A qualitative exploration of women firefighters' experience in the Western Australian Volunteer Bushfire Service

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A Qualitative Exploration of Women Firefighters' Experience in the

Western Australian Volunteer Bushfire Service

Cindy Branch-Smith

A reported submitted in Partial Fulfilment of the Requirements for the

Award of Bachelor Science (Psychology) Honours,

Faculty of Computing, Health and Science,

Edith Cowan University.

Submitted October, 2009

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I would lastly like to dedicate this thesis to my father...I eventually got there Dad, and to my grand-mother, your curious mind lives on.

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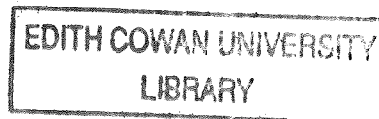
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Cindy Branch-Smith

Women in Non-Traditional Occupations: A Review of the Literature

Abstract

Much research has examined the nature, prevalence, and impact that discriminatory and inappropriate behaviours have on women in non-traditional employment. This paper provides a review of research which has investigated women's experiences in non-traditional employment, revealing that negative experiences are well-documented while positive and rewarding experiences are not. Factors discussed throughout this review include the historical and relational context of women's experiences within non-traditional employment. The review highlights that these contextual factors often influence the way in which women experience their non-traditional occupation. The review also highlights a number of gaps within this literature (particularly within the fire services literature) and concludes with avenues for future research.

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Submitted: October, 2009

Women in Non-Traditional Occupations: A Review of the Literature

Women in traditionally male-dominated occupations have had a somewhat contentious history. Whilst seeking employment in traditionally male-dominated occupations, women have met with resistance as to their suitability and capability (Williams, 1989), and typically have experienced hostility from colleagues, supervisors and those in managerial positions (e.g., Baigent, 2001; Department for Communities and Local Government, 2008a). Therefore, women are often described as being incapable, inadequate and incompetent for jobs that are typically performed by men (Blau, Ferber, & Winkler, 1998). Male-dominated occupations are defined as those in which women comprise 25% or less of the total employed (U.S. Department of Labor, 2008). The term 'male-dominated' will be used interchangeably with the term 'non-traditional occupations' throughout this review. Further to this, non-traditional employment for women may also be viewed by laypersons as any occupation that requires arduous labour (Sullivan, 2002).

The history of occupational segregation for women has resulted in restricted areas in which women have worked, namely administration, education and nursing, and has reinforced stereotypes and inequalities which is described as "a crucial barrier to the attainment of economic equality for women" (Blau & Hendricks, 1979, p.197). More recently, however, some changes have occurred, particularly in the mid to late 1990's when an increasing number of women entered into the labour market seeking employment within some male-dominated professions (Grube-Farrell, 2002), in managerial occupations (Halford & Leonard, 2001), in some blue-collar occupations (McIlwee, 1982), in construction (Swan, 2001) and in fire fighting (Blau, Ferber, &

Winkler, 1998). However, even with more movement into these non-traditional professions, women are still having difficulty being accepted. For example, women in the uniformed services (military, police, and fire fighting) are reporting burdensome and oppressive journeys in being accepted within these occupations (Grube-Farrell, 2002).

The aim of this paper is to review and critically evaluate research conducted in the area of women in non-traditional occupations, highlighting the range of experiences, roles, difficulties, and conclusions that exist so far. The paper will be divided into four sections, each examining women's roles in non-traditional employment areas such as construction, trade and transit workers, police and military services, the fire services, and the fourth section examines women in volunteer bushfire brigades. Finally, the review will conclude with a brief summary and critique of the findings, and a discussion of implications of the findings, and suggestions for future research.

International Gender-Related Research in Non-Traditional Employment

Women have occupied non-traditional employment throughout the nineteenth and twentieth centuries, with most women employed in low-paying positions in manufacturing and industry (Sullivan, 2002). However, as large numbers of men left the labour sector to serve in the military during World War II, women were beseeched to replace men in heavy manufacturing positions. With the end of the war men returned to their positions in industry and women returned home or to their previous employment roles (Deaux & Ullman, 1983). It has only been within the past three decades, as social and cultural gender roles have changed, that the proportion of women returning to non-traditional employment has again begun to increase (Deaux & Ullman, 1982).

Apart from detailing the numbers of women in different occupations, the first serious analyses of women's experiences in non-traditional employment emerged during the 1970's with Kanter's (1977a) work. Kanter's sociological studies were one of the first to conduct research examining gender and gender roles within the workplace. The purpose of her early research was to investigate the processes and consequences involved in discrimination. Kanter proposed that three primary variables are involved when attempting to account for inequity, and these variables work in combination to confine and shape possibilities for action and push people to adjust to their situation in a number of ways. 'Power' consists of the formal and informal ability to make and enforce decisions, 'opportunity' is the chance for upward mobility, both of which are affected by 'numbers,' which refers to the representation of certain groups of individuals, such as by age, gender, or ethnicity.

Kanter was the first to theorise about discrimination as a social process that was a direct result of tokenism (Kanter, 1977b). Tokenism refers to the representation of one's status as a symbol of one's kind, and is a result of a numeric (proportional) imbalance (Kanter, 1977a). Tokenism was developed as a general theory about discrimination based on the three variables, power, opportunity, and numbers. The relevance of her work to the current review is that women in non-traditional work roles were utilised as the empirical basis for her theoretical framework.

Kanter's (1977a) work examining tokenism identified groups within workplaces on the basis of proportional representations, namely dominants and tokens. Dominants are the numerically dominant group and thus control the group and culture, while tokens are the other group that represent the others left, hence they are more like symbols rather

than individuals. From her study, Kanter developed a framework for conceptualising the social perceptions and interaction dynamics that occur between dominants and tokens, and suggested some consequences that may be associated with tokenism.

The findings supported three perceptual phenomena associated with tokens. First, tokens, separately, have higher visibility than dominants, that is, they capture a larger awareness. The second perceptual tendency is polarisation, or exaggeration, of differences. This occurs as a result of members of the dominant group becoming more aware of both their commonalities with, and their differences from, the token. The third perceptual tendency, assimilation, involves the use of stereotypes or familiar generalisations about a person's social type. The characteristics of a token tend to be distorted to fit the generalisation. As tokens, by definition, are fewer in number, it is difficult to prevent the application of such familiar generalisations and stereotypes (Kanter, 1977b).

Therefore it is suggested that typical token responses are generated. Visibility creates performance pressures on the token, and therefore two typical ways of responding to these performance pressures were identified; overachievement, and the more common response of attempts to limit visibility, to become socially invisible. The second, polarisation, leads to group boundary heightening and isolation of the token, this occurs due to dominant group members realising their common bond and the token's differences, moving to exaggerate boundaries which previously they may not have been aware. Assimilation is the result of the token's entrapment. Entrapment refers to stereotypical assumptions and mistaken attributions made about tokens which tend to force them into playing limited and caricatured roles within the system (Kanter, 1977b).

This notion of assimilation is supported by Gutek and Morasch's (1982) research, who found support for 'sex-role spillover,' which is defined as "the carryover into the workplace of gender-based expectations for behaviour that are irrelevant or inappropriate to work" (Gutek & Morasch, 1982, p. 55). Sex-role spillover was suggested to occur when, for example, women are expected to be more nurturant and sympathetic than men in the same work-role. Both assimilation and sex-role spillover imply that environmental factors are important indicators of a male-dominated organisation's culture and thus provide possible explanations for the treatment of women.

Kanter (1977b) concluded from her tokenism research that the perceptual processes of visibility, polarisation, and assimilation negatively impact on both the interactions between the dominants and tokens, and the token's abilities to perform at maximum capacity. While Kanter's research focused on discrimination as a broad social process, the implications of interactive dynamics for women employed in male-dominated organisations emerged as factors which affect their experiences during employment.

The theory of tokenism has been challenged in more recent years by a number of writers (e.g., Halford & Leonard, 2001; Ott, 1989; Yoder, 1991). Ott (1989), for example, studied tokenism in two professions considered appropriate for both sexes to test whether Kanter's (1977a) theory of numerical imbalance could be considered gender-neutral. Police and nursing were examined. Ott points out that while Kanter's predictions were intended to be gender-neutral, they were based entirely on observations of token women. Ott hypothesised that women police officers who were part of a minority (O-women) would experience disadvantages compared with women police

officers who were part of a majority (F-women), and that male nurses who were part of a minority (O-men) would experience advantages compared with men who were part of a majority (F-men).

Interviews were conducted with 50 police teams and 49 nursing teams of approximately 15 members each. It was reported that more O-women than F-women felt visible, lacked privacy, and were looked upon with scepticism. It was also found that O-women experienced stronger sex-stereotyping with an inhibiting effect. In contrast, O-men felt that colleagues paid extra attention to them compared to F-men, and that this extra attention was seen as pleasant. With regard to sex-stereotyping, O-men felt patients frequently attributed a higher status to them than female nurses, even after they had told the patient they were not a physician. The results of the study contradict Kanter's (1977a) claim that tokenism applies to both men and women in non-traditional work environments. The notion that dynamics of proportion is an important factor is supported, but gender-neutrality was not. Kanter claimed that dynamics of proportion always affected the minority group negatively, however Ott (1989) found this not to be the case for men in the minority, and concluded that the differences encountered were effects of the high correlation between gender and status, the stereotypes that exist about the majority and minority groups, and the nature of the work that is being done.

Research investigating various other aspects of women's experiences whilst employed in non-traditional work roles began to emerge. For example, exploration of women's work satisfactions and experiences within their occupations were being documented (e.g., Delaware University, 1987; Mansfield et al., 1991; McIlwee, 1982). However, when exploring the experiences of women in non-traditional work roles, it is

apparent that discrimination is a major issue. All of the studies examining women in non-traditional occupations in this review reported some form of discrimination within the workplace. Even though all report the existence of discrimination, it is interesting to note the diverse ways in which the concept has been operationalised. Discrimination was operationalised in such ways as questionnaires that elicited information about discriminative acts (McIlwee, 1982), discrimination scales (Mansfield et al., 1991) and interpretation of behaviours by women as discriminatory (Fitzgerald et al., 1997).

There are several other negative aspects of the work role experience that have been found to exist for women in different types of male-dominated organisations. Negative aspects have included the lack of opportunity for advancement, demands of the job, isolation, and hierarchical social relations of the job (Guteck & Morash, 1982; Mansfield et al., 1991; McIlwee, 1982; Swan, 2001). While these are salient factors for women, it is not known whether these factors were as salient for their male co-workers. Future research may compare satisfactions of men and women within their occupations and organisations to understand the unique challenges experienced by women in these occupations.

Contrasting views about levels of satisfaction experienced by women in male-dominated work roles have been reported by several researchers. For example, Mansfield et al. (1991) reported that tradeswomen and transit operators were significantly less satisfied than school secretaries, McIlwee (1982) described work satisfaction of tradeswomen as equally satisfying as their male co-workers, but this trend occurred as a function of time employed in the occupation, while Delaware University (1987) reported that women in non-traditional occupations were as satisfied as their male co-workers.

