

## “Trying to Eat an Elephant”: The Complexities of Bullying Training in the Fire Service

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### ABSTRACT

*Bullying in the fire service has long been overlooked, although efforts to understand the phenomenon have increased over the past few decades. Recent research has highlighted high rates of bullying in the fire service, regardless of gender and race. Despite established issues of bullying, workplace bullying training has yet to be examined in the fire service. Using qualitative data from interviews with a national sample of firefighters and fire service leaders, this foundational research sought to understand current and future needs related to training on bullying prevention and effective messaging for the fire service. Common themes that emerged from the data include current training opportunities, the effectiveness of training, and components of effective training.*

**KEYWORDS:** qualitative methods, firefighters, bullying, training.

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Once largely considered a struggle of children or adolescents (American Osteopathic Association, n.d.), bullying faced by adults, particularly in the workplace, is gaining traction as research has focused not only on the prevalence of bullying but adverse outcomes associated with victimization (Kessler et al., 1999; Okechukwu et al., 2014; Pascoe & Smart Richman, 2009; Rospenda et al., 2006; Thrasher et al., 2016). While social media may provide a ripe environment for bullying (Lowry et al., 2016), workplace bullying is an unfortunately common experience for adults. Thirty percent of Americans have reported current or past victimization, while an additional 19% witnessed bullying behavior. That translates to 79.3 million American adults having

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experienced direct or indirect bullying. Men are twice as likely as women to be bullies, and in 65% of incidents, the bully outranked the victim. Over 20% of bullying incidents occur between peers or coworkers at the same level in the organization (Namie, n.d.).

Bullying in the fire service has long gone unaddressed, although efforts to understand the phenomenon have increased over the past two decades. Early assessments found that 50% of women firefighters experienced bullying behavior (Hulett et al., 2008), while African American women firefighters reported the highest rates of bullying and hostility from coworkers (Yoder & Aniakudo, 1997; Yoder & Berendsen, 2001). Recent work continues to find high rates of bullying in the fire service. While over 40% of women firefighters still experience bullying (Jahnke et al., 2019), 37% of first responders, regardless of race or gender reported having experienced or witnessed bullying at a prominent east coast department (Titan Group, 2017). Additionally, bullying may exist at both the individual and systemic levels in the fire service (Willing, 2019), especially for racial and gender minorities in the fire service.

Adverse outcomes associated with bullying victimization in the general population are well documented and include both physical and mental manifestations such as anxiety, depression, post-traumatic stress, increased cardiovascular disease risk, higher blood pressure, poor diet, and substance use (Kessler et al., 1999; Okechukwu et al., 2014; Pascoe & Smart Richman, 2009; Rospenda et al., 2006; Thrasher et al., 2016). Emerging work has focused on if such impacts exist in the fire service as well with foreboding results. Women who experienced harassment or discrimination in the fire service reported more poor health days, a higher prevalence of depression, anxiety, and post-traumatic stress, higher alcohol consumption, and lower levels of job satisfaction (Jahnke et al., 2019). Meanwhile, racial and ethnic discrimination is associated with a greater risk of obesity, depression, and poor physical and mental health (Poston et al., 2014). In addition to health-related outcomes, bullying victimization is related to increased job stress, turnover, burnout, and decreased job performance (Bernotaite & Malinauskiene, 2017; Robert, 2018; Srivastava & Dey, 2019; Trad & Johnson, 2014). Although bullying does not affect just women and minorities in the fire service, research specific to men's experiences with bullying in the fire service is sparse, although recent work has taken a deeper look into hazing and initiation behavior through the lens of bullying.

Workplace bullying training has been examined in healthcare (Stagg et al., 2011; Stagg et al., 2013), education (Sorrell, 2015), and municipality organizations (Einarsen et al., 2017), but has yet to be studied in the fire service, despite the established issues of bullying. Using qualitative data from interviews with a national sample of firefighters and fire service leaders, this foundational research sought to understand current bullying training and messaging in the fire service, in addition to components that may be necessary for effective training.

