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Bullying at the Fire Station? Perceptions Based on Gender, Race and Sexual Orientation

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Abstract

Discrimination and strained co-worker relationships based on gender, race or sexual orientation are forms of bullying in the workplace. This research examined firefighter perceptions with regard to bullying. The web based survey was distributed through the National Fire Academy Training, Resources and Data Exchange Network (TRADENET). Findings from 113 surveys indicated that most firefighters did not perceive bullying issues were pervasive in the fire service. However, there were large differences in perception between female and male firefighters. Significantly more female firefighters indicated they were treated differently due to gender, felt their supervisors did not address complaints concerning gender or sexual orientation, had ill-fitting uniforms or equipment, and believed promotions were not decided upon fairly. Recommendations included continuing to assess female and minority perceptions with regard to perceived discrimination. Additionally, fire service leadership should identify best practices in leadership and firefighter training to effectively address fair treatment for all firefighters.

Keywords: workplace bullying, discrimination, organization culture, fire station culture, fire station discrimination

1. Background

Previous research conducted by the International Association of Women in Fire and Emergency Services (“Sexual Harassment”, 1995) reported alarming results from 551 survey respondents. In that study, 78% of female firefighters had experienced some form of sexual harassment. Of that 78%, 70% reported the issue to their chain of command. Approximately 30% of survey respondents indicated they had been subject to sexual demands; 13% more than once. Unwelcome physical contact was reported by 50% of the 551 survey respondents.

Another key survey of firefighters was the National Report Card on Women in Firefighting (Hulett, et al., 2008) which reported responses from 675 male and female firefighters. Survey questions included not only gender related incidents but racial and sexual orientation issues as well. With regard to sexual harassment, 31.9% of female firefighters indicated they had been verbally harassed and 18.6% were victims of sexual harassment. The first of two Embry-Riddle Aeronautical University studies followed. The first study involved a 10 question survey that attempted to gauge if sexual harassment was as prevalent in fire stations has had been reported in the 1995 Sexual Harassment and 2008 National Report Card studies.

The first study Does the Fire Station Have a Glass Ceiling (Griffith, Schultz, M. C., Schultz, J. T., & Wakeham, 2015) examined survey responses from 339 survey participants. An encouraging note was that 84% (283 of 337) of female firefighters would still enter the fire service and 73% (247 of 339) would encourage a female relative or friend to pursue a firefighting career. At least 75% (252 of 337) indicated they gained more acceptances the longer they were in the job. All these results were statistically significant (p=.000). However, 54% (183 of 337) of female firefighters indicated they were not treated as an equal by male firefighters. Although this was not statistically significant (p=.114), female firefighters did indicate physical requirements limited female success (56%, 191 of 338) which was significant (p=.017). Reasons for leaving the fire service included “Gender” 2.3% (4 of 176 survey respondents) and problems with male co-workers 6.8% (12 of 176).
An open comment area of the survey allowed survey respondents to elaborate on issues they had with sexual harassment and bullying which revealed deeper issues. Based on the recommendations of the 2015 study, this research used the *National Report Card on Women and Firefighting* survey as a template (Hulett et al. 2008). Questions regarding sexual harassment were compared and contrasted with the studies already mentioned. Perceived issues with racial and sexual orientation were examined as well.

2. **Purpose**

The purpose of this research is to:

1. Determine current perceptions of bullying in the fire service to include not only gender, but race and sexual orientation.
2. Compare and contrast results with previous research, most notably the *National Report Card* 2008 study.

2.1 **Research Questions**

Does a bullying problem exist in the Fire Service and if so, what groups are affected and in what ways? How do the results from questions involving bullying compare to similar questions in the 2008 *National Report Card* study?

2.2 **Scope**

This research examines voluntary responses from firefighters across the United States.

2.3 **Relevance**

Bullying impacts productivity and recruitment efforts for any organization. The fire service is no exception. Decreasing budgets and increasing workloads require the most effective use of staffing possible. Understanding and eliminating bullying practices will prevent marginalization of a significant number of firefighters.