Opposing interpretations of women's satisfactions within their non-traditional occupations could potentially be explained by the various methodologies employed by researchers, or by the diverse range of occupations that were included in each author's research.

Although most research about women in non-traditional occupations has focussed on the experience of adverse conditions and the consequences of deleterious relations with male co-workers, positive experiences have also been elicited (e.g., Delaware University, 1987; Mansfield, et al., 1991), though to a much lesser extent. A probable reason for this is that most women in non-traditional employment reported negative experiences, especially when this type of research first began to filter into academia. From an extensive review of the literature, it has been found that most research has concentrated on negative experiences, with positive experiences receiving minimal attention.

Early research conducted with women in non-traditional employment focussed on negative aspects of work experiences and how these might be facilitated within an organisational structure (e.g., Guteck & Morash, 1982; McIlwee, 1982; Wexler & Logan, 1983). Over time, women have come to be more accepted within such occupations and research reflects this shift, by investigating more constructive aspects of a woman's experience in a male-dominated occupation (e.g., Dantzker & Kubin, 1998; Sullivan, 2002). Some discrepancies exist within the literature about reasons for, and the consequences of, discrimination. Therefore, the working conditions of women in non-traditional employment require accurate and systematic documentation by researchers if policy recommendations are to be made which increase and retain women in non-

traditional workforces, increase their job satisfaction, and enhance their emotional and physical well-being whilst at work.

International Gender-Related Research in the Uniformed Services

Women were once prohibited from entering the uniformed services (the military, police, and fire fighting) until court orders and legal decisions mandated their inclusion in the 1970's (Lawrence & Mahan, 1998). Despite this, women have continued to be underrepresented in the uniformed services. Even with some increases during the 1970's, women still constitute less than 25% of the workforce in the uniformed services (Grube-Farrell, 2002). Therefore the police, military, and fire services are considered non-traditional occupations for women.

Research which has attempted to examine reasons why women remain at low numbers in non-traditional employment has focused on the negative aspects of the work environment as a possible explanation, with little consideration of women's positive experiences already in these types of occupations. Much of the research has examined sexual harassment of women (e.g., Culbertson & Rosenfeld, 1994; Fitzgerald, Drasgow, Hulin, Gelfand, & Magley, 1997; Loy & Stewart, 1984; Moore & Kleiner, 2001; Rosell, Miller, & Barber, 1995; Rosen & Martin, 1998a, 1998b; Taylor, Fitzgerald, Phillips &, Nixon, 1994), and other negative aspects of their work life (e.g., Gossett & Williams, 1998; Pogrebin & Poole, 1998; Wexler & Logan,1983). Most research of this nature has been conducted within the police and military services, and will therefore be the focus of this section of the review.

Although countries have varied in the dates of admitting women into their police force, the opposition of their admission has been almost universal (Brown, 1997). Early

research about women in the police service focussed on their competencies and abilities

compared to their male counterparts (e.g, Bloch & Anderson, 1974; Sherman, 1975;

Terry & Clinton, 1981). However, all of these studies concluded that female police

officers were as competent as male police officers. The research focus then moved from

competencies of women to other aspects of their non-traditional work, such as attitudes

toward women in policing by male colleagues (Haarr & Morash, 1999), and experiences

of discrimination (Gossett & Williams, 1998).

Tokenism has also featured heavily in research about women in the uniformed

services. Several studies have revealed that while tokenism acts to discriminate women

in male-dominated organisations, several additional factors can be attributed to

discrimination of women in these types of occupations (Gossett & Williams, 1998;

Grube-Farrell, 2002; Ott, 1989). For example, a study by Wertsch (1998) examined

tokenism as a deterrent to promotion. Interviews were conducted with 16 policewomen

in a Pacific Northwest city in the Unites States. The results indicated that tokenism may

act as one of several confounding factors that contribute to women's advancement in the

police force (Wertsch, 1998). Specifically, tokenism as a deterrent may have a

deleterious effect under the following conditions when: the organisation's promotional

procedures are unequal and discriminatory; the organisation's promotional procedures are

equal and non-discriminatory and allow for the advancement of women, but the effects of

tokenism are sufficient to be a disincentive to individuals from competing for

advancement; and competition for advancement is perceived as equal, but the

combination of tokenism and formal policies tends to direct women towards a specific

unit. Wertsch concluded that an officers' token status may be a contributing factor,

creating restrictions for advancement and that advancement for women may be specifically affected.

Sources of stress for police women have also featured in the literature. In their study of stress among female police officers, Wexler and Logan (1983) interviewed 25 female patrol officers in a large metropolitan department in California. Previous research has identified four categories of stressors involved in police work; external, organisational, task-related, and personal (Terry & Clinton, 1981). From Wexler and Logan's research, an additional category was created, namely female-related stressors (which are specific to female officers). Of the five categories of stressors, organisational and female-related were most often cited by these women as causing stress. Verbal abuse and intimidation during training were the most frequently mentioned organisational stressors, while negative attitudes by male officers towards female officers, and also rumours were the most frequently cited female stressors. A further source of stress specific to female officers was group blame, for example, when a woman did not perform adequately, they believed the men looked at that event as proof that no woman could be a police officer. This experience of being treated as a group is typical of minority group status and supports Kanter's (1977a) theory of tokenism. Wexler and Logan concluded that although different sources of stress were identified, the most salient were those associated with being female.

This view is supported by Haarr and Morash (1999), who conducted research with over 1,000 officers in 24 departments across the United States, 68.6% were men, and 31.4% were women. From their research, it was found that gender was a significant predictor of levels of stress, with the odds of being in a high-stress group increasing by

48% if the officer was a woman. The authors concluded that structural and cultural features of police organisations create unique problems and pressures for women, which is consistent with previous research (Wertsch, 1998; Wexler & Logan, 1983).

Additionally, Haarr and Morash (1999), and others (Brown & Heidensohn, 2000; Taylor, et al., 1994) have extended research on stress experienced by women in the uniformed services to investigate coping strategies to combat challenges and difficulties faced. All research alluded to the notion that women used additional coping strategies to men, which were a result of the unique difficulties faced by women.

Attention has been given to numerous other issues surrounding reasons as to why women still constitute a small portion of the total employed in the uniformed services. For example, in their anticipation of understanding why women remain at low numbers within the police force, Dantkzer and Kubin (1998) examined job satisfaction among officers and whether there is a difference by gender, hoping to provide insight into the attitudes and perceptions of female officers. Additionally, Dantzker and Kubin (1998) examined other variables such as rank, age, and years of experience combined with gender. In combination, some evidence was provided in support of differences in job satisfaction for men and women. Future research should therefore give attention to gender in combination with demographic characteristics (e.g., age, rank, years of experience, ethnicity, and education) to determine if differences exist. Such a determination will result in further understanding of what differences in job satisfaction exist between male and female police officers.

Perceptions of discrimination have also been discussed as a potential barrier for women seeking employment within the police force and also as a barrier to seeking

advancement once employed. Gossett and Williams (1998) interviewed women officers

regarding their perceptions of discrimination, and found the most frequently expressed

complaints were of not being taken seriously, of males failing to acknowledge females in

positions of authority, and of generally inappropriate behaviour directed toward female

officers. Several officers also felt disadvantaged in the promotional process, which is

supported by Wertsch's (1998) research.

European research illustrates a similar story to that of the United States and

United Kingdom. Brown (1997) offers insights into policing in Northern and Eastern

European countries, asserting that many constants characterise women's experiences in

European police organisations. Brown reported that women are restricted to support

functions, and operationally confined to the speed at which women's roles develop and

advance. This is also reflected in the Netherlands and Sweden, where women have

attained roles in higher-ranking placements, whereas in France there is still a tendency for

women officers to be protected from street duties. Brown also found a similar trend in

Eastern European countries.

As indicated earlier, women's negative experiences have been the focal point of

much research conducted in the uniformed services, serving as potential explanations for

why women remain underrepresented. More research is needed to understand the various

positive and rewarding experiences that exist among women in non-traditional

occupations to obtain a fuller understanding in this area. The generalisability of much of

the published research on this issue is problematic because of the exploratory nature,

which limits the practicability of the research findings. However, acknowledging that

certain types of experiences are apparent for women allows for further investigative

action and policy implementations to occur. Finally, there is a paucity of Australian

research conducted with women in the uniformed services.

International and Australian Gender-Related Research in the Fire Services

In modern times, the term 'firefighter' is still synonymous with the term

'fireman,' possibly due to the nature of the work that is required to hold such a position.

Firefighting, a traditionally male-dominated industry is an occupation with both arduous

physical and psychological demands (Shuster, 1990), typically attributed to men.

Firefighting has been a particularly inflexible industry for women to gain employment in,

and once employed, to be acknowledged as capable and competent members of the

workforce (Chetkovich, 1997). Women have experienced resistance and resultant

hostility from colleagues and individuals in supervisory and managerial positions

(Department for Communities and Local Government, 2008b). However, the numbers

of women infiltrating the ranks of the fire service, seen as one of the last bastions of the

male-dominated occupations, is increasing (Rosell, Miller, & Barber, 1995).

The first woman to be employed in the fire services occurred during 1974 in the

United States (Floren, 1980). During the late 1970's, Burnside Country Fire Services in

South Australia was the first brigade in Australia to partake in the implementation of

women in active roles in the fire service, and in 1987, South Australia was again the first

state to employ a paid female firefighter (Childs, 2008). Western Australia's first female

firefighter was employed in 1987, and remained the only female firefighter within the

Fire and Emergency Services Authority (FESA) until she left in 1992 (Childs, 2008).

Subsequently in 1997, six more female firefighters commenced their employment with

FESA (Childs, 2008). Currently in Australia, an average of 5% of the total firefighters are female (Morris & Ingham, 2004; cited in Childs, 2006a).

Similar to research conducted with women employed in non-traditional roles, most of the American research related to female firefighters is concerned with issues of discrimination of women (Hulett, Bendick, Thomas, & Moccio, 2008), sexual harassment (Floren, 1980), and equality and diversity (Bucke, 1994; Department for Communities and Local Government, 2008b, 2009). There is a small amount of research which investigates female firefighter's experiences in general, but this also resulted in reported experiences of discrimination, (e.g., Yoder & Berendsen, 2001).

This can be seen in Chetkovich's (1997) research, who explored the issues of gender in fire services through examining the experiences of 26 firefighter recruits in California through in-depth interviews. The focus of her research was to attempt to understand what it meant to be a firefighter (both to oneself and to the fire fighting culture), and how recruits become accepted as firefighters. The author identified characteristics of women which affected their acceptance into the fire service, namely, the differential socialisation of men and women and its effect on their willingness to demonstrate certain behaviours. For example, aggressive participation in drills and fireground tasks were not as vigourously participated in by women. As a result of their caution and self-doubt, women were often seen by their male co-workers as unskilled and incompetent (Chetkovich, 1997).

In addition, the level of caution expressed by women firefighters was a result of the perception that women were particularly liable to have their mistakes publicised and therefore reflect women in general as not fit for the job (Chetkovich, 1997). This view is

supported by Wexler and Logan (1983), who identified group blame as a specific stressor of females in non-traditional occupations, and is also indicative of minority group status dynamics which supports Kanter's (1977a) theory of tokenism.