## **Methods**

Data for this report are from a larger, mixed-methods study funded by FEMA that focused on bullying and harassment in the fire service. Using qualitative and quantitative methods, the goal of the project was to examine the prevalence, incidence, and risk factors of bullying and harassment and to develop prevention and intervention efforts, policies, and programs. This study used a phenomenological approach to understand current training opportunities and messaging regarding bullying in the fire service. A phenomenological study uses the subjective lived experiences of participants to ascertain, understand, and define phenomenon (Yüksel & Yıldırım, 2015). While phenomenological research focuses on simply describing a phenomenon rather than providing an explanation, adding an interpretive dimension, as is the case in the current study, allows for practical application to inform, support, or challenge policy (Lester, 1999). This approach was

appropriate for this project due to the lack of existing theory to explain bullying training and messaging in the fire service. The appropriate institutional IRBs approved all protocols and procedures relating to the study.

## **Study Design**

A nationally represented group of firefighters were selected to participate in interviews using a convenience-based purposive sampling strategy. Participation was solicited through convenient avenues by providing an announcement of the study to two outlets: 1) a popular fire service email list serves known as the “Secret List”, and 2) contacting participants from previous studies (Jahnke et al., 2012; Jahnke et al. 2019). Interested personnel were instructed to contact the Principal Investigator for possible study inclusion. Purposive sampling of the participant list was based on geographical (East, Central, West), and roles in the fire service (i.e., firefighters, fire service leaders; Palinkas et al., 2015). Purposive sampling was used to ensure a wide variety of experiences and opinions on the topic based on geography and rank. A nationally represented sample of firefighters and fire service leaders can account for any cultural differences based on geography to develop a well-rounded analysis. Additionally, the inclusion of line-level firefighters and fire service leaders results in a bottom-up and top-down understanding of bullying in the fire service.

Validity and reliability during data collection and analysis was ensured through a number of steps completed by the research team. To begin with, the interviews were conducted by two researchers. One serving as primary, actively engaging with the participant by asking questions, while the second interviewer listened in and took notes. As part of a debriefing process, the two interviewers shared notes and adjusted the data collection process when necessary. This peer debriefing and auditing not only confirmed data accuracy, but also developed credibility and trustworthiness. Additionally, unclear or vague expressions of themes were not included in the analysis, removing opportunities for the introduction of bias or subjective interpretation. Finally, in the name of transparency, all steps during the data collection process and analysis of data were documented (Leung, 2015).

## **Interview Methodology**

Interviews were conducted from April 2018-January 2019. Interviews were conducted telephonically, recorded using a private and secure conference line, and lasted approximately one hour. Beginning with an explanation of the summary, participants were informed about the confidentiality of the interview and given the opportunity to ask questions. After consent was obtained, the interview began. Interview questions were developed by the research team with assistance from a stakeholder panel of fire service experts. The use of interview guides assured topic consistency among interviews and were designed to capture broad themes. Open-ended questions asked about the training and messages about bullying in the fire service are presented in Table 1.

## **Data-Analysis Procedures**

Interviews were transcribed verbatim and were coded for recurrent themes and divergence, consensus and differing opinions regarding training and messages about bullying (Glaser & Strauss, 1967; Miles & Huberman, 1994). A multi-part inductive process was used to develop

common themes. This process began with researchers reviewing transcripts to generate a set of working codes. Transcripts were reviewed by two researchers, and commonly occurring patterns and themes were identified. After data was coded into major themes by hand (Hill et al., 1997), the two primary coders compared analyses. Finally, third and fourth researchers reviewed the findings to ensure accuracy. Thematic saturation was reached at 31 interviews, when a sufficiently diverse sample had been obtained, and no new themes were emerging from ongoing analysis.

**Table 1**  
*Interview Questions*

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What trainings exist to curtail bullying and harassment in the fire service?
How effective are the existing trainings?
If you could develop any training to curtail harassment or bullying in the fire service, what would it include? (Probe: Format, content, key lessons)
What effective messages are you aware of that can help change the climate of bullying/harassment?
Do you have any suggestions for effective messaging in the fire service?

