Absenteeism and Behavioral Health at the Bedford Fire Department

By: Daniel Dopslaf

Lieutenant

Bedford Fire Department

165 Center Rd. Bedford, Ohio 44146

A proposed research project submitted to the Ohio Fire Executive Program

15th of January, 2019

2

CERTIFICATION STATEMENT

I hereby certify that the following statements are true:

1. This paper constitutes my own product, that where 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.

2. I have affirmed the use of proper spelling and grammar in this document by using the spell and grammar check functions of a word processing software program and correcting the errors as suggested by the program.

Signed:

Printed Name: 1

Abstract

The problem is the Bedford Fire Department does not know how behavioral health affects unscheduled absenteeism. Behavioral health issues do not receive the same attention as physical health issues even though both cause unscheduled absenteeism. A descriptive research project asked personal questions that dealt with behavioral health issues that affect individuals and their use of unscheduled absenteeism. These questions included 1.) How often Bedford Firefighters use an unscheduled absence 2.) Do other departments have similar attendance incentives as Bedford's? 3.) What procedures are in place to return to work after using an unscheduled absence? 4.) Is unscheduled absenteeism related to stress?

Personal interviews, anonymous surveys, literature review, and questioners were used to understand the reasons unscheduled absences were used and if behavioral health issues attributed to them. According to the results of this survey, Bedford Firefighters compared similarly to Cuyahoga County firefighters in all four questions and also similar to the IAFF survey regarding behavioral health questions. A literature review provided evidence of increased awareness of behavioral health issues that face the fire service. The fire service culture has become more aware of behavioral health issues and how it may affect them. The fire service has voluntarily pledged to increase behavioral health awareness with such programs such as National Fallen Firefighters Foundation's Everyone Goes Home Life Safety Initiative 13. The purpose of the

study was to increase awareness on behavioral health issues develop new policies and procedures to deal unscheduled absences related to behavioral health.

In Summary, Bedford Fire should identify a new program such as Behavioral Health Assistance Program instead of the traditional Employee Assistance Program, adopt Life Safety Initiative 13 and use the work that has already been done, empower the firefighters with decisions, develop a resiliency training program, and provide annual psychological exams.

TABLE OF CONTENTS

CERTIFICATION STATEMENT	2
ABSTRACT	3
TABLE OF CONTENTS.	5
INTRODUCTION	6
Statement of the Problem	7
Purpose of the Study	8
Research Questions	8
BACKGROUND AND SIGNIFICANCE	8
LITERATURE REVIEW	11
PROCEDURES	14
Definition of Terms.	15
Limitations of the Study	15
RESULTS	16
DISCUSSION	19
RECOMMENDATIONS	20
REFERENCES	22
APPENDIX 1 – Firefighters' survey	25
APPENDIX 2 – Chiefs' email survey	26
APPENDIX 3 – Email invite to participate	27

INTRODUCTION

Statement of the Problem

The Bureau of Labor Statistics defines excessive unscheduled absence being 4% or more (NIH.Gov, 1998); however, unscheduled absences are above 4% at the Bedford Fire Department. According to The National Institute of Mental Health (NIMH), anxiety and depression are the leading causes of workplace absenteeism (Sandoiu, 2018).

Bedford Fire has doubled the call volume over the last twenty years while minimum staffing levels have increased by only one firefighter per shift, causing additional members repeated exposure to traumatic events than the previous twenty years. Since firefighting is considered one on the most stressful occupations, behavioral health issues, including stress have been manifested at Bedford Fire as well. One department with six firefighters on duty responded to a motor vehicle accident where four children were killed and two were seriously injured. All six responders were referred to the Employee Assistance Program (EAP), and Critical Incident Stress Debriefing (CISD). Of the six firefighters who responded on that call, two have retired with a psychological disability and no longer work in the fire service. Issues such as anxiety, depression, substance abuse, Post Traumatic Stress Disorder (PTSD) have also been associated with unscheduled absenteeism at Bedford Fire.

