

Firehouse Service Dogs: Asset or Liability?

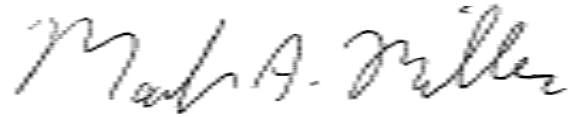
Deerfield Township, Ohio

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CERTIFICATION STATEMENT

I hereby certify that this paper constitutes my own product, that were the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, ideas, expressions, or writings of another.

A handwritten signature in cursive script that reads "Mark A. Miller".

Signed: _____

Abstract

The problem addressed by this applied research project was that decisions were being made regarding whether or not to allow firehouse service dogs when there has never been qualitative research conducted into the possible benefits and liabilities of allowing service dogs within Deerfield Township firehouses. The purpose of this research is to aid in draft policy development associated with allowing service dogs within Deerfield Township firehouses. This research utilized the action research method to answer the questions:

1. What are the benefits of allowing service dogs within Deerfield Township firehouses?
2. What are the possible liabilities associated with allowing service dogs within Deerfield Township firehouses?
3. What logistical considerations would need to be considered if service dogs were allowed in Deerfield Township firehouses?
4. What type of support exists from the employees of Deerfield Township Fire Rescue regarding having service dogs in the firehouses?

The procedures used to complete this project included a literature review, disseminated employee survey, and numerous personal interviews with service dog owners and our township's risk management advisor. The results of this study identified numerous physical and mental health benefits of allowing service dogs in the firehouse. This study also found several potential liabilities of allowing service dogs in the firehouse.

The recommendations weighed the known benefits against the potential liabilities associated with allowing service dogs in the firehouse. It was ultimately recommended that the

benefits outweigh the possible liabilities with allowing service dogs in the firehouse and that the project should be implemented in three specific steps. These steps were broken down into education, acquisition and training, and introduction of the service dog into Deerfield Township firehouses. A final recommendation was made to collect ongoing data regarding the effects the service dogs have on the mental wellbeing of department personnel.

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Introduction

Firefighting routinely ranks amongst the most stressful jobs in the United States. In 2016, firefighting was ranked as the third most stressful job because it only exists to assist people who are in dire straits and in need of rescue (Gouveia, 2016). Cumulative stress and Post Traumatic Stress Disorder (PTSD) are becoming more frequently diagnosed amongst fire service professionals, law enforcement, emergency medical providers, and our military veterans. Suicide rates are also steadily increasing amongst the American fire service (Lamplugh, 2015). Finding ways to combat the daily stress experienced by emergency responders should be a top priority for fire service administrators.

Deerfield Township firefighters and paramedics are not immune to the daily stressors associated with the profession. As fire service administrators, the responsibility isn't taken lightly to help our personnel combat the effects of cumulative stress and PTSD. One proven way to do this for other occupations is through the utilization of service dogs and emotional support dogs. The problem is decisions are being made regarding allowing firehouse service dogs when there has never been qualitative research conducted into the possible benefits and liabilities of allowing service dogs within Deerfield Township firehouses.

The purpose of this research is to aid in draft policy development associated with allowing service dogs within Deerfield Township firehouses. This research will utilize the action research method to answer the questions: 1. What are the benefits of allowing service dogs within Deerfield Township firehouses? 2. What are the possible liabilities associated with allowing service dogs within Deerfield Township firehouses? 3. What logistical considerations would need to be considered if service dogs were allowed in Deerfield Township firehouses? 4. What

type of support exists from the employees of Deerfield Township Fire Rescue regarding having service dogs in the firehouses?

Background and Significance

Deerfield Townships nestled in the southwest corner of Warren County, Ohio. Deerfield Township is approximately twenty square miles and home to an estimated 41,000 residents (U.S. Census, 2010). According to the U. S. Census (2010), Warren County is the third fastest growing county in the State of Ohio. Deerfield Township has been the epicenter of development within the county for the past two decades. By 2020, Deerfield Township is projected to have 54,000 residents and 71,000 residents by 2030 (U.S. Census, 2010). Deerfield Township is dissected by Interstate 71 which aids in its appeal to attract residents and businesses alike. This ease of interstate access is just one of many reasons that Deerfield Township has experienced momentous residential, business, and commercial growth over the past two decades.

Deerfield Township Fire Rescue (DTFR) is a combination fire department that utilizes both career and part-time employees to fulfill its staffing matrix, responding out of three firehouses with nineteen on-duty personnel daily. The department boasts an ISO Class II rating. The department consists of 35 career and 65 part-time employees. Each firehouse is staffed with five cross-trained firefighter/paramedics. Frontline supervision is accomplished through the use of a lieutenant or captain assigned to each of the three fire stations per unit day. A battalion chief supervises the daily shift and multi-company incident responses. DTFR provides advanced life support transport, fire suppression, technical rescue, and hazardous materials response to its community. The organization also participates in aggressive mutual aid agreements within Warren, Hamilton, and Butler Counties.

It has been well documented that the fire service ranks amongst the top of the most stressful jobs in the United States. In 2016, firefighting was ranked as the third most stressful job because it only exists to assist people who are in dire straits and in need of rescue (Gouveia, 2016). The effects of this stress on the human body have also been well documented over the years. More recently, cumulative stress has come to the forefront of firefighter health and wellness. Cumulative stress is a common experience for people who work in chronically stressful situations (McSteen, 2012). Cumulative stress results from an accumulation of various stress factors such as heavy workload, poor communications, multiple frustrations, coping with situations in which you feel powerless, and the inability to rest or relax (McSteen, 2012).