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**Results**

As shown in Table 2, the average age of the 31 participants was 48.1 ( $\pm 9.0$ ) years, with an average of 22.1 ( $\pm 9.4$ ) years of fire service experience. There were 15 firefighters and 16 fire service leaders. A majority of the participants were female (61%), while 84% were white and non-Hispanic. Table 3 presents the common themes that emerged from the data, which includes current training opportunities, effectiveness of training, and components of effective training.

**Table 2**  
*Participant Demographics*

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Demographic	N (%)
Sex	
Male	12 (38.7)
Female	19 (61.3)
Race	
White	27 (87.1)
Black	2 (6.5)
American Indian/ Alaskan Native	1 (3.2)
Other	1 (3.2)
Ethnicity	
Hispanic	2 (6.5)
Non-Hispanic	29 (93.5)
Age (M, SD)	48.1 (9.0)
Role	
Firefighter	15 (48.4)
Leader	16 (51.6)
Years of Service (M, SD)	22.1 (9.4)

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**Table 3**  
*Thematic Summary*

Main Themes	Sub-Themes
Current training opportunities	<ul style="list-style-type: none"> <li>• National conferences and seminars</li> <li>• Department or City HR</li> <li>• Lack of quality trainings</li> </ul>
Effectiveness of training	<ul style="list-style-type: none"> <li>• Not very effective</li> <li>• Effective</li> </ul>
Components of effective training and messaging	<ul style="list-style-type: none"> <li>• Importance of strong leadership</li> <li>• Clarification of bullying/harassment</li> <li>• Having access to useful resources</li> <li>• Real-life scenarios/case studies</li> </ul>

### **Current Training Opportunities in the Fire Service**

Participants provided a number of training opportunities in the fire service that address bullying and harassment. It was stated that “people can’t say there’s no training out there. There is an abundance of training opportunities. People just have to be willing to put forth the effort to find the appropriate one for their organization” (male leader). The current opportunities were reported as largely falling into two categories, those provided at national conferences and seminars, and those provided by the department or city Human Resources.

A common theme that emerged in regards to trainings included a number of national fire service organizations that offer classes, workshops, and seminars during their annual conferences. “I think there’s a lot of people that are out there doing conferences, small conferences here and there” (male leader), “I know that there’s a class coming up at the Women in the Fire Service conference” (female firefighter). While “you occasionally see workshops and seminars at something like FDIC, FRI” (female leader), “both iWomen and IAFC seem really committed to this” (female leader). Additionally, “the National Volunteer Fire Council puts out another excellent program that is geared towards volunteer fire fighters” (male firefighter) ensuring both career and volunteer firefighters are targeted.

In addition to national conferences and seminars, participants discussed training and policy review provided by their department or City’s Human Resources. There is often a review of policies during these trainings, acting as a “refresher on the hazing, harassment, and discrimination policies. That includes all of the city resources that are available for pursuing complaints and grievances and those kind of things” (male firefighter). Working with HR was perceived as primarily providing an opportunity for clarification such as “reviewing types of bullying, harassment, and what might be considered okay to someone versus not being okay” (male firefighter), as “they educate us on what exactly is acceptable and not” (female firefighter).

Despite the various types of trainings mentioned by some participants, others highlighted a lack of trainings sharing “I really don’t think there’s much trainings that exist...I really don’t think that there is any training that does much of any good right now” (male leader), “not that we have in our department” (female firefighter). When asked about anti-bullying training, one participant simply shared “No. There was not. There was none. There were, ‘Here’s the policy. Sign that you have received the policy’” (female leader), while another pointed out “other than individual seminars and trainings...I’m not sure of any sort of national program” (female leader).

One possible explanation for the lack of training for some departments was related to the issue itself not being a desirable issue to discuss in the fire station setting, alluding to the discomfort felt by those involved in bullying behavior.

*It's not a subject that a lot of people want to go talk about. It's hard to get an audience... I think people recognize it, but they just don't want to admit it...the biggest hurdle right now is getting people to want to do something about it, to admit that there's an issue and want to try to fix the issue. (Male leader)*

Such resistance to training, despite the acknowledgement of bullying being an issue, may interfere with the effectiveness of bullying training. This may be more prevalent in situations where older, more seasoned veterans are resistant to trainings that younger firefighters may have been open to receiving.