The notion of women's perceived inadequate job skills by male co-workers noted by Chetkovich (1997) is extended to perceived inadequate job skills by women themselves. Murphy, Beaton, Cain, and Pike's (1995) research of gender differences in firefighter stressors asked respondents to identify job stressors experienced in their past 10 shifts worked. Women reported significantly higher job skill concerns than men ($t = -2.65, p = <.01$), reporting that having inadequate skills compared to their male co-workers was a major source of stress.

Research into the culture of the fire service in the United Kingdom (UK) has been described as very masculine, very hierarchical, locked in the past, and very resistant to change (Baigent, 2001). Dave Baigent (2001), an operational firefighter turned academic post retirement from the UK fire service, identified characteristics of this masculine culture, with the main form of masculinity in firefighting characterised by the formation and maintenance of the group. This included ostracising firefighters who did not conform to the group, bullying and threatening anyone who disagreed with the dominant group, and enforcing the rituals of inclusion and exclusion that perpetuate the masculine culture.

The existence of a discriminatory masculine culture within the fire service has also been reported in the most comprehensive current study conducted in England about the experiences of firefighters, commissioned by the Department of Communities and Local Government (2008a). The survey of 1,869 serving women and men firefighters (as

well as women and men leaving the fire service one to three years prior to the survey),

collected qualitative and quantitative data on the workplace experiences of firefighters in

order to understand the culture of firefighting in England. The survey found that 32% of

respondents experienced harassment or discrimination, 28% received unwelcome

comments about their appearance, and 25% were verbally abused at work. In all cases,

women were most likely to have experienced these behaviours at work committed by

colleagues. More than half (56%) of those who experienced these behaviours, reported

they were affected or bothered by the situations.

Similar to the research discussed in relation to women employed in the uniformed

services, all research discussed thus far has been conducted in the United States and

England. There is a dearth of literature within Australia investigating the experiences of

women firefighters. This may be explained by Wraith's (1994) assertion that in disaster

management in Australia, the role of women has essentially been in an unofficial support

function to the core activities. Recently a longitudinal study within the Metropolitan Fire

and Emergency Services Board (MFB) (Lewis, 2005), and a national survey-based study

(Childs, 2006b) have been conducted in Australia with women in the paid fire services.

However, no research has been found which specifically examines the positive and

rewarding experiences of female firefighters.

Lewis (2005), in conjunction with the Swinburne Institute for Social Research and

the MFB, developed the Gender Equity Project in Melbourne, Australia. The aims of the

five year longitudinal project are to research and develop a long-term equity plan for a

more diverse fire service by identifying and removing all cultural and structural barriers

which prevent improved recruitment, retention and promotional opportunities for women.

The report has found that women experienced several aspects of tokenism, that is, their behaviour was seen as representative of their social category as women rather than individuals, and their visibility rendered them reluctant to put themselves forward for management development knowing they would be subject to more scrutiny. Key recommendations included the gendered culture of the MFB be the focus of change by establishing a gender equity development program for the provision of training for all MFB personnel on current and emerging gender and diversity issues, and the implementation of a range of women sensitive policies and practices. The conclusion of the project is scheduled for 2010, when all programs, policies, and practices implemented as a result of the project will be revised. The culture of the MFB will also be researched in light of changes made.

The only other research conducted in Australia with employed women firefighters was by Childs (2006b). The purpose of the research was to obtain a preliminary appreciation of experiences of female firefighters across different types of firefighting agencies (e.g., paid, retained, and volunteer) within Australia. She hypothesised that commonalities would exist in the gendered experiences of female firefighters, regardless of locale and context, even if there were differences in terms of the tasks undertaken, the scope of the agency, and remuneration or otherwise. The participants included both career and volunteer firefighters, with a total of 389 respondents.

Participants reported a spectrum of experiences, from enjoyment working as a team towards a shared a goal, to working with men and their egos. Elements of tokenism were also reported by some women who indicated that they felt that they had to work a lot harder than men to prove that they were just as good, and that their mistakes were

magnified by others. These findings supported the idea that women inhabit and experience firefighting organisational culture in gendered ways. Childs (2006b) concluded that the experiences of female firefighters are mediated by their own commitment to the job, capacity to manage male attitudes, and the nature of support within their crews. For example, it was reported that an amenable crew could make a female firefighter's experiences positive and fulfilling, whereas a disrespectful or resistant crew could make working life virtually unbearable.

Childs (2006b) further concluded that some outdated ideas about females still exist within the fire services, and that fire agencies have not taken enough action to ensure females are treated as if they are a normal part of a firefighting workforce. This conclusion is similar to that reached by the Department for Communities and Local Government (2008a) in England. A limitation noted by Childs was the nature of the methodology, in that an Internet-based survey could be completed by anyone, therefore potentially contaminating data. The researcher made mention of applying mechanisms to discourage misrepresentation but it was not explicitly stated what these mechanisms were.

It appears, internationally, fire services have within them a culture that may not always welcome women, and where sometimes some women may be devalued, bullied, or excluded (Childs, 2006b). It also appears that despite the existence of a discriminatory culture, women are determined to overcome such behaviours which are typical of this culture, and to experience and also enjoy the experience of fire fighting as a role for women. Fire services around the world now recognise women's intentions by implementing policies and practices conducive to the enhancement of their well-being

whilst employed as a firefighter (e.g., Department for Communities and Local Government, 2008a, 2009; Lewis, 2005).

Australian Gender-Related Research in Volunteer Fire Services

Volunteers are considered an integral part of the fire services in Australia due to the high degree of threat to communities because of vast bushland areas. Recent events have shown how invaluable Australia's volunteer firefighters are, however there is a relatively scarce amount of information about volunteer firefighters (Beatson & McLennan, 2005). The proportion of women within volunteer bushfire services in Australia currently ranges from 12% to 24% (McLennan, 2004a). Western Australia currently possesses the highest proportion of female volunteer firefighters in Australia (24%), with 6389 registered volunteers (Fire and Emergency Services Authority of Western Australia, 2008).

Limited research exists about volunteer firefighters in the United States (e.g., Lozier, 1976; Manolakes, 2001; Meyer, 1990; Thompson & Bono, 1993), and no studies were found which examined female volunteer firefighters specifically. Manolakes' (2001) dissertation included a comparison of experiences of female and male volunteer firefighters. The author found gender influenced motivations to join, processes by which individuals joined, and levels of participation in official and social activities. This finding concurs with Chetkovich's (1997) conclusion about firefighter recruits, that differential socialisation of men and women was argued to affect their willingness to demonstrate certain types of behaviours. It is interesting to note there is no definitive calculation about the numbers of female volunteer firefighters in the United States (Floren, Denlinger & Brucciani, 2006).

Two Western Australian studies have been conducted with volunteer firefighters, again these studies were not gender-specific (Aitken, 2000; Preston, 1993). Given there are few studies about volunteer firefighters in Australia (e.g., McLennan, 2004a; McLennan & Birch, 2005; McLennan & Birch, 2008; McLennan & Birch, 2009; McLennan, Birch, Cowlishaw, & Hayes, 2009), there are fewer studies about the experiences of women in Australian volunteer-based fire services, and currently no fire service in Australia has a formally stated policy concerned specifically with the enhancement of female volunteer numbers (Beatson, 2005). Most research about volunteer firefighters has been conducted by the Bushfire Cooperative Research Centre (Bushfire CRC) at Latrobe University in Melbourne, with the aim of focusing on enhancing recruitment and retention through implementation of appropriate strategies and policies (e.g., McLennan, Birch, Beatson, & Cowlishaw, 2007).

The first study conducted by the Bushfire CRC served as a base-line for future evaluation of contributions by the Bushfire CRC's Volunteerism Project to enhancing recruitment and retention of volunteers by fire services (McLennan, 2004b). Interviews and discussions were held with human resource staff, volunteer management staff, chief officers, and a small number of actual volunteers across Australia (Northern Territory Fire and Rescue Service is not a participant in the Bushfire CRC Volunteerism Project because of its small number of volunteer numbers). Reports and other documents produced by fire services concerning volunteer recruitment and retention were also reviewed. Major findings of the preliminary study established that brigades were concerned about the aging volunteer population for future viability of volunteer fire services, and also about underrepresentation of women volunteers generally, and

particularly in operational roles (as distinct from auxiliary support roles). Some concerns were noted that attitudes among older male volunteers, especially in rural brigades, may be hostile toward women participating in firefighting activity. Preliminary findings accorded priority by the Bushfire CRC included identifying barriers to greater participation by women in operational firefighting roles.

Two more studies conducted by the Bushfire CRC investigated the experiences of female volunteers specifically, with the aim of providing direction for strategies which would assist in the recruitment and retention of women volunteers (McLennan & Birch, 2006a; 2006b). Women from the Australian Capital Territory Rural Fire Service (RFS) (n=31) and the South Australian Country Fire Service (CFS) (n=442) responded to a mail survey. Similar results were found across both studies with few exceptions. Women from both studies reported very positively on their training experiences, but approximately one third expressed that it could be intimidating to ask questions on a topic which men are stereotypically knowledgeable about. Opportunities for advancement and leadership were reported as barriers faced by approximately one quarter of women on a regular basis, and approximately one quarter of women also reported they were told by at least one man in the brigade that women do not belong in the fire service and/or are not capable of the work.

This final finding is a similar result found in a study by the Country Fire Authority (CFA) (1998) in Victoria. Fifty-one focus groups were conducted with approximately 800 CFA volunteers as part of a recruitment and development program which investigated challenges to recruitment in regional areas. As part of the study, it

was found that for women volunteers, they expressed they felt that "in many cases, brigades were viewed as boys' clubs" (p. 7).

Similar levels of discrimination were experienced by women from both studies (McLennan & Birch, 2006a; 2006b), with one third to one quarter of women reporting derogation of suitability and restriction of opportunity for leadership as the main acts of discrimination. Levels of sexual harassment experienced by women from both studies were also similar, with 16% of RFS and 15% of CFS participants reporting harassment of this nature. Main forms of sexual harassment were reported in both studies as offensive sexual innuendo, verbal abuse, unwanted sexual advances, and inappropriate touching. The only major difference between the two studies was the perception that women felt they had to act like one of the boys to fit in, with women from the RFS reporting this expression more than double that of the CFS. A possible explanation is the combination of the geographical locations of the RFS brigades, in that they are considered to be more rural than the CFS brigades, and also the proportion of females in the RFS (15%) is less than that of the CFS (22%).

These research findings concur with McLennan, et al., (2007), who conducted surveys with 391 volunteer firefighters from various CFA regions across Victoria. Results indicated women within volunteer fire services experienced specific gender-related challenges and issues. Such issues included intimidation at training and dissatisfaction with opportunities for leadership and advancement. It would seem there are both perceived and actual issues for women volunteer firefighters in the CFA. However, as the above-mentioned studies were survey-based, little opportunity

was given for women to elaborate about their experience and role as a volunteer

firefighter.