Additionally, other behaviors associated with behavioral health have surfaced such as policy and procedure violations, relationship conflict, employee referrals to the Employee Assistance Program (EAP).

The problem this study addressed was how behavioral health affects unscheduled absenteeism at Bedford Fire.

Purpose of the Study

The purpose of this study is to identify and describe key issues that affect unscheduled absenteeism at Bedford Fire. This study will determine if the department needs to establish new policies and procedures in order to reduce unscheduled absenteeism.

Research Questions

Using a descriptive research method, this research was intended to answer the following questions:

- 1. To what extent do Bedford Firefighters use uncontrolled absence on average?
- 2. Do other departments have attendance compensation similar to Bedford's?
- 3. What types of procedures are in place for returning to work after an uncontrollable absence?
- 4. Is absenteeism related to stress?

Background & Significance

In 1881, the Bedford Volunteer Fire Department was formed. The department consisted of twenty-eight members. In 1963, the first full-time members were hired, providing fire responses only; the department consisted of several full-time members supplemented with volunteers. The department eventually became all full-time and began emergency care and transportation on a basic level. In 1994, the minimum staffing was increased from four to six to provide paramedic emergency services while operating two ambulances. The department hired nine firefighter/paramedics that were selected from the Bedford Civil Service Commission,

based on a written exam score, background check, polygraph exam, physical fitness, and a physical exam; no exam takes place to identify behavioral health for the applicant.

The department is made up of three shifts of eight members that work twenty-four-hour shifts followed by being off for forty-eight hours before returning to work again. Each day, three firefighters are allowed to schedule a scheduled absence, dropping the scheduled staffing to five firefighters on duty. The department administration consists of a chief, assistant chief, and an administrative assistant.

A contractual agreement between the City of Bedford and Bedford Firefighters who are represented by the International Association of Firefighters Local 1683, have defined absenteeism benefits: Bedford Firefighters earn fifteen hours per month of unscheduled absentee time that can accumulate up to 1,200 hours. Once a firefighter earns over one thousand two hundred hours at the end of the calendar year, they are paid 1/3 of the amount over one thousand two hundred in November of each year. Upon retirement, firefighters are paid at a rate of 50% of their total unscheduled absentee time that they have accumulated (CBA, 2018).

Bedford is an "inner ring" suburb of Cleveland, Ohio that provides fire suppression and EMS to residents and visitors out of one centrally located firehouse. The City of Bedford is racially diverse with a population of 54% Caucasian and 46% minority. The average home is owned by 53% of the population. The average home value is 103,000,00 dollars. The average household income is 42,000.00 dollars. According to Cuyahoga County records, 14% of Bedford residents live below the federal poverty level.

The City of Bedford has lost numerous large retail and manufacturing businesses. The resulted in the loss of revenue that has impacted finances to the city. Wage freezes, department budget cuts and threats of layoff have been mentioned to the fire chief by the city manager and

mayor, due to the increase in the overtime budget at the fire department. According to researchers, staff burnout could lead to the following adverse effects in the work setting: higher rates of illness, lower staff morale, increased use of alcohol and drugs, lower career satisfaction, high staff turnover, reduced quality of service, and poor customer outcomes (Barnett, 1999).

The Bedford Fire Department operates with the Cities of Maple Heights, Bedford Heights, Garfield Heights, and Oakwood on an automatic aid system, the auto aid provides the additional workforce to the scene of working fire incidents.