Other participants suggested the fire service limits itself in terms of resources because “there’s a lot more out there in those realms, but the fire service isn’t good at reaching beyond its borders. If it doesn’t have a Star Life or a Maltese cross on it, we usually don’t look at it” (male leader). Limiting resources considered for training can greatly impact how the fire service addresses this issue, something one participant felt resulted in an unproductive cycle. “We have to get outside our normal training. We can’t keep doin’ this same thing over and over again... I think we need a team approach with behavioral health, team with an employee advocate that you can turn to” (female leader). Reaching outside of the fire service and collaborating with organizations or behavioral health specialists may be a fruitful avenue of future efforts.

### **Effectiveness of Trainings**

While quantitative assessments of effective bullying training were not within the scope of this research, participants were asked about the effectiveness of bullying trainings they had experienced or aware of in the fire service. The challenges associated with bullying training identified were that it “needs to be targeted at the right people” (female leader), while “no one takes it seriously. When they rolled out the harassment policy, they did come out to the stations and talked about it, but nobody takes those seriously because they don’t actually do anything when stuff comes up” (female firefighter). The style of training was mentioned as a possible reason for a lack of effectiveness “especially since it's on the computer and it's pretty much the same every year. You just go to the end and try to take the test” (female firefighter). These responses elude the necessity of novel training methods rather than the typical training which includes videos and lectures,

*If people think watching a video is gonna make an asshole be a nice guy or make someone with some pretty severe mental issues in regard to women, minorities, smaller statured men or whatever, change their behavior or having them sign a pledge, is ludicrous. Our typical fire service training is, don't do this or you're gonna get in trouble. Don't say that or you're gonna get in trouble. That doesn't affect anyone. It may keep people's hands in their pockets for a little bit while after the class, but as far as having a true experiential effect on people, those classes do not and never will work. (Female leader)*

Effective bullying training may be a complex and lofty goal, “I think it's trying to eat an elephant” however, cultural buy-in was deemed important as “they’re only effective as long as the leadership within the organization buys into it” (male leader). Starting with just conversations can be important because “even just discussions on the topics are effective throughout organizations, because you’re educating and making people aware” (male leader). This new awareness is important because people “want to know what the rules are” (male leader), and is part of a change in culture, often required for effective training. “It's more of an organizational culture workshop. I think that that can help as well, just to really set the expectation of a positive atmosphere” (female firefighter).

### **Components of Effective Trainings and Messaging**

Building on the notion of culture change, participants shared what they believed to be components of effective training, such as the importance of strong leadership. Change needs to “start from the top...Something needs to come from our leadership” (female firefighter), because “if the leadership of the organization does not buy into it, then it’s meaningless” (male leader). Follow through was also part of strong leadership because change can occur

*when the chiefs of departments make it their priority to ensure that everyone coming to work has that comfortable work environment and when they don't they take swift action against those who are not playing nicely...when officers, chiefs, and chiefs of the department stop the bad behavior and give consequences for that bad behavior or repeated or illegal behavior... They need to deny promotions and perks to people who have a history of bullying or harassment. That will send the biggest message. (Female leader)*

Other aspects of leadership were mentioned such as “the importance of professionalism...I think I would just stress the importance of treating each other the way that the public expects us to treat them” (female firefighter), and promoting “teamwork inside of a fire station setting” (male firefighter). Additionally, “we need to give people ownership and responsibility. This is your fire department. You need to make it the best” (female leader). Finally, visibility of leadership’s investment into training was mentioned as a method of information disbursement “you have a very well-respected chief of a very well-respected organization, have the courage to get up and be filmed, talking about how we shouldn’t tolerate that in the fire service...coming from the leadership just sends a very strong message” (female leader).

A clear understanding of bullying, harassment, and sexual harassment was also a repeated theme to effective training as “first and foremost, I think, is the definition and recognition” (male leader). Not only was defining bullying important but “making sure folks understand exactly what it is and understand some of the impact that bullying has” (male firefighter). Largely a profession full of people who love to learn through hands-on methods, “firefighters need specifics. I've heard guys ask me a lot, “Well, what do you think is sexual harassment? What do you constitute as sexual harassment?...I think education is a huge deal” (female firefighter).