3. **Literature Review**

In recent years, the topic of bullying has received national media attention highlighting various cases with tragic endings that prompted widespread anti-bullying campaigns and educational programs. Bullying, however, is not limited to child and adolescent schoolyard environments, but instead, persists into adult venues, giving rise to consequences of equal magnitude and gravity.

With regard to definition, bullying can range from obvious physical and verbal abuse or threats to more subtle forms of intimidation and isolation, including persistent criticism and targeted offensive remarks, insults, rumors or jokes (Einarsen, Hoel, Zapf & Cooper, 2010; Leymann, 1996; Zapf, Knorz, & Kulla, 1996) and has been alternatively labeled “mobbing” (Leymann, 1990) or “psychological violence” (Namie, 2000, p. 3). Einarsen et al., offer the following comprehensive definition:

Bullying at work means harassing, offending, socially excluding someone, or negatively affecting someone’s work tasks. In order for the label bullying (or mobbing) to be applied to a particular activity, interaction or process, it has to occur repeatedly and regularly (e.g., weekly) and over a period of time (e.g., about six months). Bullying is an escalating process in the course of which the person confronted ends up in an inferior position and becomes the target of systematic negative social acts. A conflict cannot be called bullying if the incident is an isolated event or if two parties of approximately equal “strength” are in conflict (2010, p. 22).

Similarly, the Workplace Bullying Institute (WBI) defined workplace bullying as “repeated mistreatment; abusive conduct that is: threatening, humiliating, or intimidating, work sabotage, or verbal abuse” in their 2014 National Survey (p. 3). Specifically, WBI (2003, p. 6) cites the following behaviors as some of the most common tactics used by workplace bullies:

- Falsely accused someone of “errors” not actually made (71%)
- Stared, glared, was nonverbally intimidating and was clearly showing hostility (68%)
- Discounted the person’s thoughts or feelings (“oh, that’s silly”) in meetings (64%)
- Used the “silent treatment” to “ice out” & separate from others (64%)
- Exhibited presumably uncontrollable mood swings in front of the group (61%)
- Made up own rules on the fly that even she/he did not follow (61%)
- Disregarded satisfactory or exemplary quality of completed work despite evidence (58%)
- Harshly and constantly criticized having a different ‘standard’ for the Target (57%)
- Started, or failed to stop, destructive rumors or gossip about the person (56%)
- Encouraged people to turn against the person being tormented (55%)
- Single out and isolated one person from co-workers, either socially or physically (54%)
- Publicly displayed “gross,” undignified, but not illegal, behavior (53%)
- Yelled, screamed, threw tantrums in front of others to humiliate a person (53%)
- Stole credit for work done by others (47%)
- Abused the evaluation process by lying about the person’s performance (46%)
- “Insubordinate” for failing to follow arbitrary commands (46%)
- Used confidential information about a person to humiliate privately or publicly (45%)
- Retaliated against the person after a complaint was filed (45%)
- Made verbal put-downs/insults based on gender, race, accent or language, disability (44%)
- Assigned undesirable work as punishment (44%)
- Made undoable demands—workload, deadlines, duties— for person singled out (44%)
- Launched a baseless campaign to oust the person and not stopped by the employer (43%)
- Encouraged the person to quit or transfer rather than to face more mistreatment (43%)
- Sabotaged the person’s contribution to a team goal and reward (41%)
- Ensured failure of person’s project by not performing required tasks: signoffs, taking calls, working with collaborators (40%)

More specifically, Ortega., Høg, Pejtersen, & Olsen (2009) noted that work-related bullying includes, “excessive monitoring of work, unreasonable deadlines, unmanageable workload and meaningless tasks” (p. 417) in addition to the aforementioned interpersonal manifestations.

