJ. A gender-role perspective on role conflict, work stress and social support. *Journal of Social Behaviour and Personality*, 1988; **3**: 317–328.
- 53 Morrison AM, Von Glinow MA (1990). Women and minorities in management. *American Psychologist*, 1990; **45**: 200–208.
- 54 Benokraitis NV. *Subtle Sexism: Current Practice and Prospects for Change*. Thousand Oaks, Canada: Sage, 1997.
- 55 Tesch BJ, Wood HM, Helwig AL, Nattinger AB. Promotion of women physicians in academic medicine. Glass ceiling or sticky floor? *The Journal of the American Medical Association*, 1995; **273**: 1022–1025.
- 56 Powell GN. *Women and Men in Management*. Newbury Park, Canada: Sage, 1988.
- 57 Cox TH, Harquail CV. Career paths and career success in the early stages of male and female MBAs. *Journal of Vocational Behaviour*, 1991; **39**: 54–75.
- 58 Powell GN, Butterfield DA (1994). Investigating the glass ceiling phenomenon: An empirical study of actual promotions to top management. *Academy of Management Journal*, 1994; **37**: 68–86.
- 59 Bhatnagar D. Professional women in organizations: New Paradigms for Research and Action. *Sex Roles*, 1988; **18**: 343–355.
- 60 Martell RF, Parker C, Emrich CG, Crawford MS, Swerdlin M. Sex stereotyping in the executive suite: 'Much ado about something'. *Journal of Social Behaviour and Personality*, 1998; **13**: 127–138.

- 61 Economic and Social Research Council. *Mothers on the run: Despite more hours at work, there's always more to do at home*. Retrieved 10 April 2005, from <http://www.esrc.ac.uk/esrccontent/news/feb05-5.asp>, 2005.
- 62 Bowes-Sperry L, Tata J. A multi-perspective framework of sexual harassment. Reviewing two decades of research. In: GN Powell (Ed), *Handbook of Gender and Work* (pp.263–280). Thousand Oaks, Canada: Sage, 1999.
- 63 Morrow PC, McElroy JC, Phillips CM. Sexual harassment behaviours and work related perceptions and attitudes. *Journal of Vocational Behaviour*, 1994; **45**: 295–309.
- 64 James K. Social identity, work stress and minorities worker's health. In: GP Keita, JJ Hurrell (Eds), *Job Stress in a Changing Workforce: Investigating Gender, Diversity, and Family Issues* (pp.127–145). Washington, DC: American Psychological Association, 1994.
- 65 Snapp MB. Occupational stress, social support, and depression among Black and White professional-managerial women. *Women & Health*, 1992; **18**: 41–79.
- 66 Cousins R, Mackay CJ, Clarke SD, Kelly C, Kelly P, McCaig RH. Management standards and work-related stress in the UK: Practical developments. *Work & Stress*, 2004; **18**: 113–136.
- 67 Nelson DL, Hitt MA. Employed women and stress: Implications for enhancing women's mental health in the workplace. In: JC Quick, LR Murphy, JJ Hurrell (Eds), *Stress and Well-Being at Work: Assessments and Improvements for Occupational Mental Health* (pp.164–176). USA: American Psychological Association, 1992.
- 68 Palmer S. Whistle-stop tour of the theory and practice of stress management: Its possible role in postgraduate health promotion. *Health Education Journal*, 2003; **62**(2): 133–142.