In reviewing the literature surrounding this sector it appears that little research has

been conducted which provides systematic accounts of the experiences of women

volunteers in Australian volunteer-based fire services, and most of the research pertaining

to the retention of female volunteer firefighters has been of a quantitative and cross-

sectional nature, making it of limited value in understanding experiences and their

potential impact. It appears a similar culture to employed firefighters exists within

volunteer fire services, and certain experiences are similar across both arenas. If more is

understood about the experiences of women firefighters in general, and women

firefighters in operational roles specifically, and the impact that these experiences have,

then brigade strategies may be better targeted. The findings from the above-mentioned

studies suggest there is little known about the issues that are specific to female volunteer

firefighters, and that more in-depth female firefighter (volunteer and employed) research

is required to better understand the experiences of these women.

Implications of Review Findings

Research conducted examining women within male-dominated occupations

indicates that an underlying culture exists where women who work in these non-

traditional occupations must deal with more than the demands that come with the job

description (e.g., Brown & Heidensohn, 2000; Childs, 2006b, Department for

Communities and Local Government, 2008b). Due to their gender and minority status,

women face additional stressors and encounter negativity whilst at work, which may

result in feelings of inferiority and damaging to women's self-worth (e.g., Gossett &

Williams, 1998; Grube-Farrell, 2002; Wexler & Logan, 1983). It appears an underlying culture exists such that women are exposed to discriminatory and inappropriate situations, but that as part of a male-dominated workforce, they themselves expect and accept such situations and consequences as a function of that type of occupation (e.g., Chetkovich, 1997; Fitzgerald, et al., 1997; Halford & Leonard, 2001). For example, threads of tokenism (Deaux & Ullman, 1983; Gossett & Williams, 1998; Haarr & Morash, 1999; Wertsch, 1998) and also the lack of opportunity for advancement (Brown & Heidensohn, 2000; McLennan & Birch, 2006a, 2006b; Rosen & Martin, 1998b; Shuster, 1990) appear throughout the literature about women in non-traditional employment. This has implications for the continuation of women in these male-dominated work environments but it also shows that women are some way from being recognised as equal and adequate members of a male-dominated organisational structure. There are implications for policy and guidelines for governing bodies in an era where equity and diversity are at the forefront. Change within male-dominated organisations will not be achieved by simply recruiting more women. It will be achieved through a complex process of cultural change.

Directions for Future Research

From the literature about women in non-traditional occupations, it is apparent that insufficient research has been conducted which investigates the positive, rewarding, and enriching experiences encountered by women. It is also apparent that the majority of research conducted has been of a quantitative and cross-sectional nature, making it of limited value in understanding potential psychological impacts for women who encounter negative experiences in their workplace. Research which enables a deeper understanding

of the impact of such experiences on women's self-esteem, attitudes whilst at work, and

the effects their experiences have on their considerations of retainment within their work

environment needs to be undertaken.

<div align="center">Conclusion</div>

This review has examined the research investigating the nature, prevalence, and

impact discriminatory and other inappropriate behaviours have on women in a range of

non-traditional occupations. The review of research findings indicates that gender is an

important determinant on the types of experiences that are likely to be encountered, and

future research would benefit from a comprehensive understanding of women's

experiences in different workplaces and the factors which influence male-dominated

work environments.

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Running Head: WOMEN VOLUNTEER FIREFIGHTERS' EXPERIENCES

A Qualitative Exploration of Women Firefighters' Experiences in the

Western Australian Volunteer Bushfire Service

Cindy Branch-Smith

A report submitted in Partial Fulfilment of the Requirements for the

Award of Bachelor of Science (Psychology) Honours,

Faculty of Computing, Health and Science,

Edith Cowan University.

Submitted October, 2009

I declare that this written assignment is
my own work and does not include:
(ii) material from published sources
used without proper acknowledgement, or
(ii) material copied from the work of other students

Cindy Branch-Smith

Abstract

Recent events have shown how invaluable Australia's volunteer firefighters are to
communities, for example, Black Saturday. Volunteer numbers appear to be declining
nation-wide and a majority of volunteer fire services report under-representation of
women in operational roles. To ascertain an understanding of experiences and issues
faced by women in volunteer fire services, the aim of the current study was to explore
female volunteer firefighters' experience, and how their experiences impact on their
perceptions of themselves as firefighters. A qualitative research methodology was
employed, which enabled investigation of issues and challenges related to the firefighting
experience. A total of 12 women participated in semi-structured interviews, which were
recorded, transcribed verbatim, and analysed using interpretative phenomenological
analysis. A total of two dominant themes and six sub-themes were identified: (1) positive
experiences and outcomes (life meaning, facilitation of confidence, positive atmosphere,
competence in getting the job done); (2) negative experiences and outcomes (negative
behaviour towards women, 'few guy' syndrome). The findings have provided insight
into the way in which women perceive themselves as firefighters, and the influences of
past experiences which impacted on these perceptions. Furthermore, this study
contributes towards the understanding of how to effectively engage and empower
women, and also to the development of programs and strategies conducive to the
enhancement of women in Australian volunteer-based fire agencies.

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Submitted: October, 2009

A Qualitative Exploration of Women Firefighters' Experiences in the

Western Australian Volunteer Bushfire Service

In Australia, volunteer fire brigades provide the only organised response to fires

outside of the built-up areas of major cities or specialised areas such as national parks

(Lyons, 2001). Nation-wide, communities rely on more than 220,000 volunteer

firefighters (McLennan, 2008), and it is estimated that approximately 25,000 bushfire

volunteers in approximately 750 brigades are currently serving in active roles across

Western Australia (WA) (Association of Volunteer Bush Fire Brigades of Western

Australia Incorporated, n.d.). Volunteers are considered an integral part of the fire

services in WA due to the high degree of threat to communities because of vast bushland

areas.

Recent events have shown how invaluable Australia's volunteer firefighters are,

for example, the events of Black Saturday. However, there is a relatively scarce amount

of information about volunteer firefighters (Beatson & McLennan, 2005). With total

volunteer firefighter numbers declining appreciably nation-wide due to complex

economic and demographic changes within Australian society (McLennan & Birch,

2005), and most brigades reporting under-representation of women within operation roles

(McLennen, 2004a), it should be of interest to bushfire brigades to attempt to maximise

volunteer numbers by implementing procedures and strategies conducive to increasing

the number of women in volunteer bushfire brigades.

The proportion of women within volunteer bushfire services in Australia currently

ranges from 12% to 24% (McLennan, 2004a). WA currently has the highest proportion

of female volunteer firefighters in Australia, with 6389 registered volunteers, and 4078 of

those holding operational roles (Fire and Emergency Services Authority of Western

Australia, 2008). An operational firefighter's role is defined as the role of an active

firefighter (as opposed to an auxiliary or supportive role), participating in activities such

as firefighting, equipment and hydrant maintenance, and fire behaviour and suppression

training (R. Wallington, personal communication, March 18, 2009).

Given there are few studies about volunteer firefighters in Australia (e.g.,

McLennan, 2004a; McLennan & Birch, 2005; McLennan & Birch, 2008; McLennan &

Birch, 2009; McLennan, Birch, Cowlishaw, & Hayes, 2009) and WA (Aitken, 2000;

Preston, 1993), there are fewer studies about the experiences of women in Australian

volunteer-based fire services (McLennan & Birch, 2006a, 2006b), and the majority of

volunteer firefighter research has been conducted by the Bushfire Cooperative Research

Centre (Bushfire CRC) at LaTrobe University in Melbourne, with the aim of focusing on

enhancing recruitment and retention through implementation of appropriate strategies and

policies (e.g., McLennan, Birch, Beatson, & Cowlishaw, 2007). Currently, however, no

fire service in Australia has a formally stated policy concerned specifically with the

enhancement of female volunteer numbers (Beatson, 2005).

The first study conducted by the Bushfire CRC served as a base-line for future

evaluation of contributions by the Bushfire CRC's Volunteerism (D3) Project to

enhancing recruitment and retention of volunteers by fire services (McLennan, 2004b).

From researching qualitative and archival data, some concerns were noted that attitudes

among male volunteers, especially in rural brigades, may be hostile towards women

participating in firefighting activities. Preliminary findings accorded priority by the

Bushfire CRC included identifying barriers to greater participation by women in operational firefighting roles.

Two more studies conducted by the Bushfire CRC investigated the experiences of female volunteers specifically, with the aim of providing direction for strategies which would assist in the recruitment and retention of women volunteers (McLennan & Birch, 2006a; 2006b). Women from the Australian Capital Territory Rural Fire Service (RFS) (n=31) and the South Australian Country Fire Service (CFS) (n=442) responded to a mail survey. Similar results were found across both studies with few exceptions. Women from both studies reported very positively on their training experiences, though opportunities for advancement and leadership were reported as barriers faced by approximately one quarter of women, and approximately one quarter of women also expressed they were told by at least one man in the brigade that women do not belong in the fire service and/or are not capable of the work.

This final finding is a similar result found in a study by the Country Fire Authority (CFA) (1998) in Victoria. Fifty-one focus groups were conducted with approximately 800 CFA volunteers as part of a recruitment and development program which investigated challenges to recruitment in regional areas. As part of the study, it was found that for women volunteers, they expressed they felt that "in many cases, brigades were viewed as boys' clubs" (p. 7).

Similar levels of discrimination were experienced by women from both studies (McLennan & Birch, 2006a; 2006b), with one third to one quarter of women reporting derogation of suitability and restriction of opportunity for leadership as the main acts of discrimination. Levels of sexual harassment experienced by women from both studies

were also similar, with 16% of RFS and 15% of CFA participants reporting harassment

of this nature. Main forms of sexual harassment were reported in both studies as

offensive sexual innuendo, verbal abuse, unwanted sexual advances, and inappropriate

touching. The only major difference between the two studies was the perception that

women felt they had to act like one of the boys to fit in, with women from the RFS

reporting this expression more than double that of the CFS. A possible explanation for

this difference is the combination of the geographical locations of the RFS brigades, in

that they are considered to be more rural than the CFS brigades, and also the proportion

of females in the RFS (15%) is less than that of the CFS (22%).

These research findings concur with McLennan, et al. (2007), who conducted

surveys with 391 volunteer firefighters from various CFA regions across Victoria.

Results indicated women within volunteer fire services experienced specific gender-

related challenges and issues. Such issues included intimidation at training and

dissatisfaction with opportunities for leadership and advancement. This study argued

there are both perceived and actual issues for women volunteer firefighters. However, as

the above-mentioned studies were survey-based, little opportunity was given for women

to elaborate about their experience and role as a volunteer firefighter.

In reviewing the literature surrounding this sector it appears little research has

been conducted which provides systematic accounts of the experiences of women in

Australian volunteer-based fire services, and most of the research pertaining to their

retention has been of a quantitative and cross-sectional nature, making it of limited value

in understanding the potential impact of such experiences. If more is known about the

experiences of women volunteer firefighters, and the impact such experiences have, then

brigade strategies can be modified to enhance the number of females within these roles.

The aim of the current study was therefore to explore female volunteer firefighters'

experiences of firefighting in a WA context. More specifically, the study focused on how

their experiences as volunteers impacted on their perceptions of themselves as

firefighters.