While the measurement of the incidence of bullying in organizations can be problematic with regard to issues such as the consensus of definition and reluctance to report (Hoel, Rayner, & Cooper 1999; Nielsen, Bjørkelo, Notelaers & Einarsen, 2010), frequency rates range between 10% and 27% (Einarsen et al., 2010, WBI, 2014). Variations in this reported prevalence of bullying have been attributed to factors such as: differences in the operational definitions used to measure prevalence and incidence of bullying in an organizational context; variations in the organizational culture prevailing in the workplaces; and/or differences in cultural norms and practices in the workplace (Agervold, 2007; Agervold & Mikkelsen, 2004; Hoel & Cooper. 2000; Mikkelsen and Einarsen, 2001; Zapf, 2002).

Specifically, the WBI (2014) reported that 27% of Americans had suffered abusive conduct at work with 7% reporting that the bullying was currently happening and 20% having the experience at some time in their work life. Moreover, their survey indicated that an additional 21% have witnessed firsthand the bullying of others and 23% were aware of others being bullied (without directly observing the actions). Together, their findings indicate that a full 72% of adult American workers are aware that bullying is a real and substantial threat in the modern workplace. Extrapolating these results over the broad U.S. labor force equates, in real numbers, to 37 million workers being directly subjected to abusive conduct and a total of 65.6 million affected either personally or vicariously.

3.1 Organizational Culture and the Facilitation of Bullying

Various studies (Aquino & Lamertz, 2004; Harvey, Treadway & Heames 2007; Martinko, Douglas, & Harvey, 2006; O’Leary-Kelly, Griffin, & Glew, 1996) acknowledge the pivotal role that organizational culture and climate play in the facilitation of a hostile environment and bullying behaviors. Specifically, Keashly and Jagatic (2000) reported increased hostility in organizations with low levels of employee involvement, low morale, low levels of cooperative teamwork and problematic supervision. Conversely, Burnazi, Keashly, and Neuman (2005) reported a negative correlation between employee involvement and empowerment and workplace hostility and Cortina (2008) found negative correlations between fair treatment and uncivil behavior in organizations.

Glomb (2002) and Keashly and Harvey (2005) theorize a bi-directional aspect to the relationship between organizational culture and bullying behavior, suggesting that organization culture is both a cause and a subsequent effect of hostile work environments and associated behaviors. Aquino and Lamertz (2004) argued that norms in the workplace can serve to normalize, justify and perpetuate inappropriate behaviors. Through widespread group acceptance, these behaviors can evolve and escalate into harassment and abuse.
Furthermore, Ferris, Zinko, Brouer, Buckley, and Harvey (2007) suggested that in some organizations leaders intentionally engage in “strategic bullying” for the intended purpose of increasing productivity, motivating through intimidation, eliminating underperforming or troublesome employees and/or increasing the leader’s sense of power. Likewise, Brodsky (1976) concluded early on that workplace abuse cannot persist without some level of direct or indirect consensus by management, what he termed the “sense of permission to harass” (p. 84.) Others (Aquino & Douglas, 2003; Ferris, 2004; Glomb & Liao, 2003; Harvey et al., 2007; Heames & Harvey, 2006; Keashly & Harvey, 2006) concurred that organizations implicitly condone and enable bullying and incivility by an obvious lack of response to developing questionable behaviors. Specifically, Andersson and Pearson (1999) described a “climate of informality” that gives rise to “incivility spirals” (p. 453). They concluded that this dynamic perpetuates reactive hostility and displaced aggression which, left unchecked, pervades an organization.

3.2 Bullying in the Firehouse

Considering the influence of organizational culture, Blackistone (2014) observed that the distinctive environment of the firehouse can foster the development of inappropriate behaviors that isolate and marginalize some individuals. He urgently called for more precise definitions of inappropriate behavior and stricter self-regulation within the firehouse, in the context that understands the unique culture, arguing that some actions appropriate in the firehouse may seem inappropriate in an office setting.

Social and interpersonal exchanges in the firehouse can be intensified by the demands of demanding work schedules, where, for example, some teams spend 24 hours or longer together in a shared living space and often find themselves in situations of life and death (Yoder & Aniakudo, 1997). Similarly, O’Donnell (2004) noted the “close confines of firehouse living, where shared meals and sleeping quarters can lead to a boiling over of sibling-like relationships fueled by constant ribbing and full of all the tensions, personal feuds and intense competition of any family ties” (para. 3).