Post-Traumatic Stress Disorder (PTSD) is the psychological result of experiencing a deeply shocking or disturbing event (ptstreatmenthelp.com, 2017). Unlike cumulative stress, PTSD can manifest itself after a single event. These events may be a near death experience, death of a loved one, exposure to massive death and destruction or personal violence such as rape, robbery or assault (ptstreatmenthelp.com, 2017). Complex PTSD, like cumulative stress, is characterized by continuous exposure to stressful situations. This repeated exposure to disaster, accidents, deaths or violent acts are oftentimes seen by police, firefighters, and paramedics (ptstreatmenthelp.com, 2017). Deerfield Township Fire Rescue personnel are equally susceptible to the effects of cumulative stress and PTSD alike.

Suicide rates are also steadily increasing amongst the American fire service (Lamplugh, 2015). Suicide is the tenth leading cause of death in the United States with 13 people per 100,000 dying by suicide annually (Jahnke, 2016). Those in protective services, which include both firefighters and police, were 34.1 per 100,000 (Jahnke, 2016). While Deerfield Township fortunately hasn't experienced any firefighter suicides, several surrounding jurisdictions have

within recent time. Internally, there has been a thirty-percent increase in employees seeking mental health counseling offered by our Employee Assistance Program (Matt Clarke, personal communication, May 2, 2017). While it is encouraged for our employees seek this vital help, it shows that there is a mental health component beginning to distress our organization.

This research creates a definitive linkage between the Executive Fire Officer Program's *Executive Leadership* course by ensuring our organization's most valuable resource, our staff, have long, healthy careers as well as retirements by ensuring we look at all feasible options for both their physical and mental wellbeing. This is one of the most important roles of the executive fire officers. The research further creates a linkage to the United States Fire Administrations strategic goal number four: *Advance the professional development of fire service personnel and of other people engaged in fire prevention and control activities*. Ensuring our personnel have adequate mental welfare will advance both their personal and professional development by ensuring our employees not only remain engaged in their professional life, but their personal and family lives as well.

Literature Review

According to the United States Dog Registry (2016), there are three certification levels for service dogs: Service Dog, Emotional Support Dog, and, Therapy Dogs. Service dogs are dogs that have been individually trained to perform a specific task for individuals who have disabilities. There are a wide range of disabilities covered by service dogs. They can aid in navigation for hearing and visually impaired, assist an individual who is having a seizure, or calm an individual who suffers from PTSD (USDR, 2016).

Emotional support dogs are dogs that provide comfort and support in forms of affection and companionship for an individual suffering from various mental and emotional conditions

(USDR, 2016). Unlike service dogs, emotional support dogs are not required to perform any specific tasks. According to the United States Dog Registry (2016), they are meant solely for emotional stability and unconditional love and aid in such conditions as anxiety, depression, and other psychological and emotional conditions such as PTSD and cumulative stress.

The fire service routinely ranks amongst the top of the most stressful jobs in the United States. In 2016, firefighting was ranked as the third most stressful job because it only exists to assist people who are in dire straits and in need of rescue (Gouveia, 2016). Firefighters and paramedics within Deerfield Township Fire Rescue are not immune to the effects of both PTSD and cumulative stress which can have health ramifications beyond psychological.

A 2012 study by researchers at Virginia Commonwealth University found employees who brought their dogs to work had reduced stress throughout the day compared to colleagues without pets (Abraham, 2012). A similar study found that having a dog in the room lowered blood pressure better than taking a popular type of blood pressure medication (ACE inhibitor) when you are under stress (Shykoff, 2001). Other research has indicated that the simple act of stroking a pet can help lower blood pressure and cholesterol (Barton, 2015). Findings suggest that the social support a pet provides can make a person feel more relaxed and decrease stress (Serpell, 2011). Social support from friends and family can have similar benefits, but interpersonal relationships often cause stress as well, whereas pets may be less likely to cause stress.

Dogs assist with exercise, if only because most of them need to be walked several times a day. This type of exercise may be more appealing to those who are intimidated by the atmosphere of a traditional gym. According to studies like those conducted by the Wellness Institute at Northwest Memorial Hospital, as long as you're the one holding the leash, you'll reap

the rewards, which can include losing -- or at least maintaining -- weight (Schulz, 2006).

Research conducted by the National Institute of Health (2009) also supports this claim -- including one study of more than 2,000 adults, which found that dog owners responsible for walking their pups are less likely to be obese than dog owners who pass the duty off to someone else or those who don't own dogs at all.

According to Gibbs (2016) - Emotional Support Animals have proven to have many benefits. Some of these benefits are:

- Reducing stress
- Relieving loneliness
- Lowering blood pressure and cholesterol
- Increasing activity
- Improving mental health
- Faster recovery times from illness or injury
- Having a friend who loves you unconditionally

Companion Animals (2014) further breaks down the benefits of owning an emotional support animal into three categories: physical health, mental health, and, social health. Physical health benefits include lower cholesterol, lower blood pressure, lower triglycerides, increased activity, more opportunities for exercise and more time spent outdoors (Companion Animals, 2014). Mental health benefits described by Companion Animals (2014) include: reduced stress, reduced feelings of loneliness, better mental health, and more opportunities for socialization. Lastly, social benefits include: animals are natural conversation starters, help forming bonds, and, reduce isolation (Companion Animals, 2014).

Reducing stress in your everyday life is vital for maintaining your overall health, as it can improve your mood, boost immune function, promote longevity and allow you to be more productive (Eliaz, 2011). Chronic stress is a significant risk factor for illnesses such as cancer and heart attacks (Eliaz, 2011). Heart attacks are the number one killer of firefighters annually. According to the United States Fire Administration (2016), fifty-four firefighters died in 2015 as a result of heart attacks and another six died as a result of cerebrovascular accidents. Psychological effects of stress can also affect a firefighter's ability to perform essential job functions. Emotional stress can make it difficult to focus, make decisions, think things through or remember things (Eliaz, 2011).