Building on the education of what is appropriate and inappropriate behavior, having access to useful resources is a key component to effective training. These resources may vary and include



*peer mentoring, some peer support would also be very important, not only for those that have been harassed, but also for those that have to deal with the administrative side of it, the discipline side of it, so that there's some place to go to, to talk to, to say, 'Hey, this is the situation I've got. I need help.'* (Male leader)

Specifically, outlining resources for “people who are pretty new to the department or the service, and they don’t know what they can do. They don’t know what is there. They don’t know who to talk to...just knowing how to activate it and how to get things started, and know that something will be done” (male firefighter). In general, understanding bullying is

*becoming one of those leading topics at various leadership conferences, as well as firefighter conferences and trainings is a great way to get it out there and get people to start changing their culture within the fire service widespread...I think everybody should have that type of training of how to stand up for yourself.* (Male leader)

Changing academy and promotional requirements was also discussed. Beginning at the start of a firefighter’s career, including bullying training “on entrance exams for the academy. I’d love to see a class or two at the academy” (female leader) could provide a solid foundation of behavioral expectations of probationary firefighters as they enter the fire service. Accountability of appropriate behavior and leadership can continue by requiring “that if you're moving up in the chain of command, you definitely would have to take some kind of training on bullying and harassment” (female leader), and including “it on the promotional exams” (female leader).

Participants also shared forward thinking suggestions, such as trainings that include “inclusiveness. I think that’s one thing the fire service is not doing. We’re not as inclusive as we should be, whether it be with race or with gender” (male leader). Another participant proposed

*placing a heavy emphasis on emotional intelligence and the soft skills because, when we do that, we really can identify those candidates who are going to best fit into the culture that we need to strive for in the fire service...competency in how to deal with conflicts. Competency with showing compassion and kindness. Competency with being able to stand up for what is right and using their voice.* (Female leader)

A final common component was the inclusion of real-life scenarios. “People love stories. We all love stories...You listen more, when it’s a real, actual story” (female firefighter). The reality of the stories shared also allows firefighters to “learn from each other’s mistakes, and that’s what the whole near miss reporting is about...if I had examples, if I was able to see examples of what kind of things happen in the workplace and what actions were taken, that would be a lot more enlightening than—and when I say workplace, specific to the fire service because a firefighter needs to make that connection to make it sink in a little bit more” (male leader). Similar to real-life scenarios is “incorporating role play or scenario based and allow people to partake. Put them into someone else’s shoes” (female leader). If firefighters can “switch the roles, I think that would make a difference. I think we've started to see a little bit of difference with fathers who are firefighters who suddenly have daughters getting into the fire service” (female leader). The effect of incorporating case studies or role playing into training may be lasting, especially if it includes “a message of somebody’s real-life situations. The impact that it has, not only for that individual, but



others, where people are losing their jobs, they're losing their careers, and the spiral that is that" (male leader).

## **Discussion**

Several themes emerged from the interview data, such as the state of current bullying trainings, which included a number of national conferences and seminars, as well as department or city HR presentations. The effectiveness of bullying training was split as some participants felt current opportunities were effective, while other participants did not. Finally, a number of components necessary to effective training were suggested. These components included strong leadership, clearly defining bullying behavior, access to quality resources, and the inclusion of real-life scenarios or case studies. Additionally, drawing on resources outside of the fire service could provide insight into addressing challenging audiences and contexts. It would be important for these resources to be tailored to the fire service to ensure effectiveness.

While an increasing amount of research has examined patterns of bullying in the fire service, this was the first to specifically discuss training and messaging around the subject. Focusing on training and messaging can provide the foundation for departments to develop programs or change cultures to create a safe work environment. The qualitative nature of the data in this work allowed participants to share their experiences and opinions in a loosely structured interview, allowing for a depth in the data not found in quantitative methods. Additionally, this work provided perspectives from both firefighters and fire service leaders resulting in a top-down and bottom-up understanding of the issue. Finally, the national sample of participants ensured well-rounded data that would include potential variations based on geographic location and culture.