While some contend that this unique culture cannot be understood by outsiders and is necessary to maintain the energy and mentality required for the high stress, high risk job of firefighting (Pennington, 2013), others argue that it actually degrades the essential teamwork and camaraderie and alienates some individuals. Look (2009) highlights the dangers of acceptance of questionable behaviors based upon the exceptional environment, stating that when we allow for the “reinforcement of the stereotypes of the ‘culture of the firehouse,’ it provides a justification for those traditions to endure.” (para. 11), further noting instances whereby this results in potentially dangerous groupthink. Hammer (2012) notes that hazing rituals in firehouses represent a form of bullying, stating, “The firefighting culture seems to demand hazing of new recruits to determine the firefighter’s ability to successfully do their job. The most common justification is to prove that the new firefighter "has what it takes" (para. 2).

In 2008, Cornell’s Institute for Women and Work published the groundbreaking report entitled A National Report Card on Women in Firefighting, which addressed the gross underrepresentation of women in the field and associated issues. The two part study analyzed survey results from 675 firefighters working in 114 different departments in 48 states. Additionally, these researchers conducted in depth interviews 175 female firefighters, 85 percent of whom indicated that they were treated differently. Specifically, 80 percent reported that they were issued ill-fitting equipment; 37 percent reported that their gender prevented career advancement; 50 percent experienced shunning or social isolation at the workplace; and 37 percent stated that they were verbally harassed (Hulett et al., 2008).

In their research on the specific antecedents of workplace bullying, Ortega, Høgh, Pejtersen & Olsen, (2009) concluded that the type of work and gender ratio are risk factors in the onset of workplace bullying. Banks (2006) argued that these aspects and the firehouse culture are particularly challenging for women and often result in harassment, discrimination and a dropout rate that is more than twice the rate for men. Likewise, in an extensive survey on race and gender, Yoder and Aniakudo (1997) concluded that,

Research with African American women firefighters highlights patterns of social interaction that involve subordination token difference, and the intertwining of race and gender. A series of processes - including insufficient, unnecessary and hypercritical training; open and subtle coworker hostility; silence; exacting supervision; lack of support; and demeaning stereotyping with negative treatment-combine to send a clear message of exclusion to Black women firefighters (p. 336).
Clearly there is polarized debate about what constitutes incivility and abuse in various contexts, its prevalence, and what action should be taken in response to incidents of workplace bullying. However, a full 93% of the American workers who indicated an awareness of workplace abusive conduct voiced a need for worker protection beyond current discrimination legislation and support for specific workplace anti-bullying statues (WBI, 2014).

3.3 Response to Workplace Bullying

Despite its known prevalence, the WBI (2014) reported that 72% of employees indicated their employers have done nothing to address bullying in the workplace environment. While increased social awareness of bullying and its deleterious effects have prompted various anti-bullying programs, specific legislation exists primarily for the school environment.

Currently in the U.S. statutory enforcement of employment discrimination is restricted to behaviors that violate Title VII of the Civil Rights Act of 1964, the Age Discrimination in Employment Act of 1967, (ADEA), and/or the Americans with Disabilities Act of 1990, (ADA) (Maurer, 2013). According the Society for Human Resource Management (SHRM):

Presently, bullying by itself does not violate Title VII or any other anti-discrimination law. Employees can sue companies for creating a "hostile work environment," which can include bullying as harassment, but the harassment usually is tied to a protected category, such as race, sex, religion or national origin. Anti-bullying advocates are pushing legislation to protect workers who are not in a protected class (Maurer, 2013, para. 5).