Service dogs are routinely used in hospitals and the Shriners Burn Center in the greater Cincinnati area, L.T. Bennett, ESQ, (personal interview, April 28, 2017). You can see people's faces light up when you walk into the room with a service dog, it's as if all their ailments go away, L.T. Bennett, ESQ, (personal interview, April 28, 2017). There are not any registered service dogs that are specifically utilized for the fire service; however, there are some that routinely visit the Veterans Administration for post-traumatic stress disorder patients L.T. Bennett, ESQ, (personal interview, April 28, 2017). In all, there are approximately 175 registered service and emotional support dogs in the region.

Emotional support animals are becoming extremely common for military veterans to help combat the effects of PTSD and cumulative stress. Like the fire service, military personnel suffer similar signs and symptoms associated with stressors of their profession; however, more resources are available to help study the benefits of emotional support animals with veterans. A report on PTSD service dogs states "there are many clear advantages to using psychiatric service dogs", and findings from a Gillett (2009) survey distributed by the US military reported:

- 82% of those with a PTSD diagnosis reported symptom reduction after partnership with a service dog.
- Another 40% reported that their use of medication decreased.

These studies are ongoing and the data is constantly being updated.

There are several possible liabilities associated with allowing service dogs within Deerfield Township firehouses. Amongst these liabilities are employees with known pet allergies, pets acting as a distraction, and safety concerns (Becker, 2014). People with pet allergies could suffer from frequent exposure to a pet. Making sure the pet is healthy and bathed regularly – and the pet pillow laundered often – will go a long way toward preventing the transfer of allergens (Becker, 2014). Special accommodations would need to be made for current employees with known pet allergies if they were to request a station reassignment based upon the severity of their allergies, K.L. Arnold (personal communication, May 4, 2017).

Pets can be extremely distracting if they are not getting the attention they feel they deserve (Chaet, 2013). Well behaved dogs are one thing – one who barks, whimpers incessantly or trots down the hall seeking mischief isn't likely to win any favors, especially in a fast-moving environment (Becker, 2014). After all, the purpose of being at work is to get work done. A distracting pet can certainly detract from this. There is also the time that is required to exercise, feed, and bath the service dog that will retract from other assigned duties, K.L. Arnold (personal communication, May 4, 2017).

Safety concerns are of utmost concern to employees, the service dog, and the general public. An unforeseen situation that makes even the most docile pet feel threatened may cause it to attack and injure someone in the workplace – a perfect recipe for a personal injury and lawsuit (Ayyar, 2014). As a risk management advisor to the township, K.L. Arnold (personal communication, May 4, 2017) suggests that all service dogs remain on leash when the general

public is within the firehouse. It is further recommended that the service dog be on a leash or tethered anytime they are out of the living quarters of the firehouse, K.L. Arnold (personal communication, May 4, 2017). This will prevent the dog from inadvertently running away if the bay doors are open as well as lunge at any residents who may happen to stop by the firehouse.

Other concerns can be to the sterile environment of paramedic units and medical equipment. Pets pose a genuine contamination hazard to medical facilities, pharmaceutical companies, and food businesses and are best kept out (Ayyar, 2014). Service dogs will need to be isolated from medical equipment that is stored in the station as well as from the back of medical response units, K.L. Arnold (personal communication, May 4, 2017).

Ayyer (2014) goes onto state: “even in the case of service animals, the law only allows well-trained, housebroken, and even tempered pets to accompany their owners to places of work, thus preventing a potentially threatening environment for coworkers of people with disabilities.” The American Disabilities Act of 2010, article 35.136 *Service Animals*, is the law pertaining to personal service animals in the workplace.

American Disabilities Act of 2010, article 35.136 (D) *Service Animals*, states:

Animal under handler's control. A service animal shall be under the control of its handler. A service animal shall have a harness, leash, or other tether, unless either the handler is unable because of a disability to use a harness, leash, or other tether, or the use of a harness, leash, or other tether would interfere with the service animal's safe, effective performance of work or tasks, in which case the service animal must be otherwise under the handler's control (*e.g.*, voice control, signals, or other effective means).

This can be difficult in the firehouse setting because the service dog will be exposed to a lot of different people, K.L. Arnold (personal communication, May 4, 2017). Furthermore, emotional

support animals are not covered by this law; however, it would certainly be considered a “best practice.”

Differing opinions amongst employees and the public are a significant liability to the project. Not every employee will have the same understanding and enthusiasm of having a service dog in the firehouse. Appointed and elected officials also may not understand the benefits of having any type of dog in the firehouse, regardless the purpose. In addition, the general public may have differing opinions of the importance of having a service dog in a public building at a cost of their taxpayer dollars.

Lastly, damage to township property is a real potential by having any type of dog in the firehouse. It isn't uncommon for a pet to damage furniture and personal belongings when left unattended; especially as a puppy. Accidents inside are also common amongst pets; slip hazards would be present if not noticed. Paying for the damaged furniture and flooring would create other issues as it isn't fiscally responsible to have tax funds re-purchase furniture and flooring due to an unattended firehouse service dog,

There are several other logistical considerations that would need to be considered if service dogs were allowed in Deerfield Township firehouses. Getting a pet certified as a service animal is a long, tedious process, W.B. Davis (personal communications, April 19, 2017). You must own your dog for six months prior to testing and you must first assure that your pet isn't aggressive towards people or other animals in different environments; this could be a difficult feat since there won't be a single handler in the firehouse environment, W.B. Davis (personal communications, April 19, 2017). Ensuring the service dog is safe while crews are out of the station is another concern. It is recommended that you have a crate to keep the dog for when you

are gone; however, this too may be difficult as it will take time and delay emergency responses, W.B. Davis (personal communications, April 19, 2017).