<div align="center">Methodology</div>

Research Design and Paradigms

An in-depth qualitative design was utilised in order to discover and understand the

unique experiences of women volunteer firefighters. As there are few studies exploring

women volunteer firefighters' experiences in the literature, a phenomenological study

best lent itself to eliciting data reflecting women's experiences and the ways in which

they construct perceptions of themselves in relation to firefighting. A phenomenological

approach focuses on the lived experiences of people, and seeks to understand the nature

of the phenomena (Becker, 1992). Phenomenological interviewing involves an informal,

interactive process and utilises open-ended comments and questions (Moustakas, 1994).

The study adopted a constructivist perspective, using semi-structured interviewing

as a vehicle for data collection. A constructivist perspective was adopted in order to

explore women's unique experiences. This perspective was applied as it seeks to

understand the multiple realities constructed by individuals and the implications of those

constructions for their lives and interactions with others (Patton, 2002).

Participants

The sample consisted of 12 women from eight volunteer bushfire brigades across

the metropolitan and semi-rural areas of Perth. Participants were aged between 18 and 49

years ($M = 39.58$, $SD = 11.07$). Years of experience within a bushfire brigade ranged from 2 to 16 years ($M = 6.08$, $SD = 4.98$). All women held an operational role within their brigade, ranging from basic firefighters to lieutenants.

Activities participated in included attending to fire incidents and regular training. These women were also involved in conducting training sessions and mentoring other firefighters. Involvement in communications and incident control was also part of participants' roles. The number and location of brigades involved in the current research is indicative of the women who chose to participate. The sample size was based on the number of participants who could offer information-rich descriptions of their perceptions, and is within the suggested range for this type of qualitative research (Burgess-Limerick & Burgess-Limerick, 1998; Miles & Hubermann, 1994; Patton, 2002; Polkinghorne, 1989).

Data Collection Procedures

The recruitment of participants was achieved through the distribution of a cover letter (see Appendix A) and information letters (see Appendix B) to all bushfire brigades in the metropolitan and semi-rural areas of Perth. Potential participants were required to make contact with the researcher, at which time an interview was scheduled for a mutually convenient time and place. Interviews were conducted either at the participants' home or at their fire brigade.

Prior to the commencement of the interview, participants received an information letter regarding the nature and purpose of the research (see Appendix C), and also a consent form (see Appendix D). Written consent was obtained for the participation in an

interview and for audio recording of the interview. Interviews were recorded using a digital audio recorder.

In order to obtain the interpretations of each participant's personal experiences, interviews were facilitated by an interview schedule (Smith, 1995). The interview schedule included a set of semi-structured questions, with probing questions for each (see Appendix E). Miles and Hubermann (1994) and also Smith (1995) have identified several advantages of conducting semi-structured interviews, which include assurance of flexibility in developing rapport, ensuring suitability to exploring personal and complex issues, and in providing rich data embedded in a certain context.

The interview questions were piloted with an acquaintance who was also a volunteer firefighter. This allowed inspection to occur of face validity and ensured understanding of the questions prior to the interviews. Furthermore, the interview schedule was reviewed by a staff member at the School of Psychology and Social Science, Edith Cowan University, to further determine face validity and suitability of questions.

The interview commenced with some demographic questions, which then moved to more general questions about firefighting experiences, such as "tell me about an experience at a fire incident," and "tell me about an experience at training." Several probing questions were utilised for each question, such as "how did that make you feel?" and "have there been similar experiences?" Several general probing questions were also utilised throughout the interviews intended to elicit further information, such as "can you tell me more about that?" and "can you give me an example?" All interviews were between 20 and 50 minutes in duration.

At the completion of the interview, the participant was thanked for participating and reminded of ethical obligations of the researcher. The researcher's reflections and impressions were documented in a journal at the completion of each interview. Interviews were then transcribed verbatim. Follow-up telephone interviews were conducted and several e-mails were exchanged with eight participants to clarify misunderstandings in the data and also to check for validation of interpretation.

Ethics

In keeping with the university's ethical guidelines, confidentiality of data and anonymity of participants were maintained during this study. Informed consent was obtained for participation and for recording of interviews. The information letter explained participation was voluntary and participants could withdraw from the study at any time without consequence. Identifiable names were coded, and all data and original recordings were securely stored and password protected on the researcher's computer. Once interviews were transcribed and analysed by the researcher, all data were stored in a secure environment at the university, where they will remain for seven years. Participants also received contact details of several available counselling services (see Appendix F). De-identified results and the written report have been made available to all participating bushfire brigades.

Role of the Researcher

As a volunteer bush firefighter, the researcher's interpretations were explicitly informed by attention to reflexivity. This process involves understanding how one's own experiences and background affect what one understands (Liamputtong & Ezzy, 2005). Reflexivity emphasises the importance of self-awareness and ownership of one's

perspective (Patton, 2002). By being self-aware and reflexive in consciousness, scientific

rigour of interpretation was ensured.

Data Analysis

Data obtained from the interviews were analysed using interpretative

phenomenological analysis to learn from the participants' experiences (Silverman, 2000).

Phenomenological analysis involves the inductive identification of themes within the data

(Liamputtong & Ezzy, 2005). Concepts were formed and related to create abstract

categories, relationships between categories were then formed and developed to create

themes which best represented the data (Liamputtong & Ezzy, 2005).

Initial analysis involved displaying the data using a triple column design with the

verbatim transcript placed on the left hand side. The first interview was read several

times, potentially significant words and phrases were developed into codes to provide

meaning to the descriptive information (Miles & Hubermann, 1994) and recorded in the

middle column. The data were then reduced by grouping similar categories and codes,

and identifying the most significant themes. As codes and themes were connected and

clustered together, the transcript was checked for accuracy. These themes were then

recorded in the right hand column at points of text which represented it (Liamputtong &

Ezzy, 2005; Smith, 2003). This process was continued with subsequent interviews.

Themes from previous cases were utilised to orient subsequent analyses,

respecting convergences and divergences within the data. Constant comparative analysis

was applied to develop and check for accuracy of theme boundaries. Constant

comparative analysis involves comparing subsequent transcripts to previous ones, using

identified themes from the first transcript to analyse the rest (Janesick, 1994; Strauss &

Corbin, 1994). New themes were added as well as some themes were dropped as they

either did not fit well in the emerging structure, of were not very rich in evidence within

the transcripts. Finally, a summary table of structured themes with quotations which

illustrate each theme was produced (Willig, 2001).

To assist in data reduction and accuracy of interpretation, transcripts were also

subjected to a question ordered matrix, which allows for viewing responses of each

participant to a specific question (Miles & Hubermann, 1994). By use of such a matrix,

the researcher was able to view sets of responses and examine them for consistencies

across questions that reflect themes, which emerged from the data independent of

questions the data originally belonged to.

Scientific rigour of the study was ensured through audibility, credibility, and

fittingness (Beanland, Schneider, LoBiondo-Wood, & Haber, 1999). Audibility refers to

providing adequate information in relation to the development of the study, and is

achieved by providing passages of interview data with the researcher's summaries to

show how data interpretation was conducted. Credibility refers to the accuracy of

findings by participants and others within the discipline. This was achieved by

performing triangulation through peer-checking of the themes (Hubermann & Miles,

1994; Janesick, 1994). Fittingness refers to the congruence between the research findings

and the literature, and is achieved by discussing the findings in the context of other

research studies in the area (Beanland, et al., 1999).

The rigour of the study was also ensured through the reliability of data

interpretation. This refers to the degree of consistency with which instances are assigned

to the same category on different occasions (Silverman, 2000), and is achieved by

conducting several processes of interpretation to conclude with emergent themes.

Throughout analyses, an audit trail (Charmaz, 2000) was also used to enhance scientific

rigour by ensuring interpretation followed a logic and conclusive path.

Findings and Interpretations

Two key themes emerged from the analysis of the volunteer firefighting

experience, within which a further six sub-themes were identified. These are summarised

in Table 1. Positive experiences and outcomes refer to experiences perceived by women

to be beneficial and productive in terms of cognitive outcomes for perceptions of

themselves as firefighters, resulting in feelings of achievement, confidence and

satisfaction. Negative experiences and outcomes refer to experiences perceived by

women to be adverse and detrimental in terms of cognitive outcomes for perceptions of

themselves as firefighters, resulting in feelings of inferiority and confusion.

Table 1

Themes

Theme	Sub-theme
Positive experiences and outcomes	Life meaning
	Facilitation of confidence
	Positive atmosphere
	Competence in getting the job done
Negative experiences and outcomes	Negative behaviour towards women
	'Few guy' syndrome

Positive Experiences and Outcomes

Positive experiences and outcomes appear to have dominated the volunteer firefighting experience for these women. Positive experiences refer to situations and events women perceived to be beneficial and productive in terms of cognitive outcomes for perceptions of themselves as firefighters. Positive outcomes refer not only to cognitive outcomes of specific situations encountered by women, but also to cognitive outcomes that were associated with being a female volunteer firefighter.

Life meaning.

Majority of the women perceived their role as a volunteer firefighter to give additional meaning to their lives and to their personal character. There were several ways in which participants felt they were providing themselves with additional value to their lives. Salient factors women attributed to providing additional meaning in their lives included a sense of community (SOC), personal achievement, and that volunteer firefighting provided them with an avenue in which to encounter experiences and participate in activities typically considered to be out of the ordinary.

SOC appeared to be a key factor in providing participants with a sense of meaning to their lives within their community. This relates to a relational SOC, distinguished by Gusfield (1975) as a quality of human relationships, and is distinct from the territorial and geographical notion of community. SOC has been one of the most researched topics in community psychology (e.g., Kingston, Mitchell, Florin, & Stevenson, 1999; Mak, Cheung, & Law, 2009; Obst & White, 2007; Pooley, Cohen, & Pike, 2005; Prezza & Pacilli, 2007), with emphasis of psychological aspects of SOC emphasised in Sarason's (1974) seminal work. More recently, McMillan and Chavis (1986) proposed a four-

factor conceptualisation of SOC. These elements appear throughout participants'

responses. First, membership refers to the feeling of belonging and relating to others.

This is reflected in several participants' responses. For example:

> *"I enjoy being involved in community things, it makes me feel like part of the community."*

> *"Being a volunteer firefighter means that I am being involved with other community members."*

Shared emotional connection is another element of McMillan and Chavis's (1986)

conceptualisation of SOC, which refers to the belief that members have shared and will

share history. This includes common places, time together, and similar experiences.

This point is highlighted by one participant who said:

> *"I think that attending fires gives you a sense of unity with other members, that feeling you get when you've been through something together."*

The third and fourth elements of McMillan and Chavis's (1986) conceptualisation

of SOC are fulfilment of needs, which refers to a feeling that members' needs will be met

by the resources available through their membership in the group, and influence, which

refers to making a difference to the group. This is reflected by one participant who

stated:

> *"I enjoy protecting the community and being able to make a difference, not only within the community but also within my brigade."*

The current findings are consistent with research conducted with volunteers

generally (Australian Bureau of Statistics, 2006), and in emergency management

organisations specifically (Gare, 2000; Fahey & Walker, 2002), in terms of the value of

being a volunteer, and its relation to SOC. Volunteer firefighter research in both

Australia and the United States has found similar trends for motivations to join and

remain with a volunteer fire brigade, conceptualising SOC in a variety of ways including assisting the community (Aitken, 2000; Thompson & Bono, 1993), protecting and feeling like a valued member of the community (Birch, McLennan, Beatson, & Kelly, 2008), and having strong links with the community (Thompson, 1994).