Despite the insight into fire service bullying training, several study limitations need to be addressed, beginning with the average age of the sample (48.1 years), which is much older than the average firefighter age (Data USA, 2019). This age difference may greatly impact the perspective of participants, including effective methods of training as younger firefighters may learn differently than older firefighters. As baby boomers continue to retire from the workforce (Fry, 2020), including the fire service, future research to understand generational cultures in the fire service would aid in the development of the most robust bullying training. Additionally, the study's sample was far more gender diverse than the national fire service. While the fire service is comprised of 8% females, more than half of the sample were women, potentially introducing a gender bias. Future investigations may want to correct for this bias, as well as examine the perceptions of racial, ethnic, and sexual minority firefighters. Focused research on volunteer versus career departments would also be a beneficial endeavor when developing future training and programs.

While additional research is required to fully understand the issue of bullying in the fire service, these results can be used as a spring board to assist in the development of bullying training and tailoring messages in the fire service. Understanding the effective components of bullying training can provide the framework for training programs. To begin with, clearly defining what is bullying behavior and what is harassment helps set boundaries for acceptable and unacceptable behavior. Additionally, it may be important to include personal stories, case studies, and role play into interactive and dynamic training sessions instead of having firefighters sit through lectures or online modules. Finally, the active involvement of officers and Chiefs will set the tone and provide examples of respectful and professional behavior, while transparency and swiftness of action for bullies will instill a sense of confidence that the safety and wellbeing of firefighters is the priority.

It should be noted that although this study focused on the fire service, many of these findings may be applicable to the training and messaging of bullying in other similar occupational groups such as the military and law enforcement, fields that also struggle with bullying (Crowell-Williamson et al., 2019; Farr-Wharton et al., 2017). These fields share many common traits with the fire service including responding to calls for service, intense and stressful work environments, a male-dominated culture, and repeated exposure to trauma (Bartlett et al., 2019; Drummet et al., 2003; Maguen et al., 2011; Pflanz & Sonnek, 2002). In fact, many fire service personnel have a background in the military or law enforcement (Meyer et al., 2012). While the current results cannot provide direct insight into bullying issues in the military or law enforcement, they may provide a beginning direction for research in each field.

This study was the first to examine perspectives of bullying training and messaging in the fire service. Not only do these results provide a foundation for the development of programs, they also provide a starting point for future research efforts which may include quantitatively refine and test the efficacy of workplace bullying trainings in the fire service. As mentioned by several participants, investment in such trainings from leadership is essential and can aid in social buy-in from the frontline. Robust bullying training programs are an essential component of cultivating a positive work environment at the fire station, which will improve the services provided to the community and ensure a healthy and productive workforce.

## References

- American Osteopathic Association. (n.d.). *Bullying in America: Survey finds nearly one-third of Americans (31%) have been bullied as an adult*. Retrieved April 2, 2021, from <https://www.prnewswire.com/news-releases/bullying-in-america-survey-finds-nearly-one-third-of-americans-31-have-been-bullied-as-an-adult-300556666.html>
- Bartlett, B. A., Gallagher, M. W., Tran, J. K., & Vujanovic, A. A. (2019). Military veteran status and posttraumatic stress disorder symptomatology among urban firefighters: The moderating role of emotion regulation difficulties. *Journal of Nervous & Mental Disease, 207*(4), 224–231. <https://doi.org/10.1097/NMD.0000000000000958>
- Bernotaite, L., & Malinauskiene, V. (2017). Workplace bullying and mental health among teachers in relation to psychosocial job characteristics and burnout. *International Journal of Occupational Medicine and Environmental Health, 30*(4), 629–640. <https://doi.org/10.13075/ijomeh.1896.00943>
- Crowell-Williamson, G. A., Fruhbauerova, M., DeCou, C. R., & Comtois, K. A. (2019). Perceived burdensomeness, bullying, and suicidal ideation in suicidal military personnel. *Journal of Clinical Psychology, 75*(12), 2147–2159. <https://doi.org/10.1002/jclp.22836>
- Data USA. (2019). *Firefighters*. <https://datausa.io/profile/soc/firefighters>
- Drummet, A. R., Coleman, M., & Cable, S. (2003). Military families under stress: Implications for family life education. *Family Relations, 52*(3), 279–287. <https://doi.org/10.1111/j.1741-3729.2003.00279.x>
- Einarsen, K., Mykletun, R., Einarsen, S. V., Skogstad, A., & Salin, D. (2017). Ethical infrastructure and successful handling of workplace bullying. *Nordic Journal of Working Life Studies, 7*(1), 37–54. <https://doi.org/10.18291/njwls.v7i1.81398>
- Farr-Wharton, B., Shacklock, K., Brunetto, Y., Teo, S. T. T., & Farr-Wharton, R. (2017). Workplace bullying, workplace relationships and job outcomes for police officers in Australia. *Public Money & Management, 37*(5), 325–332. <https://doi.org/10.1080/09540962.2017.1328180>