According to the American Society for the Prevention of Cruelty to Animals, the average first-year cost of dog ownership is \$1,050-\$1,435 dependent on size, plus an additional \$264-\$408 for grooming of long-haired dogs. They go on to state that of these costs, \$580-\$875 are expected recurring annual expenses. American Pet Products Manufacturers Association survey indicated an average annual veterinary bill of \$219 per dog owner. This doesn't account for unexpected illness and injury. Food is an obvious expense as a large bag of Purina Dog Chow is about \$30 at the pet store and lasts an average of one month (Kuo, 2014).

Two funding sources could be utilized to aid in cost sharing: a budget line-item and the department's house fund. Creating a budget line-item for the service dogs is relatively a straightforward process; however, it has to get board approval through the normal course of the budget process. The second opportunity for funding is the utilization of funds from the house fund. The house fund is funded at a rate of .50 cents per twelve hours worked per employee. This money is then divided between the three firehouses to purchase condiments and snacks.

Ensuring adequate exercise of the service dog is another logistical concern for allowing service dogs in the firehouse. Dogs need to be exercised at least thirty-minutes per day, W.B. Davis (personal communications, April 19, 2017). This may be difficult on busy days around the firehouse. Implementing a workout schedule that allows the service dog's exercise to be built into the crew's daily required exercise might assist in consistency of exercise for the service dog, W.B. Davis (personal communications, April 19, 2017).

Ensuring the service dog is isolated from the general public is essential for both the safety of the public and service dog and is also a logistical concern. Keeping the service dog in the

living quarters and not in the publicly accessible areas of the three fire stations will aid in limiting exposure, W.B. Davis (personal communications, April 19, 2017). A disadvantage is the service dog would be alone with the personal belongings of the firefighters. Care would have to be taken to ensure personal items don't become toys of the service dog, W.B. Davis (personal communications, April 19, 2017).

Animal liability insurance is another avenue worth pursuing, W.B. Davis (personal communications, April 19, 2017). Animal liability insurance will cover property damage as well as an unfortunate incident where the service dog would bite someone. Two options to consider for bite liability are coverage on your homeowner's policy or specific liability policy for accident or injury caused by your canine (Elliott, 2015).

To identify what type of support exists from the employees of Deerfield Township Fire Rescue regarding having service dogs in the firehouses, a brief survey was distributed to department personnel. The survey was broken down into two parts: definitions and personal responses. Definitions of cumulative stress and PTSD provided a baseline to ensure each member understood the verbiage of the survey questions, coming from the same background. Four questions were then utilized to identify any known personal or co-worker stress related issues that exist within the individual firehouse. Lastly, five questions related to the employees personal willingness to support in all aspects of having a firehouse service dog.

Cumulative stress is a common experience for people who working chronically stressful situations (Mitchell, 1990). Law enforcement, military, fire, and Emergency Medical personnel all work within this environment on a regular basis. Mitchell, (1990) goes on to state: "it results from an accumulation of various stress factors such as heavy work load, poor communications,

multiple frustrations, coping with situations in which you feel powerless, and the inability to rest or relax.”

PTSD Treatment Help (2016), describes PTSD as the psychological result of experiencing a deeply shocking or disturbing event. Some describe it as a normal emotional response to an abnormally stressful experience (PTSD Treatment Help, 2016). Traditionally, PTSD had been linked to a significant, onetime event. Recently, Complex PTSD and Ongoing Stress have been studied. It is now recognized that continuous exposure to stressful situations, or cumulative stress, can also cause symptoms of PTSD (PTSD Treatment Help, 2016).

Four questions were asked relating to stress in the workplace: 1. How often in your career do you feel you have experienced signs and symptoms of cumulative stress? 2. Do you feel a DTFR coworker is currently experiencing signs and symptoms of cumulative stress? 3. How often in your career do you feel you have experienced signs and symptoms of Post-Traumatic Stress Disorder (PTSD) while in the fire service? 4. Do you feel a DTFR coworker is currently experiencing signs and symptoms of PTSD?

Five questions related to the employees personal willingness to support in all aspects of having a firehouse service dog: 5. Do you feel it is the responsibility of the fire department’s administration to explore non-conventional ways of dealing with the daily stress experienced by fire department personnel? 6. Have you personally been diagnosed with any pet allergies specifically pertaining to dogs? 7. Do you have a personal fear of dogs? 8. Would you be willing to participate in exercising, feeding, bathing and training a firehouse service dog? 9. Do you feel a service dog in the firehouse would be too distracting for you to accomplish your assigned daily duties?

Procedures

To determine what the benefits of allowing service dogs within the Deerfield Township firehouses, a thorough literature review was conducted between March 14, 2017 and May 4, 2017. The literature review began at the National Fire Academy's Learning Resource Center on March 14, 2017 and concluded with an extensive internet search on May 4, 2017. The internet search engines utilized were Google and Bing. Search words and phrases utilized were "service dogs," "post-traumatic stress disorder," "cumulative stress," and, "health benefits of dog ownership." A personal interview was also conducted with service dog owner Larry T. Bennett, ESQ on April 28, 2017.

To determine what are the possible liabilities associated with allowing service dogs within Deerfield Township firehouses, a personal interview with Kim Arnold of KLA Risk Consulting was conducted on May 4, 2017. KLA Risk Consulting is the contract risk management consultant for Deerfield Township. Additionally, an extensive literature review was conducted on May 8, 2017. The internet search engines utilized were Google and Bing. Search words and phrases utilized were "liabilities of pets in the workplace" and "pet ownership liabilities."

To determine what logistical considerations would need to be considered if service dogs were allowed in Deerfield Township firehouses, a personal interview was conducted with service dog owner William Bryant Davis on April 19, 2017. An extensive literature review was also conducted on April 19, 2017. The internet search engines utilized were Google and Bing. Search words and phrases utilized were "cost of pet ownership," and "logistical considerations of pet ownership."