The connection of fire brigades to the communities from which volunteers are recruited is reflected in Australian research, which has consistently found the most salient motivations for joining, and also for remaining with a volunteer fire brigade are factors attributed to SOC (e.g., Birch, et al., 2008; Childs, 2006; Clancy & Holgate, 2004; Palmer, 2000). Bachrach and Zautra (1985) have suggested SOC can be extended when individuals participate in activities which assist in the maintenance and cohesiveness of the community, such as volunteer firefighting. Therefore, it appears SOC is an important and reverberating characteristic, and valued by the majority of volunteer firefighters.

A sense of personal achievement appeared to be another factor, which provided participants with additional meaning to their personal characters. Majority of participants expressed personal achievement was a result of their perceptions of competence in completing tasks. Personal achievement was not necessarily a factor in motivation to join a brigade, but more as a result of participating in and completing required tasks. For example, participants stated:

> *"I get a sense of achievement when I realise that I can do something that I didn't know I could."*

> *"I gain a lot of confidence when I put into practice what I have learned."*

Personal achievement has been heavily researched in the discipline of psychology, with David McClelland and his colleagues pioneering this area of research

(McClelland, Atkinson, Clark, & Lowell, 1953). Personal achievement gained through

volunteering appears also to be a salient factor in retention for the women in this study,

and is consistent with previous research about volunteering generally (Australian Bureau

of Statistics, 2006), volunteering in emergency management organisations (Fahey &

Walker, 2002), and volunteering in fire brigades specifically (Birch et al., 2008; Country

Fire Authority, 1998; McLennan & Birch, 2006a). The current findings are also

consistent with Childs' (2006) research with women firefighters in Australia, who

reported that women enjoyed the sense of accomplishment obtained from their

experiences as a firefighter.

Another area of participants' personal lives positively influenced by being a

volunteer firefighter was that such membership provided participants with an avenue

which competes with the normalities of their everyday lives. This meant participants felt

that being a volunteer firefighter provided them with avenues to meet people outside of

their everyday lives, to learn skills outside of their everyday lives, and to provide them

with the means to participate in activities outside of their everyday lives. This point is

highlighted by the following comments:

> *"Part of the joy is every time you come through the door you don't know who you're going to run into or who you'll be working with."*

> *"I enjoy the excitement and also the opportunity to learn new things, to learn new skills and different people, people outside of the normal range of people that I meet."*

> *"It's something different. I work in an office Monday to Friday, nine til five, so going out nights and weekends to fight fires is very different from what I am doing during the day so it's good."*

The value of learning new and different skills is consistent with previous

volunteer firefighter research in Australia (Aitken, 2000; Birch et al., 2008; Palmer,

2000), and should be utilised as a key incentive in retention (Fahey, Walker, & Sleigh, 2002). The current findings therefore extend on the literature in a number of ways to provide additional information regarding the way in which women volunteer firefighters perceive their role, and the psychological impacts associated with it. Data suggested that while learning and applying new skills is important to women, meeting new and different people and also participating in activities considered to be opposing to the routine of everyday life are also important elements of the volunteer firefighting experience perceived by women.

This is consistent with a study by Thompson and Bono (1993), who concluded that engaging in voluntary activities to satisfy the need for self-actualisation is a contributing factor to volunteer motivation, which is not possible to gain from regular employment. Thompson and Bono further concluded the nature of the volunteer firefighter's role was also a contributing factor of motivation, that an understanding of the nature of the labour and its significance for communities promotes pride and self-esteem. This suggests that volunteer firefighting provides individuals with activities that are conducive to the processes of self-actualisation, and also promotes confidence and achievement.

Facilitation of confidence.

The facilitation of confidence in varying situations and events appeared to be the most common positive (and overall) outcome for women in terms of the impact on their perceptions of themselves as firefighters. An array of stories by the women elicited examples of how their experiences as a volunteer firefighter promoted confidence in their

abilities to competently perform the tasks required of the role. This is illustrated in the

following examples:

> *"Getting into situations that are quite risky and dangerous, but calculated as well, and being able to handle myself in that situation. Still being able to my job in that situation gives you a lot of confidence."*

> *"You do all your training and then once you're out there you're putting that into practice and you know what to do. . .it's a good feeling and gives you confidence when you put into practice what you have learnt."*

Being one of the few qualitative studies investigating the positive experiences of

female volunteer firefighters in Australia, this study has provided evidence for the notion

that gaining confidence is a salient and important aspect of being a woman volunteer

firefighter. Although it is not investigated in the volunteer firefighter research, these

findings further support the idea that a benefit of volunteering is increased confidence

(Leong, 2008; McCabe, White, & Obst, 2007). Future research might assess whether this

concept is as salient and as important for men.

Childs' (2006) research with Australian women firefighters also provides support

for the idea that confidence is a positive outcome associated with the experiences of

being a firefighter. The interview responses from the current study suggest substantial

support for the high value attributed to confidence as an outcome of the firefighting

experience. The current finding extends on the literature by providing insight into the

positive psychological impact of being a volunteer firefighter, and proposes that

increased confidence is a fundamental element of the firefighting experience for women.

Women also expressed that confidence gained as a result of being a volunteer

firefighter transferred to other areas of their lives. This reinforces the benefit of gaining

confidence within this role and its value to the women, and may be a key element to

issues surrounding recruitment and retention of women volunteer firefighters. This point

is highlighted by one participant who said:

> *"Being in the brigade has given me the confidence to know my abilities*
> *and to know what I am and am not capable of. Even outside of the fire*
> *station I feel that kind of mentality has carried over."*

> *Positive atmosphere.*

A majority of women reported the general atmosphere within their bushfire brigade as

being a positive, encouraging and supportive environment. Ten of the twelve women

interviewed reported a generally positive atmosphere within their brigades. The

following observations are indicative:

> *"It's fun. I mean we go to fires and do work, but socially it's fun."*

> *"Everyone is nice and friendly, gets on well with each other so it's like a*
> *little family."*

> *"Everyone is supportive of everyone else. You know, backs each other*
> *up."*

This result is consistent with research in terms of a high reporting of a positive

social environment by women volunteer firefighters in Australia (McLennan & Birch,

2006a; 2006b). Furthermore, researchers of the Gender Equity Project (Lewis, 2005), a

five year longitudinal project aimed at developing a long-term equity plan for a more

diverse fire service within the Metropolitan Fire and Emergency Services Board in

Melbourne, acknowledged concerns expressed by women participants in relation to

disappointment the research did not highlight positive experiences encountered by

women whilst working with their male colleagues. This suggests that while negative

experiences and outcomes are areas which require research in terms of recruitment and

retention, positive experiences and the generally positive environment of a volunteer fire

brigade for women may be utilised as an instrument for recruitment and retention.

Competence in getting the job done.

This sub-theme is a positive outcome experienced by women as a result of being a

volunteer firefighter. It refers to the notion women were neither scared, embarrassed or

ashamed to admit their physical strength sometimes meant a task wouldn't be completed

the same way a man would complete the task. Rather, women felt competent the task

would be completed their own way, whether that meant completing the task differently,

taking longer, or asking for assistance. This point is reflected by the following remarks:

> *"I happen to be a woman but I am competent, and be respectful of the
> fact that I may not do things the same way that you do, I don't have the
> same physical strength but I'll get it done my own way."*

> *"I'm the first to admit that I'm not as strong as some of the guys so if I
> can't lift something I will ask someone to help, but that is because I'm a
> girl. Most men are stronger than most females, and I'm happy to admit
> that."*

> *"I know I can do it just as good as any bloke out there. I may not do it
> the same way, but I'll get it done."*

It appears women generally felt competent, and also comfortable, in their abilities

to perform the activities of a volunteer firefighter, despite biological differences in

strength between men and women. With few exceptions (e.g., Chetkovich, 1997;

Dantzker & Kubin, 1998; Sullivan, 2002), much of the current research in emergency

management and non-traditional employment for women has neglected to investigate the

more positive aspects of work, and psychological impacts associated with these types of

activities for women. The current findings therefore extend on the current literature by

enhancing our understanding of how women appear to be comfortable with their capabilities to perform the tasks required of a volunteer firefighter.

Negative Experiences and Outcomes

Whilst not as predominant as positive experiences and outcomes, negative experiences and outcomes as a result of the volunteer firefighting experience were a cause for concern for these women. Negative experiences refer to situations and events women perceived to be adverse and detrimental in terms of cognitive outcomes for perceptions of themselves as firefighters. Negative outcomes refer not only to cognitive outcomes of specific situations encountered by women, but also to cognitive outcomes that were associated with being a female volunteer firefighter.

Negative behaviour towards women.

A strong and recurring sub-theme, and one mentioned by the majority of participants related to negative behaviour perceived by women; this appears to pose the most significant barrier to retaining female volunteer firefighters. The interview responses of the women provide substantial support for the notion that women experienced several types of negative behaviours with some occurring at training, and most occurring on the fireground.

Behaviours have been divided into two categories based on the perception of the participant as to how they perceived the behaviour to be. First, inappropriate behaviours were perceived by women to be situations and experiences they felt may or may not (that is, they were unsure) have been discriminatory behaviour towards them. Second, covert discrimination was perceived by women to be an indirect and discrete form of gender-based discrimination.

The most concerning inappropriate behaviour discussed during the interviews was the removal of a hose from the women's hands whilst in the process of suppressing a fire, with three participants discussing this experience and how it impacted on their perceptions of themselves as firefighters. Remembering women were unsure of the intent motivating these acts, one participant explained her experience and the resultant impact as follows:

> *"I have had the hose physically removed from my hand...I was stunned, absolutely stunned that I had the hose forcibly taken away from me without an explanation. I don't know whether it was an ego thing but it left me really confused as to why this had happened. I still don't know why it happened so I guess it's made me wary about that could potentially happen at any time again."*

Participants alluded to the negative experiences surrounding fellow male members not following directions given by them, which resulted in the women feeling as though they were not taken seriously as valued volunteer firefighters. Again, participants were unsure as to the intent behind the behaviour, that is, whether the behaviour was a discriminatory act or not. This issue is illustrated by the following:

> *"A lot of the time I found that men found it difficult to take directions from me, not orders but just direction. Like if I ask a member to put their gloves on, they can't take that suggestion and that can be very antagonistic. . .it makes you feel as though what you have got say as a firefighter is not valued."*

Participants also alluded to the negative experiences of covert discrimination among some women and this may compound concerns for the retainment of women as volunteer firefighters. Perceptions of covert forms of discrimination by participants dominated this broad theme, occurring somewhat at training, and mostly on the fireground. Many participants described how they felt experiences encountered on the

fireground and at training were not direct and open forms of discrimination, but more discrete and subtle. The following observations are indicative:

> "There have been a couple of times that I have been put into comms (communications). I've gone out to a fireground with half a dozen blokes and funnily enough I've been the one that goes into comms. I'm pretty sure half of those blokes would've refused outright to go into comms."