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- Fry, R. (2020, November 9). *The pace of Boomer retirements has accelerated in the past year*. Pew Research Center. <https://www.pewresearch.org/fact-tank/2020/11/09/the-pace-of-boomer-retirements-has-accelerated-in-the-past-year/>
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Aldine.
- Hill, C. E., Thompson, B. J., & Williams, E. N. (1997). A guide to conducting consensual qualitative research. *The Counseling Psychologist*, 25(4), 517–572. <https://doi.org/10.1177/0011000097254001>
- Hulett, D. M., Bendick, M., Thomas, S. Y., & Moccio, F. (2008). *A national report card on women in firefighting*. iWomen.
- Jahnke, S. A., Haddock, C. K., Jitnarin, N., Kaipust, C. M., Hollerbach, B. S., & Poston, W. S. C. (2019). The prevalence and health impacts of frequent work discrimination and harassment among women firefighters in the US fire service. *BioMed Research International*, 2019, Article 6740207. <https://doi.org/10.1155/2019/6740207>
- Jahnke, S. A., Poston, W. S. C., Jitnarin, N., & Haddock, C. K. (2012). Health concerns of the U.S. fire service: Perspectives from the firehouse. *American Journal of Health Promotion*, 27(2), 111–118. <https://doi.org/10.4278/ajhp.110311-QUAL-109>
- Kessler, R. C., Mickelson, K. D., & Williams, D. R. (1999). The prevalence, distribution, and mental health correlates of perceived discrimination in the United States. *Journal of Health and Social Behavior*, 40(3), 208–230.
- Lester, S. (1999). *An introduction to phenomenological research* (p. 4). Stan Lester Developments.
- Leung, L. (2015). Validity, reliability, and generalizability in qualitative research. *Journal of Family Medicine and Primary Care*, 4(3), 324–327. <https://doi.org/10.4103/2249-4863.161306>
- Lowry, P. B., Zhang, J., Wang, C., & Siponen, M. (2016). Why do adults engage in cyberbullying on social media? An integration of online disinhibition and deindividuation effects with the social structure and social learning model. *Information Systems Research*, 27(4), 962–986. <https://doi.org/10.1287/isre.2016.0671>
- Maguen, S., Vogt, D. S., King, L. A., King, D. W., Litz, B. T., Knight, S. J., & Marmar, C. R. (2011). The impact of killing on mental health symptoms in Gulf War veterans. *Psychological Trauma: Theory, Research, Practice, and Policy*, 3(1), 21–26. <https://doi.org/10.1037/a0019897>
- Meyer, E. C., Zimering, R., Daly, E., Knight, J., Kamholz, B. W., & Gulliver, S. B. (2012). Predictors of posttraumatic stress disorder and other psychological symptoms in trauma-exposed firefighters. *Psychological Services*, 9(1), 1–15. <https://doi.org/10.1037/a0026414>
- Miles, B., & Huberman, A. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). SAGE Publications.
- Namie, G. (n.d.). *2021 WBI U.S. Workplace Bullying Survey*. Workplace Bullying Institute.
- Okechukwu, C. A., Souza, K., Davis, K. D., & de Castro, A. B. (2014). Discrimination, harassment, abuse and bullying in the workplace: Contribution of workplace injustice to occupational health disparities. *American Journal of Industrial Medicine*, 57(5), 573–586. <https://doi.org/10.1002/ajim.22221>
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health*, 42(5), 533–544. <https://doi.org/10.1007/s10488-013-0528-y>