Determining what type of support exists from the employees of Deerfield Township Fire Rescue regarding having service dogs in the firehouses was captured through the use of an online survey. The survey was distributed on April 14, 2017 via *SurveyMonkey.com*. The survey link was emailed out through our interdepartmental Outlook email system to all eighty-four DTFR employees. At the close of the survey, thirty-nine employees responded to the survey, or 46.4 percent. Specific instructions were given to respondents to thoroughly read all definitions prior to answering the questions. This ensured all respondents had the same base knowledge prior to giving their input.

Several limitations were identified throughout the course of this research. Most notably was the lack of material regarding the use of service and emotional support dogs for cumulative stress and PTSD specifically relating to the fire service. This limited research to online articles and personal interviews. The second limitation for this research was attempting to find a service dog owner who routinely dealt with cumulative stress and PTSD relating to the fire service. The two service dog owners interviewed dealt mostly in the hospital setting. While this provided a significant amount of insight to the benefits, liabilities, and logistical considerations of owning a service dog, it didn't provide adequate information on the support of those experiencing difficulties with cumulative stress and PTSD. The third limitation was that only forty-six percent of those who were sent the survey responded. This limited departmental input to just less than fifty percent of the organization. Lastly, some literature sources utilize service dogs and emotional support dogs synonymously. This research has shown stark contrast between the two; however, I have caused for references to utilize emotional support dog and service dogs in a synonymous fashion as well.

Results

Several benefits were identified throughout the course of this research to justify allowing service dogs within the Deerfield Township firehouses. In 2016, firefighting was ranked as the third most stressful job because it only exists to assist people who are in dire straits and in need of rescue (Gouveia, 2016). This stress makes firefighters, EMS providers, police, officers and military personnel susceptible to cumulative stress and PTSD. For this reason, the utilization of service dogs as a stress management tool has been at the forefront of this research. Furthermore, based upon the definitions provided by the United States Dog Registry (2016), a dog utilized for PTSD or cumulative stress would be identified as an emotional support dog and not a general term of service dog as utilized throughout this research.

This research identified several health benefits of having a service dog. The 2012 study by researchers at Virginia Commonwealth University found employees who brought their dogs to work had reduced stress throughout the day compared to colleagues without pets. A similar study found that having a dog in the room lowered blood pressure better than taking a popular type of blood pressure medication (ACE inhibitor) when you are under stress (Shykoff, 2001). Other research has indicated that the simple act of stroking a pet can help lower blood pressure and cholesterol (Barton, 2015).

Several additional benefits were identified by Gibbs (2016) - Emotional Support Animals have proven to have many benefits. Some of these benefits are:

- Reducing stress
- Relieving loneliness
- Lowering blood pressure and cholesterol
- Increasing activity
- Improving mental health

- Faster recovery times from illness or injury
- Having a friend who loves you unconditionally

Companion Animals.com (2014) further breaks down the benefits of owning an emotional support animal into three categories: physical health, mental health, and, social health.

Companion Animals (2014) goes on to state: physical health benefits include lower cholesterol, lower blood pressure, lower triglyceride, increased activity, more opportunities for exercise and more time spent outdoors. Mental health benefits include: reduced stress, reduced feelings of loneliness, better mental health, and more opportunities for socialization. Lastly, social benefits include: animals are natural conversation starters, help forming bonds, and, reduce isolation.

This research found that chronic stress is a significant risk factor for illnesses such as cancer and heart attacks (Eliaz, 2011). Heart attacks are the number one killer of firefighters annually and have been for quite some time. According to the United States Fire Administration (2016), fifty-four firefighters died in 2015 as a result of heart attacks. Psychological effects of stress can also affect a firefighter's ability to perform essential job functions. Emotional stress can make it difficult to focus, make decisions, think things through or remember things (Eliaz, 2011).

Emotional support animals are becoming extremely common for military veterans to help combat the effects of PTSD and cumulative stress. Like the fire service, military personnel suffer similar signs and symptoms associated with stressors of their profession; however, more resources are available to help study the benefits of emotional support animals with veterans. A report on PTSD service dogs states "there are many clear advantages to using psychiatric service dogs", and findings from a Gillett (2009) survey distributed by the US military reported:

- 82% of those with a PTSD diagnosis reported symptom reduction after partnership with a service dog.
- Another 40% reported that their use of medication decreased.

Several possible liabilities are associated with allowing service dogs within Deerfield Township firehouses as found by this research. Amongst these liabilities are employees with known pet allergies, pets acting as a distraction, and safety concerns (Becker, 2014). Employees with pet allergies are a significant concern to employers. Making sure the pet is healthy and bathed regularly – and the pet pillow laundered often – will go a long way toward preventing the transfer of allergens (Becker, 2014). Special accommodations will need to be made for employees with known pet allergies if these measures aren't successful in keeping allergens down. Pets can also be extremely distracting in the workplace. Not only can their actions be distracting, but their need for walking, feeding, and bathing will detract from company work being completed.

Safety concerns of having a service dog in the firehouse are of utmost importance. This research has found that there are associated safety concerns for the service dog, employees, and members of the public. An unforeseen situation that makes even the most docile pet feel threatened may cause it to attack and injure someone in the workplace – a perfect recipe for a personal injury and lawsuit (Ayyar, 2014). It was recommended that the service dog be on a leash anytime they are out of the living quarters of the firehouse, K.L. Arnold (personal communication, May 4, 2017). This will go a long way to protecting the dog, employees, and the general public. It will further reduce the likelihood of the service dog running away when outside the living quarters of the firehouse.

Another significant liability found during the course of this research is the threat to the sterile environment of paramedic units and medical equipment throughout the firehouse. Pets

pose a genuine contamination hazard to medical facilities, pharmaceutical companies, and food businesses and are best kept out (Ayyar, 2014). Service dogs will need to be isolated from medical equipment that is stored in the station as well as from the back of medical response units, K.L. Arnold (personal communication, May 4, 2017). This can be a difficult task when leaving for an emergency incident response.