Notwithstanding this lack of specific bullying-focused legislation, the Healthy Workplace Campaign (HWC) reports that workplace bullying is four times more prevalent than illegal discrimination. Since 2003, 29 states and two territories have introduced some version of the Healthy Workplace Bill (HWB) which prohibits workplace harassment without the mandate of proving that such harassment is based on a protected class (Maurer, 2013). Among its many provisions the HWB,

- precisely defines an "abusive work environment;"
- plugs the gaps in current state and federal civil rights protections;
- provides an avenue for legal redress for health harming cruelty at work;
- allows targets to sue the bully as an individual;
- holds the employer accountable;
- seeks restoration of lost wages and benefits;
- Compels employers to prevent and correct future instances (Healthy workplace campaign, 2014, para. 1).

In 2015 alone 11 bills were introduced in 10 states. (Healthy workplace campaign, 2015). Critics argue that legislating civility is nebulous and anti-bullying legislation would lead to an outpouring of frivolous lawsuits. However, the HWB is garnering widespread support as the detrimental effects of hostile work environments enter the social consciousness.

4. Research Design

This study used a cross sectional survey research design (Gay, Mills, & Airasian, 2006). The electronic survey was distributed through the National Fire Academy TRADENET e-mail service. TRADENET is an e-mail service sent to firefighting professionals throughout the United States. The survey used the same questions as the 2008 National Report Card study. Surveys were constructed and collected using Survey Monkey. Researchers examined data from questions involving perceived bullying in the areas of gender, race and sexual orientation. Open area comments on the surveys were also reviewed to identify significant trends.

4.1 Population

The survey was made available to all firefighters through TRADENET (National Fire Academy) and TWITTER (International Association of Female Firefighters and Emergency Services) throughout the United States. The survey was available for a four month period from March through June, 2015.

4.2 Demographic Data on Survey Respondents.

One hundred and thirteen firefighters responded to the survey; 56 were female (49.6%) and 57 were male (50.4%). A large majority of respondents were over 30 (95%). Most of the respondents were 40 or older (69%). The ethnic breakdown was 92% white, 3% African American and 3% Hispanic/Latina(o). Most of the respondents had a college degree (70%) and 93% had completed at least some college courses.
Most of the respondents were mono-lingual with English as their only spoken language (81%). Most respondents were either firefighters, company officers or chief officers involved with suppression (61%). An additional 14% identified them as a firefighter/paramedic. Eighty-two percent of survey respondents indicated they had been in the fire service 8 or more years. Approximately 63% had served in their current department and approximately 50% indicated they were in their current position for at least eight years.

A surprising 65% did not want to be a firefighter while growing up and 58% did not have a family member or close relative who was in the fire service. The greatest influence to become a firefighter came from friends (34%) followed by family members (22%).

4.3 Treatment of the Data
Specific question data were compared using Chi Square (α=.05). Open ended comments were also examined to identify significant trends (Gay, et al., 2006).

4.4 Hypotheses Tested

Ha₁- There will be a significant difference between the numbers of respondents who believe bullying is an issue compared to the number who do not.

Ha₂ - There will be a significant difference in perceptions between survey respondents in this study compared to the 2008 National Report Card study with regard to questions on bullying.

5. Results

<table>
<thead>
<tr>
<th>Survey Results</th>
<th>Agree</th>
<th>Disagree</th>
<th>χ²</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>My Dept. takes extra steps to recruit Women? (n=111)</td>
<td>30</td>
<td>47</td>
<td>3.753</td>
<td>.053</td>
</tr>
<tr>
<td>My Dept. takes extra steps to recruit Minorities (n=113)</td>
<td>36</td>
<td>45</td>
<td>1.0</td>
<td>.317</td>
</tr>
<tr>
<td>Entry-level physical exam accurately reflected my ability (n=101)</td>
<td>54</td>
<td>22</td>
<td>13.474</td>
<td>.0002*</td>
</tr>
<tr>
<td>Men and women were treated the same during the physical test (n=100)</td>
<td>79</td>
<td>12</td>
<td>49.34</td>
<td>.000*</td>
</tr>
<tr>
<td>Have you been treated differently due to gender (n=112)</td>
<td>52</td>
<td>60</td>
<td>.571</td>
<td>.45</td>
</tr>
<tr>
<td>Different treatment due to race or ethnic origin? (n=107)</td>
<td>13</td>
<td>94</td>
<td>61.318</td>
<td>.000*</td>
</tr>
<tr>
<td>Formal procedure for gender or race based complaints? (n=112)</td>
<td>80</td>
<td>32</td>
<td>20.571</td>
<td>.000*</td>
</tr>
<tr>
<td>Experienced ill-fitting uniforms or gear? (n=113)</td>
<td>56</td>
<td>57</td>
<td>.009</td>
<td>.925</td>
</tr>
</tbody>
</table>