The Bedford Fire Department provides fire suppression to the City of Bedford and an engine company on automatic aid to Bedford Heights and Maple Heights. The department also provides mutual-aid to any city that requests assistance. Bedford Fire also operates two advanced life support ambulances when there are at least six firefighters on duty. As of 2008, when a firefighter uses an unscheduled absence, and there are three firefighters with scheduled absenteeism, the department will drop to four on duty, requiring a firefighter to be brought back in on overtime to bring minimum staffing to five. When one ambulance is taken out of service, mutual-aid is required to handle the additional call while the first ambulance is unavailable which the second ambulance would have handled. A mutual-aid ambulance was provided to other cities one hundred three times in 2017 and mutual- aid was received one hundred thirtynine times; mutual- aid was received disproportionately from Oakwood Village. Oakwood Village provided mutual-aid to Bedford 50 times, and Bedford provided mutual-aid to Oakwood Village seven times in 2017 (Village of Oakwood, 2017). Maple Heights responded with an ambulance thirty-four times to Bedford; Bedford Heights responded with an ambulance 17 times to Bedford.

When requiring mutual-aid, response time delays can be expected due to the further distance mutual-aid companies are responding from; average response time in Bedford by Bedford firefighters' is 3:30 (City of Bedford, 2017). Additionally, the department operates with only one ambulance due to unscheduled absenteeism 10% of the time; this is an additional loss of revenue of 7,000.00 dollars to Bedford based on an average EMS bill being 500.00 dollars. (City of Bedford, 2017).

By having fewer firefighters to perform on emergency scenes, an increased workload in Bedford is required; an increased workload causes firefighters to do more with less. In 2017, Bedford Fire experienced its busiest year ever, responding to 2,700 calls out of one station for fire and EMS. Bedford Fire operated at 37 structure fires in 2017 (City of Bedford, 2017). During firefighting operations, an increased workload contributes to fatigue and potential for injury (Ricci JA, 2007). Vehicles are placed back in service without proper decontamination procedures or incident rehabilitation as defined in SOP's (Nagy, 2008). With decreased staffing levels, more work is assigned to duty members involving station maintenance, vehicle maintenance, training exercises, along with missed training opportunities; which cause continuity of operations to suffer by members not having the same information or the same training opportunities.

As of December 2016, the average age of the Bedford Fire Department was forty-two years old (Department Roster, 2016). Department members with over fifteen years of service account for 75% of the unscheduled absenteeism at the department (Department, 2010-2016). With firefighting being one of the most stressful occupations (Wall Street Journal, 1996), a correlation needs to be examined if unscheduled absenteeism due to behavioral health is also stress and age-related.

The potential impact this study could have on the Bedford Fire Department is: identify members who use above-average unscheduled absences due to behavioral health issues and potentially preventing at-risk personnel from using an uncontrolled absence. The positive effects that can be expected are: lower attrition rates, increased overall employee wellness, increased productivity, an increased financial benefit to the city by reduced overtime pay, develop new policies, procedures, and incentives for decreased use of unscheduled absences.

Literature Review

This applied research is intended to examine the rate of unscheduled absenteeism related to behavioral health at the Bedford Fire Department, how it compares to other full-time departments in Cuyahoga County and how to identify causes and solutions to reduce the rate of unscheduled absenteeism attributed to behavioral health. Scheduled absences are scheduled in advance for such events as vacation, medical appointments, jury duty, funerals, and other times when the employee would have been normally assigned to work. Unscheduled absences are defined as self or family illnesses, the death of a family member and other unexpected emergencies.

According to The National Institute of Mental Health (NIMH), anxiety and depression are the leading causes of workplace absenteeism (Sandoiu, 2018). One study suggests job strain is the leading cause of stress in the U.S. Job strain is defined as low job control, high job demands, and is directly related to anxiety and depression (Lancet Psychiatry, 2018). According to a report by TNS Social Research (The State of Mental Health in Australia, 2014), 21% of unscheduled absences in the last year were related to stress, anxiety, depression or feeling mentally unhealthy. Among employees who consider their workplace mentally unhealthy, 46% used an unscheduled absence in the last year.