Differing opinions amongst employees and the public are a significant liability to the success of the project that will need to be overcome. Not every employee will have the same understanding of having a service dog in the firehouse. Additionally, appointed and elected officials also may not understand the benefits of having any type of dog in the firehouse, regardless the purpose. Lastly, the general public may have differing opinions of the importance of having a service dog in a public building utilizing public funds.

Damage to firehouse property is a legitimate concern with having any type of dog in the firehouse. Pets left unattended can often damage furniture and the facility itself. Pet accidents on the floor are also a concern. Even though concrete floors are utilized in each firehouse, a slip hazard is of great concern if the accident goes unattended. Paying for damage to the firehouse is another liability as it wouldn't be fiscally responsible to utilize tax payer funds to replace items in the firehouse damaged by a firehouse service dog.

Several logistical considerations would need to be considered if service dogs were allowed in Deerfield Township firehouses. The first is the importance of having the service dog certified by an accredited agency. This is six month process that ensures the temperament of the dog being certified around both people and other pets, W.B. Davis (personal communications, April 19, 2017). Ensuring the service dog is safe while crews are out of the station is another concern. It is recommended that you have a crate to keep the dog for when you are gone;

however, this too may be difficult as it will take time and delay emergency responses, W.B. Davis (personal communications, April 19, 2017).

Funding is another logistical consideration to ensure the service dogs don't become a personal burden to the crews. Two options were identified throughout the course of this research: a budget line-item and subsidized by the firefighters house fund. A budgeted line-item is easily obtainable with board approval. Utilization of the firefighter's house fund dollars is another viable option; however, a prices increase would be inevitable to ensure current items purchased by the house fund remain in the stations. Any increase to the house fund has to be voted on by the membership of the organization.

Ensuring adequate exercise of the service dog is another logistical concern for allowing service dogs in the firehouse. Dogs require exercise to keep their energy level down while indoors. Implementing a workout schedule that allows the service dog's exercise to be built into the crew's daily required exercise might assist in consistency of exercise for the service dog, W.B. Davis (personal communications, April 19, 2017).

Ensuring the service dog is isolated from the general public is essential for both the safety of the public and service dog. Keeping the service dog in the living quarters and not in the publicly accessible areas of the three fire stations will aid in limiting exposure, W.B. Davis (personal communications, April 19, 2017). A disadvantage is the service dog would be alone with the personal belongings of the firefighters. Care would have to be taken to ensure personal items don't become toys of the service dog, W.B. Davis (personal communications, April 19, 2017).

Animal liability insurance is another avenue worth pursuing W.B. Davis, (personal communications, April 19, 2017). Animal liability insurance will cover property damage as well

as an unfortunate incident where the service dog would bite someone. Two options to consider for bite liability are coverage on your homeowner's policy or specific liability policy for accident or injury caused by your canine (Elliott, 2015). Since Deerfield Township doesn't have homeowners policies, liability insurance will need to be provided by the fire department.

The disseminated survey to determine what type of support exists from the employees of Deerfield Township Fire Rescue regarding having service dogs in the firehouses was extremely conclusive. While only 46.4 percent of the organization responded to the survey, the results provide a good baseline of employee support for justifying and allowing service dogs within Deerfield Township firehouses.

Question one:

How often in your career do you feel you have experienced signs and symptoms of cumulative stress?

Never	4	10.26%
1-3	16	41.03%
4-6	6	15.38%
Greater than six times	13	33.33%

Question two:

Do you feel a DTFR coworker is currently experiencing signs and symptoms of cumulative stress?

Yes	29	74.36%
No	10	25.64%

Question three:

How often in your career do you feel you have experienced signs and symptoms of Post-Traumatic Stress Disorder (PTSD) while in the fire service?

Never	20	51.28%
1-3	13	33.33%
4-6	0	0.00%
Greater than six times	6	15.38%

Question four:

Do you feel a DTFR coworker is currently experiencing signs and symptoms of PTDS?

Yes	12	31.58%
No	26	68.42%

Question five:

Do you feel it is the responsibility of the fire department's administration to explore non-conventional ways of dealing with the daily stress experienced by fire department personnel?

Yes	34	89.47%
No	4	10.53%

Question six:

Have you personally been diagnosed with any pet allergies specifically pertaining to dogs?

Yes	1	2.56%
No	38	97.44%

Question seven:

Do you have a personal fear of dog?

Yes	0	0.00%
Somewhat	1	2.56%
No	38	97.44%

Question eight:

Would you be willing to participate in exercising, feeding, bathing and training a firehouse service dog?

Yes	31	79.49%
Somewhat	5	12.82%
No	3	7.69%

Question nine:

Do you feel a service dog in the firehouse would be too distracting for you to accomplish your assigned daily duties?

Yes	3	7.69%
Somewhat	5	12.82%
No	31	79.49%

The purpose of this action research was to develop a draft policy to aid in introducing service dogs into Deerfield Township firehouses. Based upon the results of this research, draft policy 17-04, *Emotional Support Dogs* has been developed and included as Appendix A. This document will undoubtedly be modified as it is disseminated throughout the ranks of the departments command staff.

Discussion / Implications

The utilization of service dogs as a stress reduction tool is at the forefront of this research. During the course of this research, it was found that several sources utilized service dog and emotional support dog in a synonymous manor. This research found that while there are several similarities, there is also stark differences; especially, as it pertains to laws governing service animals in public spaces. The appropriate term based upon this research is emotional support dog; therefore, moving forward organizationally, the term emotional support dog will be utilized.