> "We were all exhausted, there were two women and one bloke. The bloke got on the radio and said 'the girls are tired, can we be relieved?' So we had an argument over that, we were all tired and I didn't like that he used us as an excuse for getting off the fireground. It was really demeaning. I was a firefighter and I worked really hard all night and then the statement came that the girls were tired. I just felt that we were being used as an excuse."

Others' experiences illustrated the theme as a perceived general attitude, for example one participant explained:

> "I feel that in certain situations I'm given the minor jobs because I am a woman."

Women also expressed that men in authoritative positions within their brigades often expressed covertly discriminatory behaviour towards them. This observation was reinforced by comments such as:

> "One time my crew leader asked me to perform a task so I went to grab what I needed from the truck, but my crew leader was standing there like this (arms folded). I just felt that in that situation the crew leader didn't think that I was capable of the doing the job that he asked me to do."

> "From the captain there was very much this expectation that I would be good at secretarial stuff and good on the radio and the telephone and that I was not going to be much chop out on the fireground."

The interview responses of the female volunteer firefighters suggest substantial support for the negative and often discriminatory behaviour demonstrated towards women firefighters by fellow members and individuals in authoritative positions

(Baigent, 2001; Chetkovich, 1997; Childs, 2006; Department for Communities and Local Government, 2008; Floren, 1981; Hulett, Bendick, Thomas, & Moccio, 2008; Manolakes, 2001; Moore & Kleiner, 2001; Rosell, Miller, & Barber, 1995; Yoder & Aniakudo, 1996; Yoder & Berendsen, 2001). It appears the negative experiences of women volunteer firefighters are similar to those of other women who make in-roads into other occupations dominated by men (Manolakes, 2001). A review of the literature reveals that men in male-dominated occupations, such as trade and transit workers (Mansfield, et al. 1991; Sullivan, 2002), police services (Brown, 1997; Fleming & Lafferty, 2003; Gossett & Williams, 1998; Haarr & Morash, 1999), and the navy (Taylor, Fitzgerald, Phillips, & Nixon, 1994) and military services (Rosen & Martin, 1998a, 1998b), display similar discriminatory and unacceptable behaviours. Volunteer firefighter research in Australia has also demonstrated similar findings (Gare, 2000; McLennan, 2006a, 2006b).

As previously mentioned, most of the situations reported by women to be unacceptable occurred on the fireground, with only a few occasions occurring during training exercises. Australian research has indicated most women volunteers in operational roles reported positively on their training experiences (McLennan, 2006a, 2006b), however these studies neglected to examine types of experiences and situations encountered by women at fire incidents in terms their interactions with men. The current findings therefore extend on the literature by providing evidence which suggests women in WA volunteer bushfire services experience negative and often discriminatory behaviour, occurring most often on a fireground. Furthermore, these experiences affect women and their perceptions of themselves as firefighters by making them feel confused

as to the intent of the behaviour and devalued by, and inferior to, their fellow male colleagues.

The current result may be explained by a number of factors. First, there may be less chance of this type of behaviour being recognised by others on the fireground as opposed to training. Another possible explanation is that fireground conditions could potentially make men more susceptible to treating women in such a way, that is, stress experienced as a result of having to perform in dangerous situations (Gomez, 2009; Ordonez & Benson, 1997; Svenson, Edland, & Slovic, 1990), or the amount of time required to make decisions during a fire incident could affect decision-making and judgement processes (Kerstholt, 1995; Finucane, Alhakami, Slovic, & Johnson, 2000; Manouchehr, 2002). Australian volunteer firefighter research is yet to determine what types of behaviours women encounter on the fireground as opposed to training, therefore more research on this topic needs to be conducted to determine why more discriminatory and unacceptable behaviours for women occur on the fireground, compared with training.

'Few guy' syndrome.

This sub-theme relates to the idea that brigade life was seen by women as a generally positive atmosphere (as discussed in 'positive experiences and outcomes' theme), but in almost all incidents women reported a small number of men within their brigade seemed to consistently express issues directed towards women. This was either expressed explicitly or in most cases the women reported that most men behaved appropriately towards women, implying there were some who did not. Explicit examples are as follows:

"A small handful of men have issues with women at training, though men like that are definitely in the minority."

"There's not too many of them (men) *that have chips on their shoulders."*

Implicit examples included:

"The majority of blokes are willing to assist if required."

"For the most part, the guys are pretty good."

"Most of the blokes in the brigade will help you."

From the interviews conducted it appears these women dismissed the negative experiences encountered with a small number of men, concluding in balance, their experiences with most men were positive. This finding has not been investigated in the volunteer firefighter research, but is consistent with a study by Childs (2006), who concluded there may be a culture of tolerance within the Australian fire services whereby women accommodate, overlook, or ignore a small number of men who appear to have issues directed specifically towards women. The current findings therefore support the small amount of research conducted in this area by demonstrating the 'few guy' syndrome exists for the women in this study.

Conclusion

The current study has provided insight into the way in which women perceived their roles as volunteer firefighters, and the influences of past experiences which impacted on these perceptions. Findings differentiated between positive and negative experiences and outcomes, which influenced women's perceptions accordingly. It appears that for these women, an array of positive experiences resulted in favourable perceptions of themselves as firefighters. The general experience of being a volunteer

firefighter contributed to a sense of life meaning for the participants, including SOC, personal achievement, and avenues for self-actualisation.

Through gaining a sense of personal achievement, participants perceived themselves to be both confident and competent in completing the tasks required of a volunteer firefighter. Confidence as a result of the volunteer firefighting experience was the most dominant outcome for women in the current study. Women generally reported positively on their general brigade atmosphere, however a concerning number of women reported they felt a small number of men consistently expressed issues with women.

Also of concern is the experience by many women of covert forms of discrimination occurring at training, and more alarmingly, at fire incidents. As a result, women felt devalued by, and inferior to, their fellow male colleagues. This appears to pose the most significant barrier to the retainment of women volunteer firefighters in operational roles, and suggests that a level of tolerance among women is applied in a fire brigade context in order to negotiate their way through the participatory activities and the social milieu. Of concern also is that covert styles of discrimination by men in authoritative positions within their brigades were reported by the women. This is a complex issue because the varying situations in which covertly discriminatory behaviour occurred implies there is considerable way to go in terms of eliminating these types of behaviours and attitudes, however this issue is beyond the scope of this report. Furthermore, many situations occurred for women where the intent of some behaviours by men were undetermined, which resulted in confusion and the uncertainty of whether the behaviours were a discriminatory act or not.

Most research on female firefighters is based on the experiences of salaried firefighters in the United States and Untied Kingdom (Beatson, 2005), however it appears that women volunteer firefighters in Australia face similar issues. Recently, research in Australia has begun to examine factors relevant to the recruitment and retention of women (McLennan & Birch, 2006a, 2006b; McLennan, et al., 2007). The current study's findings extend upon previous Australian research to highlight the importance of both positive and negative experiences for women in volunteer firefighting, and how these experiences impact on their perceptions of themselves as firefighters. Accordingly, as economic and demographic changes within Australian society continue to affect volunteer firefighter numbers nation-wide, providing support, practices and activities conducive to promoting retention to this viable pool of volunteer firefighters would be of benefit.

Implications and Recommendations

This study has implications for the current body of knowledge regarding volunteer firefighting in general, and for women in volunteer firefighting roles specifically. Contemporary research on the factors impacting Australian women's volunteer firefighter experience (Beatson, 2005; Childs, 2006; McLennan & Birch, 2006a, 2006b; McLennan et al., 2007) does not take into account the positive and negative aspects of the experience. With this in mind, it appears future volunteer firefighter research could further explore the positive experiences and outcomes for women in these roles, enabling governing bodies to better develop strategies which include a more holistic understanding to enhancing the retention of women within volunteer fire brigades.

As a result of the current study, several key incentives which facilitate the retention of women volunteer firefighters, as well as incidents which impede retention, were identified. As a majority of volunteer fire services in Australia report under-representation of women in operational roles (McLennan, 2004b), it would be of benefit to brigades to provide activities which are conducive to the learning of new and different skills, to facilitate confidence for women volunteer firefighters. The issue of negative behaviour and treatment of women on a fireground emerging from this study also has implications for the retainment of women in operational roles. Therefore, research is needed to determine what types of behaviours women encounter on a fireground. In terms of implications for policy and guidelines for governing bodies in the emergency response sector, the current research could inform the development of policies and practices for the enhancement of women as volunteer firefighters.

The enhancement of the experience for women volunteer firefighters is important to retention of volunteer participation rates of women (Beatson & McLennan, 2005). It is clear from the results of the current study that educating volunteer firefighters on appropriate and acceptable behaviour, both professionally and socially, within brigades to assist members in accepting and encouraging women within the volunteer fire services is important. Second, exit surveys currently conducted by FESA in some volunteer emergency management organisations to determine why volunteers leave (Beatson, 2005) could be extended to volunteer bushfire brigades and adopt questions specifically relevant to the experience of volunteers, as indicated in the current study. This would enable a broader understanding of the factors affecting retention for emergency management volunteers.

Limitations and Directions for Future Research

The findings of the current research are specific to its context, and therefore the transferability of conclusions and recommendations must be investigated in relation to other contexts (Silverman, 2000; Miles & Hubermann, 1994). The volunteer firefighting experience for women is influenced by structural and contextual factors, issues which may not necessarily be relevant in other contexts. Future research could examine issues pertinent to other volunteer emergency services such as the State Emergency Service and the Volunteer Fire and Rescue Service.

A methodological limitation of the current research involves the sampling technique, which may have produced participants who chose to be explicit about their volunteer firefighting experiences. It is also possible that women who chose to participate in the research were confident in discussing their experiences. Although these could potentially bias results, it was intended that the current research be a stepping stone in the identification of experiences and issues faced by women who are volunteer firefighters.

There is some suggestion in the literature that women in rural brigades experience somewhat harsher conditions in terms of relations with fellow members and treatment as a firefighter (McLennan & Birch, 2004b). There was some anecdotal evidence of this suggestion in the current research as a number of participants were members of brigades considered semi-rural. A substantial comparison was not possible due to the sample size but could be a future endeavor for research in terms of differences in experiences for women in rural and metropolitan brigades.

The main finding of the current research suggests increased confidence as a result of the volunteer firefighting experience is one of the most important and salient factors for women. As most research has paid little attention to examining positive experiences of volunteer firefighters generally, it is not known whether this is also true for male volunteers. It would therefore be of interest to understand the experience of male volunteers and factors important to men. Generally, Australian society is extremely reliant on the work of volunteers, and it is of great benefit to understand the experience of the women and men involved in these roles as without understanding factors for the recruitment and retention of this important group of individuals, communities will suffer immeasurably.