- Pascoe, E. A., & Smart Richman, L. (2009). Perceived discrimination and health: A meta-analytic review. *Psychological Bulletin*, *135*(4), 531–554. <https://doi.org/10.1037/a0016059>
- Pflanz, S., & Sonnek, S. (2002). Work stress in the military: Prevalence, causes, and relationship to emotional health. *Military Medicine*, *167*(11), 877–882.
- Poston, W., Haddock, C. K., Jahnke, S. A., Jitnarin, N., Day, R. S., & Daniels, I. D. (2014). Health disparities among racial and ethnic minority firefighters. *Journal of Health Disparities Research and Practice*, *7*(5), Article 8.
- Robert, F. (2018). Impact of workplace bullying on job performance and job stress. *Journal of Management Info*, *5*(3), 12–15. <https://doi.org/10.31580/jmi.v5i3.123>
- Rospenda, K. M., Richman, J. A., & Shannon, C. A. (2006). Patterns of workplace harassment, gender, and use of services: An update. *Journal of Occupational Health Psychology*, *11*(4), 379–393. <https://doi.org/10.1037/1076-8998.11.4.379>
- Sorrell, D. (2015). Workplace bullying in education. *Journal of Bullying & Social Aggression*, *1*(2). <http://sites.tamuc.edu/bullyingjournal/article/workplace-bullying-education/>
- Srivastava, S., & Dey, B. (2019). Workplace bullying and job burnout: A moderated mediation model of emotional intelligence and hardiness. *International Journal of Organizational Analysis*, *28*(1), 183–204. <https://doi.org/10.1108/IJOA-02-2019-1664>
- Stagg, S. J., Sheridan, D. J., Jones, R. A., & Speroni, K. G. (2013). Workplace bullying: The effectiveness of a workplace program. *Workplace Health & Safety*, *61*(8), 333–338. <https://doi.org/10.1177/216507991306100803>
- Stagg, S. J., Sheridan, D., Jones, R. A., & Speroni, K. G. (2011). Evaluation of a workplace bullying cognitive rehearsal program in a hospital setting. *Journal of Continuing Education in Nursing*, *42*, 395–401; quiz 402. <https://doi.org/10.3928/00220124-20110823-45>
- Thrasher, A. D., Wells, A. M., Spencer, S. M., Cofie, L., & Yen, I. H. (2016). Workplace discrimination is associated with alcohol abuse among ethnically diverse hospital staff. *Workplace Health & Safety*, *64*(5), 202–209. <https://doi.org/10.1177/2165079916628878>
- Titan Group. (2017). *Organizational Climate Review Report*. Fairfax County Fire and Rescue Department. <https://www.fairfaxcounty.gov/sites/publicaffairs/files/assets/documents/fire-rescue-report-feb2017.pdf>
- Trad, M., & Johnson, J. (2014). Bullying among radiation therapists: Effects on job performance and work environment. *Radiologic Technology*, *86*(2), 122–131.
- Willing, L. (2019, January 7). *Confronting workplace bullying in the fire service*. FireRescue1. <https://www.firerescue1.com/fire-chief/articles/confronting-workplace-bullying-in-the-fire-service-NbhLSthrHRKdXq0k/>
- Yoder, J. D., & Berendsen, L. L. (2001). “Outsider within” the firehouse: African American and White women firefighters. *Psychology of Women Quarterly*, *25*(1), 27–36. <https://doi.org/10.1111/1471-6402.00004>
- Yoder, J., & Aniakudo, P. (1997). “Outsider within the firehouse”: Subordination and difference in the social interactions of African American women firefighters. *Gender & Society*, *11*(3), 324–341. <https://doi.org/10.1177/089124397011003004>
- Yüksel, P., & Yıldırım, S. (2015). Theoretical Frameworks, Methods, and Procedures for Conducting Phenomenological Studies in Educational Settings. *Turkish Online Journal of Qualitative Inquiry*, *6*(1), 1–20.

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