In 2016, firefighting was ranked as the third most stressful job because it only exists to assist people who are in dire straits and in need of rescue (Gouveia, 2016). Suicide rates are also steadily increasing amongst the American fire service (Lamplugh, 2015). Limiting the stressors associated with the fire service was the most notable benefit of having a service dog in the firehouse. This research found that the reduction of this stress not only helps the employees mentally, but physically as well.

Several immediate health benefits were identified throughout the course of this research by just being in the presence of a service dog. A study found that having a dog in the room lowered blood pressure better than taking a popular type of blood pressure medication (ACE inhibitor) when you are under stress (Shykoff, 2001). Other research has indicated that the simple act of stroking a pet can help lower blood pressure and cholesterol (Barton, 2015). Findings suggest that the social support a pet provides can make a person feel more relaxed and decrease stress (Serpell, 2011).

The stress reduction efforts of this research may quite possibly assist in the reduction of cancer and heart attacks in the fire service. Chronic stress is a significant risk factor for illnesses such as cancer and heart attacks (Eliaz, 2011). Since heart attacks are the number one killer of

firefighters annually, stress reduction techniques in the fire service may have a positive effect on these all too common line of duty deaths. According to the United States Fire Administration (2016), fifty-four firefighters died in 2015 as a result of heart attacks and another six died of cerebrovascular accidents. That accounted for 60.44 percent of all deaths in 2015 (U.S. Fire Administration, 2016). This research found that the psychological effects of stress can also affect a firefighter's ability to perform essential job functions. Emotional stress can make it difficult to focus, make decisions, think things through or remember things (Eliaz, 2011). In the fire service, the effects of emotional stress can be deadly!

The importance of the immediate health benefits cannot go understated as found throughout this research. Firefighting is an inherently dangerous profession. Anything that can be done to reduce the stress experienced by our firefighter/paramedics is an endeavor worth investigating. The data from the United States Fire Administration regarding heart attacks is staggering. Based upon the research, emotional support animals will likely reduce the leading factors of heart attacks in the fire service.

Dogs can also assist with exercise if only because most of them need to be walked several times a day and will fit seamlessly into our organizations mandatory physical fitness program. This will encourage firefighters to get out of the firehouse and walk around the property with the dog. This may be beneficial for employees who generally shy away from the traditional gym setting. While this may be difficult to accomplish on busy days, a regular schedule will help reduce the lack of activity for the emotional support dog.

Emotional support animals are becoming extremely common for military veterans to help combat the effects of PTSD and cumulative stress. Like the fire service, military personnel suffer similar signs and symptoms associated with stressors of their profession; however, more

resources are available to help study the benefits of emotional support animals with veterans. A report on PTSD service dogs states "there are many clear advantages to using psychiatric service dogs", and findings from a Gillett (2009) survey distributed by the US military reported the initial published study results show 82% of those with a PTSD diagnosis reported symptom reduction after partnership with a service dog and another 40% reported that their use of medication decreased (Gillett, 2009). These are extremely promising results! Until funding can be secured for a fire service study, it is imperative that fire service professionals keep abreast of the military study outcomes.

Several possible liabilities associated with allowing service dogs within Deerfield Township firehouses were identified throughout this research. Amongst these liabilities are employees with known pet allergies, pets acting as a distraction, and safety concerns (Becker, 2014). Reducing the effects of pet allergens can be accomplished through regular bathing of the service dog as well as laundering of their bed. Distractions are inevitable with a service dog in the firehouse. Limiting the service dog's access to office space would greatly reduce these distractions during work hours. Additionally, having the ability to isolate the living quarters from the apparatus bays in each of the firehouses would aid in keep the service dog away from the work being accomplished.

Safety concerns for the service dog, employees, and members of the general public are of great concern, according to this research. An unforeseen situation that makes even the most docile pet feel threatened may cause it to attack and injure someone in the workplace – a perfect recipe for a personal injury and lawsuit (Ayyar, 2014). As a risk management advisor to the township, K.L. Arnold (personal communication, May 4, 2017) suggests that all service dogs remain on leash while the general public is within the firehouse. It is further recommended that

the service dog be on a leash anytime they are out of the living quarters of the firehouse, K.L. Arnold (personal communication, May 4, 2017).

Lastly, damage to firehouse property is a legitimate concern with having any type of dog in the firehouse. Ensuring the service dog isn't left unattended, especially as a puppy, can limit damage of any kind. Pet accidents on the floor are also a concern but can be greatly reduced with a regular schedule of being let outside. Paying for damage to the firehouse is another liability as it wouldn't be fiscally responsible to utilize tax payer funds to replace items in the firehouse damaged by a firehouse service dog. Utilization of personal or house fund dollars would have to be utilized to repair and/or replace any items damaged by the service dog. Again, ensuring the service dog isn't left unattended would go a long way in reducing the need to pay for damage.

Several logistical considerations would need to be considered if service dogs were allowed in Deerfield Township firehouses. Most importantly, having the dog registered as a service dog is imperative and a relatively lengthy process. Getting a pet certified as a service animal is a long, tedious process (W.B. Davis, personal communications, April 19, 2017). You must own your dog for six months prior to testing and you must first assure that your pet isn't aggressive towards people or other animals in different environments; this could be a difficult feat since there won't be a single handler in the firehouse environment, (W.B. Davis, personal communications, April 19, 2017). Assigning a single handler for each unit day will help minimize the confusion of the pet. This will allow consistency of training and a regular feeding and exercise schedule.

The two funding sources available are a line-item in the budget and the station's house fund. Creating a budget line-item for the service dogs is relatively a straight-forward process;

however, it has to get board approval through the normal course of the budget process. There would also need to be an educational component as any tax payer funds utilized for the care of a service dog will undoubtedly raise concerns from fiscal conservatives. Any increase in the station house funds would require a majority vote of employees. While organizational support exists, this may be a difficult feat. Utilizing a combination of the funding sources would be ideal. Regular fees for the emotional support dog, healthcare, and insurance should be funded by a line-item. Food, bedding, and toys can be covered out of the house fund per individual station.