While firefighters are at the top of most stressful occupations, individuals have many different responses to stress. Your cognitive reaction to a situation plays a role in determining how stressful a situation is to you (Martin, n.d.). The author found genetic make-up, temperament, and pre-conceived views of a situation are some of the contributors to a negative response to stress. Stress affects individuals differently, which can have physiological effects such as muscle tension, fatigue, and lower sex drive, anxiety, and agitation, lack of focus, irritability, sadness, and anger. Negative behavioral effects may include eating disorders, short temper, being withdrawn, and lack of exercise. (mayoclinic.org, 2016)

Other public safety agencies are also similarly affected by stress. Stress may be even more dangerous because instead of a single event that is noticed such as officer-involved shooting, hostage situation, and other calls that received attention. Instead, repeated exposure to daily police activities such as traffic stops, exposure to the deceased, long hours, public scrutiny, and daily politics often go unnoticed, therefore, accumulation of stress that builds throughout a career (Beshears, 2017). Winter (2009) found that military members are more likely to develop mental health issues with: long deployment times, combat action, witnessing others killed and injured, low morale, previous trauma exposure, less educated soldiers, and those who suffer family problems. Wagner (2012) studied firefighters in British Columbia and found lower rates of mental health and stress were associated with positive coping skills and being emotionally intelligent.

National Fire Protection Agency (NFPA) 1500 has a standard on Fire Department Safety and Health Programs. In 2013, NFPA added two chapters to NFPA 1500 titled "Behavioral Health & Wellness" (Wilmoth, 2014) to address behavioral health issues, along with the

National Fallen Firefighters Life Safety Initiative 13 (https://www.everyonegoeshome.com/16-initiatives/13-psychological-support/, 2004)

Jonathon, Gunderson (2014) research in resiliency training is having positive outcomes in its brief trial period conducted on responders to the July 2012 Aurora, Colorado movie theater shooting. The research contends that resiliency training can be taught in the classroom and has a high success rate in police, fire/EMS agencies. The resiliency curriculum in this study focused on:

- Goals
- Diet and exercise
- Sleep
- Relaxation
- ABCs (activate events, beliefs, and consequences)
- Perspective
- Self-defeating thoughts
- Empathy
- Wins and losses
- Reaching out
- Social support

Peacock (1998) suggests the culture within the department of "use it or lose it" mentality regarding unscheduled absenteeism needs to change. The author suggests a committee should explore incentive programs that are mutually beneficial to both entities. According to a survey the author sent out to members of the Fort Worth, Texas Fire Department, regarding incentives

not to use an unscheduled absence; 38% of respondents favored accruing their unscheduled absence hours and converting this time towards their length of service. Meanwhile, 4% were for firefighters converting two unscheduled absence days per year into their deferred compensation fund as long as no type of absenteeism was used in that fiscal year.

In summary, the literature review illustrates the negative impact unscheduled absenteeism has on personnel and departments. With behavioral health issues in what is considered one of the most stressful occupations (Wall Street Journal, 1996), undesirable consequences for employees and employers can be anticipated. The above sources support establishing: employee wellness program, changes in the daily operations of the department and compensation that is mutually beneficial to all parties.

Procedures

The purpose of this research was to study unscheduled absenteeism and how it's related to behavioral health at the Bedford Fire Department. This descriptive research study was meant to identify causes of unscheduled absenteeism, determine treatment, and identify employees that need assistance. Published research articles about unscheduled absenteeism and behavioral health by multiple sources from websites were chosen for their diverse occupations regarding unscheduled absenteeism and behavioral health in the workplace.

The author studied the rationale, reasoning, and attitudes regarding unscheduled absenteeism in the workplace by interviews, anonymous surveys (Appendix 1) (Appendix 2) and (Appendix 3), email surveys; results were tabulated. A survey regarding unscheduled absenteeism and behavioral health was placed in twenty-seven department member mailboxes at Bedford Fire; the purpose of the study was described, and a request for anonymous participation was requested. Of the twenty-seven surveys, twenty-three were completed and turned in (85%).

Each completed survey was placed in a sealed envelope and into the author's collection box. Ten retired members of Bedford Fire were contacted in person and telephone; the ten retirees were read the same survey questions that the current members received in their mailboxes, their answers were collected by the interviewer.