Note. Data were compared using Chi Square test of good fit for equal expected frequencies (α=.05). Neutral responses were not included in the analysis with the exception of the question on formal procedures for gender or race based complaints where neutral responses were counted as “disagree.”

Significantly more survey respondents agreed than disagreed that entry-level physical exams accurately reflected their ability to do their firefighting duties (p=.0002), men and women were treated the same during the physical test (.000), and that there was a formal procedure for gender or race based complaints (.000). Significantly more respondents disagreed that fire fighters were treated differently due to race or ethnic origin (.000).

Non-statistically significant findings included that departments take extra steps to recruit women (p=.053) and minorities (.317). Additionally a slight majority felt that they had not been treated differently due to gender (.45). Another issue noted is that just under half the firefighters surveyed had experienced ill-fitting uniforms or gear (.925).
### Table 2: Supervisor Treatment and Opinion on a Firefighting Career

<table>
<thead>
<tr>
<th>Survey Results</th>
<th>Agree</th>
<th>Disagree</th>
<th>$x^2$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>My supervisor addresses complaints concerning gender-related incidents (n=113)</td>
<td>66</td>
<td>20</td>
<td>24.605</td>
<td>.000*</td>
</tr>
<tr>
<td>My supervisor addresses complaints concerning race-related incidents (n=111)</td>
<td>57</td>
<td>12</td>
<td>29.348</td>
<td>.000*</td>
</tr>
<tr>
<td>Treated differently due to sexual orientation? (n=112)</td>
<td>25</td>
<td>55</td>
<td>11.25</td>
<td>.0008*</td>
</tr>
<tr>
<td>Promotions are decided upon fairly (113)</td>
<td>55</td>
<td>32</td>
<td>6.08</td>
<td>.014*</td>
</tr>
<tr>
<td>Gender is not a barrier to my career development (n=111)</td>
<td>73</td>
<td>27</td>
<td>21.16</td>
<td>.000*</td>
</tr>
<tr>
<td>Ethnic origin is not a barrier to my career development (n=111)</td>
<td>69</td>
<td>12</td>
<td>40.11</td>
<td>.000*</td>
</tr>
<tr>
<td>Would you advise a young minority woman to become a firefighter? (112)</td>
<td>80</td>
<td>23</td>
<td>31.54</td>
<td>.000*</td>
</tr>
<tr>
<td>Would you advise a young white woman to become a firefighter? (n=113)</td>
<td>81</td>
<td>22</td>
<td>33.796</td>
<td>.000*</td>
</tr>
<tr>
<td>Would you advise a young minority man to become a firefighter? (112)</td>
<td>92</td>
<td>9</td>
<td>68.208</td>
<td>.000*</td>
</tr>
<tr>
<td>Would you advise a young white man to become a firefighter? (n=113)</td>
<td>97</td>
<td>5</td>
<td>82.98</td>
<td>.000*</td>
</tr>
</tbody>
</table>

Note. Data were compared using Chi Square test of good fit for equal expected frequencies (α=.05). Neutral responses were not included in the analysis.

Significantly more survey respondents indicated that their supervisors addressed complaints concerning gender (p=.000), and race (.000) related incidents. A statistically significant majority also disagreed that they were treated differently due to sexual orientation (.008). Most survey respondents indicated that promotions were decided upon fairly (.014) and that gender (.000) and ethnic origin (.000) was not a barrier to career development (.000). Significantly more respondents agreed than disagreed that they would advise a young woman (.000), young minority woman (.000), young man (.000) or young minority man (.000) to become a firefighter.