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Appendix A

Cover Letter to Volunteer Bushfire Brigades

To the Secretary/Captain,

My name is Cindy Branch-Smith and I am a senior member of the Gosnells Bush Fire Brigade. I am providing the attached letter to all bushfire brigades within the metropolitan and semi-rural areas of Perth. I ask for your assistance by circulating the letter to all female firefighters within your brigade who have been members for more than 2 years and that hold an operational role within the brigade, that is, not communications. The purpose of the letter is to recruit potential participants for my thesis research which I am conducting as part of my psychology degree at Edith Cowan University.
The letter provides all necessary information with regard to my research. Your assistance in this matter would be greatly appreciated. If you have any questions, I can be contacted on █████████

Thank you for your time

Cindy Branch-Smith

Appendix B

Information Letter for Potential Participants

To potential participant,

My name is Cindy Branch-Smith and I am currently involved in conducting research as part of my Honours degree at Edith Cowan University. As a volunteer firefighter myself, I have chosen to conduct an exploration of the experiences of women serving operational roles within bush fire brigades across Perth.

The purpose of the research is to explore the experiences of female volunteer firefighters and to understand the impact that their experiences have on their perceptions about their role within the brigade. The research is aimed to improve the understanding of the challenges and issues faced by female volunteer bush firefighters in Perth. With this information, it is hoped that women volunteer bush firefighters can be better supported within their role as a firefighter.

Participants are being recruited through the distribution of this letter to various bush fire brigades in the metropolitan and semi-rural areas of Perth. The Ethics Committee has approved the rationale and design of this research project. All data will remain confidential and publication of any results will not disclose your identity.

If you choose to participate, you will be required to take part in an interview and answer general questions in relation to your experiences as a volunteer bush firefighter. The interview will take approximately one hour, and will take place at an appropriate time and location. Another interview may be requested to clarify any previous information given.

Your participation in this research will be totally voluntary, and if you choose to participate, you are free to withdraw without consequence at any time. If you have any queries about the research project, please do not hesitate to contact me, my supervisor, or alternatively you can contact Kim Gifkins from the Edith Cowan University Ethics Committee. Please be reminded that if you choose to participate in this research, you may withdraw from the study at any time without consequence.

If you require further information or would like to participate, please contact:

Cindy Branch-Smith (researcher)
Julie Ann Pooley (supervisor)   6304 5591
Ethics Committee (Kim Gifkins)   6304 2170

Thank you for your time

Cindy Branch-Smith

Appendix C

Information Letter for Participants

Dear participant,

Thank you for your time and interest in this research project. My name is Cindy Branch-Smith, and I'm currently completing an Honours degree in psychology at Edith Cowan University, Joondalup. The purpose of the research is to explore the experiences of female volunteer firefighters and to understand the impact that their experiences have on the perceptions about their role within the brigade. The research is aimed to improve the understanding of the challenges and issues faced by female volunteer bush firefighters in Perth. With this information, it is hoped that that female volunteer bush firefighters can be better supported within their role as a firefighter.

Participants have been recruited through the distribution of an information letter to various bush fire brigades in the metropolitan and semi-rural areas of Perth. The Ethics Committee has approved the rationale and design of this research project. All data will remain confidential and publication of any results will not disclose your identity.

Your participation in this study will be to take part in an interview and answer general questions in relation to your experiences as a volunteer bush firefighter. The interview will take approximately one hour, and will take place at an appropriate time and location. Another interview may be requested to clarify any previous information given.

Your written consent to participate in this research is also required. I am also asking for your consent for audio taping the interview. Recording of the interviews ensures that an accurate record of the discussions can be analysed. The recording will be destroyed once transcribed. Please be aware that I will not be recording your name and that any names recorded will be changed to maintain confidentiality. At the termination of the study, all data collected will be stored securely at Edith Cowan University.

Your participation in this research is totally voluntary, and at any time you are free to withdraw without consequence. If, for any reason at all, you become distressed with any element of this study, assistance is available through a number of counseling services. If you have any queries about the research project, please do not hesitate to contact me, my supervisor, or alternatively you can contact Kim Gifkins from the Edith Cowan University Ethics Committee.

If you require further information, please contact:
Cindy Branch-Smith (researcher)   ██████████
Julie Ann Pooley (supervisor)   3604 5591
Ethics Committee (Kim Gifkins)   6304 2170

Thank you for your time
Cindy Branch-Smith

Appendix D

Participant Consent Form

I _____ have read the information sheet provided
and agree to participate in the research conducted by Cindy Branch-Smith of Edith
Cowan University. I understand the purpose and nature of the study and am participating
voluntarily. Any questions I have asked have been answered to my satisfaction. I give
permission for the data to be used in the research stated. I understand that my name and
other demographic information, which might identify me, will not be used. I understand
that I can refuse to answer questions and can withdraw from the study at any time. I am
aware there will no penalty, should I decide to terminate my participation. I also grant
permission for the interview to be audio recorded and understand that the recording will
be destroyed once the interview is transcribed.

_____   _____
Signed: Research participant   Date

_____
Contact phone number

_____   _____
Signed: Researcher   Date

Appendix E

Interview Schedule

Before we start, I would to thank you for your participation in the research project. Your comments and participation are greatly appreciated.

The purpose of this interview is to understand what you think, from your perspective, about how your experiences have impacted on what your role means to you and what you think of yourself as a firefighter, that is, what's your reality?

What influenced you to become a firefighter?

What position do you hold/what does your role involve?

What does being a firefighter mean to you/what meaning does it have in your life?

What is it like being a FF within your brigade?

Please describe for me in as much detail as possible, a situation which you believe has impacted on what you think of yourself as a firefighter.

> How did that make you feel?
>
> How do you believe that experience has impacted on what you think of yourself as a firefighter?
>
> Have there been any other experiences that made you feel the same way?

Can you tell me a story about an experience on the fireground?

> How did that make you feel?
>
> Do you believe that experience has impacted on what you think of yourself as a firefighter?
>
> > What sort of impact?
>
> Have there been similar experiences on a fireground?
>
> Have there been different experiences that made you feel the same way?

Can you tell me about an experience on the fireground that you feel was in relation to being a female? You may not have an answer to this question and that is fine.

> How did that make you feel?

Do you believe that experience has impacted on what you think of yourself as a firefighter?

What sort of impact?

Have there been similar experiences on a fireground?

Have there been different experiences that made you feel the same way?

Can you tell me about an experience at training?

How did that make you feel?

Do you believe that experience has impacted on what you think of yourself as a firefighter?

What sort of impact?

Have there been similar experiences at training?

Have there been different experiences that made you feel the same way?

Can you tell me about an experience at training that you feel was in relation to being a female? You may not have an answer to this question and that is fine.

How did that make you feel?

Do you believe that experience has impacted on what you think of yourself as a firefighter?

What sort of impact?

Have there been similar experiences at training?

Have there been different experiences that made you feel the same way?

Is there anything you would like to add that you think I would like to know?

Examples of probes

What was that like for you?

Why do you think that was the case?

Can you give me an example/do you have further examples of this?

Appendix F

List of Counselling Services

Fire and Emergency Services Authority Support Services   1800 153 344

Fire and Emergency Services Authority Employee Services 1300 361 008

Fire and Emergency Services Authority Chaplain   9323 9334

Lifeline   13 11 14

Mental Health Direct   1800 220 400

Family Helpline   9223 1100

Appendix G

Glossary

Assimilation: a consequence of tokenism that uses stereotypical assumptions and mistaken attributions to fit what are perceived generalisations about tokens (Kanter, 1977).

Career firefighter: an individual who is employed by a Fire and Rescue Service funded by a government, who performs such duties as firefighting, equipment and hydrant maintenance, emergency rescues, and trains in fire behaviour and suppression techniques (Australian Fire and Emergency Service Authorities Council, 2009).

Communications: methods and systems for firefighters to communicate with each other during a fire incident, including the use and maintenance of radio channels for fireground communication and external modes of incoming information such as weather reports and predicted fire behaviour (Australian Fire and Emergency Service Authorities Council, 2009).

Constructivism: theoretical assumption in qualitative psychology which assumes a relativist ontology (there are multiple realities), a subjectivist epistemology (researcher and respondent co-create understandings), and a naturalistic (in the natural world) set of methodological procedures (Denzin & Lincoln, 2003).

Discrimination: in social psychology and related fields, the unequal treatment of individuals or groups based on arbitrary characteristics such race, gender, sex, ethnicity or cultural background (Reber & Reber, 2001).

Equal opportunity: the application of human rights principles and laws to help create an equitable environment for work, study and the provision of services (Bucke, 1994).

Fire ground: the area in the vicinity of fire suppression operations, including the area immediately threatened by the fire. It includes burning and burnt areas; constructed and proposed fire lines; the area where firefighters are, vehicles, machinery and equipment are located when deployed; and roads and access points under traffic management control (Australian Fire and Emergency Service Authorities Council, 2009).

Fire services: government funded agency responsible for coordinating the response to a wide range of emergencies including fire, cyclones, storms, floods, road crash, hazardous material spills, earthquakes and tsunami, as well as undertaking search and rescue operations on land and water (Department for Communities and Local Government, 2008).

Male-dominated occupation: those occupations in which women comprise 25% or less of the total employed (U.S. Department of Labor, 2008).

Non-traditional occupation: those occupations in which women comprise 25% or less of the total employed (U.S. Department of Labor, 2008).

Occupational segregation: the distribution of groups defined by ascribed characteristics, mostly gender, across occupations. More basically, it is the concentration of a similar group of people in an occupation (Grube-Farrell, 2002).

Operational firefighter: an individual whose role within their brigade mainly consists of firefighting responsibilities such as training as fire suppression, as opposed to an auxiliary or supportive role (R. Wallington, personal communication, March 18, 2009).

Phenomenology: theoretical framework for qualitative research which focuses on people's understandings and interpretations of their experiences in their own terms, emphasising these as explanations for their actions (Liamputtong & Ezzy, 2005). In general, phenomenological psychological research aims to clarify situations lived by persons in everyday life (Giorgi & Giorgi, 2003).

Polarisation: a consequence of tokenism that relates to the contrast or exaggeration of differences that has more to do with the dominant group's perception of itself than it does with others' perceptions of tokens. In attempts to preserve their commonalities, the dominant group attempt to keep the tokens in their place (Kanter, 1977).

Tokenism: term coined by Kanter (1977) to describe the representation of one's status as a symbol of one's kind, and is a result of numeric (proportional) imbalance. The theory of tokenism argues that groups of varying proportions of people of different social types differ qualitatively in dynamics and process. Someone who is one of the few among the many faces different types of disadvantages.

Uniformed services: occupations included in the military, police, firefighting, and correctional services (Grube-Farrell, 2002).

Visibility: a consequence of tokenism that relates to individuals of token status representing a smaller numerical proportion of the overall group, therefore each potentially capturing a larger share of the awareness given to that group (Kanter, 1977).

Volunteer bushfire brigade: state government department organisation which provides fire suppression services outside of metropolitan areas of major cities or specialised areas such as national parks (Lyons, 2001).

Volunteer firefighter: an individual who volunteers their time at designated volunteer fire brigades, who perform such duties as firefighting, equipment and hydrant maintenance, and fire behaviour and suppression training (Fire and Emergency Services Authority of Western Australia, 2007).

Appendix H

References for Glossary

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