Based upon the disseminated survey, both cumulative stress and PTSD amongst our workforce is an area of great concern. Furthermore, more than eighty nine percent of the respondents have experienced the signs and symptoms of cumulative stress on more than one occasion and fifty percent of responded have experienced PTSD. Over eighty four percent of the respondents believe it is the responsibility of the fire departments command staff to explore non-conventional ways of combating the effects of cumulative stress.

While pet allergies have been identified as both a liability and logistical concern during the course of this research, only one respondent has been diagnosed with pet allergies. This is an issue that would be of great logistical concern regarding the reassignment of employees if they are unable to work in the same firehouse as a service dog. There also weren't any respondents with a personal fear of dogs. Care would have to be taken to ensure new applicants understand there are emotional support dogs in the firehouse and any issues would need to be brought forward at that time.

Organization support for allowing service dogs in the firehouse was also overwhelming from respondents. Eighty percent of respondents stated they would participate in exercising, feeding, bathing, and training the service dog. Without organizational support, an argument

couldn't be made to support emotional support dogs in the firehouse. Employees also don't feel allowing emotional support dogs in the firehouse would be too distracting. Almost eighty percent of respondents don't feel allowing service dogs in the firehouse would be distracting.

Recommendations

After significant research and analysis, the author has developed specific recommendations to introduce emotional support dogs into the firehouse. Based upon the research, short-term, mid-term, and long-term goals have been developed to aid in the implementation and transition of emotional support dogs into Deerfield Township firehouses. Short-term goals are to be accomplished within six months; mid-term goals are going to be completed between six and twelve months; and long-term goals are one to two years. Achieving these goals will aid as benchmarks to ensure efforts to reduce the effects of cumulative stress and PTSD are effective.

Short-term goals will focus on the education of employees, appointed and elected township officials, and the public. Employee education will focus on the signs and symptoms of cumulative stress and PTSD. It will also involve a refresher on the services available to employees through the current employee assistance program. The employees will also learn how to handle an emotional support dog. Training the townships appointed and elected officials will focus on the existence of cumulative stress and PTSD in the emergency response arena as well as the health benefits of allowing emotional support dogs in the firehouse. All of these trainings will be utilized as a public education tools to inform the public of the benefits of having emotional support dogs in Deerfield Township firehouses.

Mid-term goals will focus on the acquisition of the emotional support dogs, certification, training and funding. Dogs of suitable temperament should be acquired from the Warren County Human Society. This will also service as an opportunity for a public relations event between the two entities. The training and certification process will take the majority of time to accomplish. This is a minimum of six months to complete. Lastly, funding sources will need to go through the normal budgetary channels which start in September of every year for the following fiscal year. Joint funding between a line-item budget and house fund will need to be finalized during this goal period.

Long-term goals include the introduction of the emotional support dogs into the firehouse and acquiring continuous employee feedback on both their mental and personal health. Through the training and introduction process within the short and mid-term goals, the intent is that the emotional support dogs should be well known throughout the organization and both the employees and dogs comfortable with one another. Gathering employee feedback is essential to benchmark the progress of the project. Ongoing data will also need to be gathered on any mental and health benefits experienced by the employees.

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Appendix A

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Deerfield Township Fire Rescue**Policy Manual****Policy 17-04 (Draft 1.0)****Emotional Support Dogs****Purpose and Scope**

The purpose of this policy is to establish guidelines for the use of emotional support dogs within Deerfield Township firehouses. The mental wellbeing of department members is the primary purpose of this policy.

Policy

It is the policy of Deerfield Township Fire Rescue to allow township owned emotional support dogs within Deerfield Township firehouses.

Guidelines*Administration*

Only departmental supplied emotional support dogs will be allowed in Deerfield Township firehouses. Personal emotional support animals will not be allowed.

Each emotional support dog will be purchased through a partnership with the Warren County Humane Society.

After temperament training, each emotional support dog will be certified by the United States Dog Registry (USDR).

All fees associated with the acquisition, training, and veterinarian services will be paid for out of the fire rescue department's annual operating budget.

All fees associated with the ongoing feeding, bathing, and bedding will be paid for out of the fire rescue department's house fund. These funds will be distributed by the station captain.

Each individual station captain will take on the responsibility of the emotional support dog within their respective firehouse. In their absence, the lieutenant shall assume these responsibilities.

The emotional support dog shall be treated as a member of the fire rescue department. Therefore, the emotional support dog shall be treated with the same respect and dignity as any other sworn member of the fire rescue department.

The cost of training personnel will be supported out of the fire rescue department's annual operating budget.

Firehouse Logistics

The emotional support animal shall remain isolated from the public at all times unless on a leash or tethered. The station captain will identify an area designated for the emotional support dog to remain tethered while outside of the facility.

The emotional support dog shall be placed in their crate when the fire companies leave the firehouse, if feasible.

During tours of the firehouse, the emotional support dog must remain on-leash at all times and in-control of a fire department employee. If the visitors are teasing or acting aggressively toward the emotional support dog, the animal is to immediately be removed from the group and crated until the visitors leave the firehouse.

The crew shall ensure two regularly scheduled feedings per day for the emotional support dog.

At no time is the emotional support dog to receive food other than dog food.

The crew shall ensure an approved exercise regimen is adhered to for the emotional support dog on a daily basis. This regimen should not have any negative impact on departmental turn-out and response times.

The emotional support dog shall receive biweekly bathing at a schedule to be determined by the station captain. At this time, the dogs bedding shall also be laundered.

The emotional support dog is to only be transported in departmental staff vehicles. At no time is the emotional support dog to be transported in front-line emergency response apparatus. During transport, the emotional support dog shall remain in a harness attached to the vehicles built-in restraint system.