### Table 3: Comparison with 2008 National Report Card Study: Recruiting, Testing, Policies and Equipment

<table>
<thead>
<tr>
<th>Survey Results</th>
<th>Women</th>
<th>Men</th>
<th>p</th>
<th>Women</th>
<th>Men</th>
<th>$x^2$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>My department takes extra steps to recruit Women? (n=111)</td>
<td>22%</td>
<td>33%</td>
<td>.138</td>
<td>36%</td>
<td>69%</td>
<td>.51</td>
<td>.475</td>
</tr>
<tr>
<td>Entry-level exam physical exam accurately reflected my ability on the job (n=101)</td>
<td>52%</td>
<td>61%</td>
<td>.397</td>
<td>43%</td>
<td>53%</td>
<td>.032</td>
<td>.859</td>
</tr>
<tr>
<td>Men and women were treated the same during the physical test (n=100)</td>
<td>82%</td>
<td>76%</td>
<td>.633</td>
<td>87%*</td>
<td>90%*</td>
<td>.252</td>
<td>.616</td>
</tr>
<tr>
<td>Have you been treated differently due to gender (n=112)</td>
<td>79%</td>
<td>14%</td>
<td>.000*</td>
<td>85%</td>
<td>12%</td>
<td>.28</td>
<td>.59</td>
</tr>
<tr>
<td>Formal procedure for gender or race based complaints? (n=112)</td>
<td>59%</td>
<td>84%</td>
<td>.037*</td>
<td>35%</td>
<td>57%</td>
<td>.241</td>
<td>.623</td>
</tr>
<tr>
<td>Experienced ill-fitting uniforms or gear? (n=113)</td>
<td>80%</td>
<td>19%</td>
<td>.000*</td>
<td>80%</td>
<td>21%</td>
<td>.08</td>
<td>.777</td>
</tr>
</tbody>
</table>

Note. Responses from women and men in the second and third column are from survey responses in this study. The p value is a Chi Square test of good fit with equal expected frequencies. Result is considered significant at α=.05. The data for women and men under the Comparison with 2008 National Report Card heading were adapted from the National report card on women in firefighting (Hulett, Bendick, Thomas, and Moccio, 2008). Retrieved from https://i-women.org/wp-content/uploads/2014/07/35827WSP.pdf. The p value in the last column to the right is a Chi Square test (α=.05) of independence between the results in this study and the 2008 National Report Card study. Values above .05 indicate no significant difference in results between this study and the 2008 National Report Card study.
Significantly more female than male firefighters indicated they were treated differently due to gender (p=.000), and had experienced ill-fitting uniforms (.000). Significantly fewer females indicated that there was a formal procedure for gender or race based complaints (.037) than their male counterparts. Other differences in the way females and males answered the survey questions were not statistically significant. Respondent answers were statistically similar to the findings in the 2008 National Report Card study.

**Table 4: Comparison with 2008 National Report Card Study: Supervisor Treatment, Promotions and Career Development**

<table>
<thead>
<tr>
<th>Survey Results</th>
<th>Women</th>
<th>Men</th>
<th>p</th>
<th>Gender</th>
<th>Comparison with 2008 National Report Card</th>
</tr>
</thead>
<tbody>
<tr>
<td>My supervisor does not address complaints concerning gender-related incidents</td>
<td>32%*</td>
<td>3%*</td>
<td>.000*</td>
<td>23%</td>
<td>6%</td>
</tr>
<tr>
<td>Treated differently due to sexual orientation?</td>
<td>33%</td>
<td>12%</td>
<td>.002*</td>
<td>31%</td>
<td>14%</td>
</tr>
<tr>
<td>Promotions are not decided upon fairly</td>
<td>41%</td>
<td>16%</td>
<td>.001*</td>
<td>34%</td>
<td>18%</td>
</tr>
<tr>
<td>Gender is a barrier to my career development</td>
<td>44%</td>
<td>5%</td>
<td>.000*</td>
<td>37%</td>
<td>7%</td>
</tr>
</tbody>
</table>

*Note.* Responses from women and men in the second and third column are from survey responses. The p value is a Chi Square test of good fit with equal expected frequencies. Result is considered significant at α=.05. The data for women and men under the Comparison with 2008 National Report Card heading were adapted from the National report card on women in firefighting (Hulett, Bendick, Thomas, and Moccio, 2008). Retrieved from https://wwomen.org/wp-content/uploads/2014/07/35827WSP.pdf. The p value in the last column to the right is a Chi Square test of independence (α=.05) between the results in this study and the 2008 National Report Card study. Values above .05 indicate no significant difference in results between this study and the 2008 National Report Card study.

Significantly more women than men felt that their supervisors did not address complaints concerning gender related incidents (p=.000), firefighters were treated differently due to sexual orientation (.002), promotions were not decided upon fairly (.001) and that gender was a barrier to their career development (.000). These findings were consistent with survey results in the 2008 National Report Card study. Based on the data shown in all four tables, it appears that women and men have significantly different perceptions.

**6. Findings**

Researchers hypothesized that there will be a significant difference between the number of respondents who believe bullying is an issue compared to the number who do not. Tables 1 and 2 indicated that significantly fewer survey takers seemed to believe that there were bullying issues at work with regard to treatment on the job than those who indicated it was an issue. However when responses from men and women were compared, Tables 3 and 4 there was a significant difference in the way women perceived their work environments compared to men. The second hypothesis stated that there will be a significant difference in perceptions between survey respondents in this study compared to the 2008 National Report Card study with regard to questions on bullying. In fact, findings shown in Tables 3 and 4 supported the null hypothesis. The responses in this study were quite similar to the findings in the 2008 National Report Card study.

**7. Conclusions**

Overall, firefighters in this study indicated that most did not perceive workplace bullying such as discrimination or deferential treatment as being an issue. However, after female and male comments were compared, there were significantly different levels of comfort with regard to the elimination of workplace bullying issues. Significantly more women than men indicated that there were issues with treatment based on gender, race, and sexual orientation. Significantly more female than males felt that promotion decisions were not fair. Another significant and troubling issue was that 80% of female firefighters had experienced issues with ill-fitting uniforms and equipment.
The 30 open area comments reviewed were mixed. Some indicated that the fire service was a great experience, the best of their lives, and some comments discussed discrimination, ill-fitting equipment, issues with promotion and training. Other comments brought out issues with privacy in the fire department regarding sleeping areas, showers and bathrooms. Findings in this study were consistent with the 2008 National Report Card on Women in firefighting study in which authors recommended a stronger emphasis by leadership to eliminate discrimination, accountability for all levels of leadership to ensure discrimination is eliminated, transparency in human resource management practices, zero tolerance for sexual harassment and finally training to help change the culture of the fire service (Hulett et al. 2008). Based on the data collected in this study, we would echo those thoughts.

One telling finding was that females answered significantly different than men when asked if they would recommend the fire service to a white female or minority female. In both questions 55% of female firefighters indicated they would recommend a career in the fire service (versus 88% of men). The difference in the way women and men answered the question was statistically significant (p=.000).

8. Recommendations for Further Research
1. Future research should continue to examine the differences in female and male perceptions in the fire service with regard to perceived discrimination, promotion issues, and mentoring and ill-fitting equipment issues.
2. More efforts should be made to cast a wider net to gauge perceptions from female and minority firefighter populations.
3. Future researchers should identify best practices in supervisor and firefighter training that effectively addresses fair treatment for all firefighters.
4. Fire Chiefs should ensure all firefighters have properly fitting equipment.
5. Fire Chief Organizations should become involved with equipment vendors to offer female sized protective clothing.
6. Additionally, the environment in fire stations should be designed to ensure that female firefighters have appropriate showering, bathroom and sleeping areas that afford privacy.

References