In addition to current and former Bedford Firefighters, anonymous surveys were sent via email to fifty firefighters and fifty fire chiefs that are employed by full-time career departments in Cuyahoga County that are represented by the International Association of Firefighters (IAFF), as is Bedford Fire. Participants in the survey were guaranteed the anonymity of their participation in the project by the use of Survey Monkey®. This survey company was chosen for its reputation as reliable and anonymous.

Microsoft Excel Spread Sheet was chosen as the collection instrument since it is part of the data retrieval by Survey Monkey®. The paper survey responses were manually entered into the Microsoft Excel Spreadsheet provided by Survey Monkey.

Limitations of the Study

It should be noted the research conducted by the author was of a personal matter regarding absenteeism and behavioral health in the workplace that required honest self-evaluation. Respondents were assured of being anonymous. However, distrust may have been evident with lack of follow through on some questions that respondents may not want to be identified.

The author receives unscheduled absentee requests on a shift level basis. The department runs three shifts; the author assigned to one of the three shifts; per department rules, is required to document the reason for the absence. In eighteen years of receiving unscheduled absence requests, at no time has the author recalled behavioral health issues as the reason for their

unscheduled absence. If all three shift officers shared their unscheduled absence requests, a more accurate assessment of findings could be evaluated.

Definition of Terms

<u>Inner-ring</u>, a suburb that is close to the Cleveland city limits

<u>Advanced Life Support</u>, a set of lifesaving skills and protocols to further support the airway, circulation, and ventilation.

<u>Mutual-aid</u>, a pre-arranged agreement for fire departments to assist each other either automatically or a request.

Results

The extents to which Bedford Firefighters admit to using an unscheduled absence related to behavioral health issues are as follows: of the twenty-three Bedford Firefighters, 43% have used an unscheduled absence due to behavioral health issues. Bedford Firefighters' with 0-5 years account for 1% of unscheduled absences; 5-10 years of service account for 26% of unscheduled absences, and firefighters with ten plus years account for 75% of unscheduled absences. Of the twenty-seven eligible participants, twenty-three surveys were completed and returned (85%). Of the ten Bedford Fire retirees, 70% admitted using an unscheduled absence due to behavioral health issues. The average days of unscheduled absence for the retirees were 5.2 days per year. The average service time of the retirees was twenty-four years.

The extents to which Cuyahoga County Firefighters admit to using an unscheduled absence related to behavioral health are as follows: of the 50 Cuyahoga County Firefighters, 46% have used an unscheduled absence due to behavioral health issues. Cuyahoga County Firefighters with 0-5 years of service account for 10% of unscheduled absences and were 20% of respondents; 5-10 years of service account for 34% of unscheduled absences and were

28% of respondents, and firefighters with ten plus years account for 56% of unscheduled absences and were 52% of respondents.

The evidence contained in the survey responses, specifically questions 1 and 4, support the fact that firefighters are affected by behavioral health issues. Additionally, of the 23 Bedford Firefighters and the 50 Cuyahoga County Firefighters, 68% of respondents believe they are fairly compensated with the number of unscheduled absentee hours they accumulate and how they can convert their accrued time.

Table 1
Unscheduled Absence Survey Profile for Bedford Firefighters

Years of Service	Percentage
0-5	1%
5-10	26%
10 plus	75%

Table 2

Comparison of Bedford Firefighters and Cuyahoga County Firefighters

Bedford Firefighters Years of Service and	Cuyahoga County Firefighters Years of Service
Absenteeism Percentage	and Absenteeism Percentage
0-5 years = 1%	0-5 years = 10%
5-10 years = 26%	5-10 years = 34%
10 Plus years = 75%	10 plus years = 56%

According to survey results from Cuyahoga County Fire Chiefs' who participated in the survey, of the 50 chiefs, 20 (40%) completed the questionnaire. The chiefs' survey results of 4.48 days of unscheduled absences were considered the average. Of the 20 participating chiefs' 95% track absenteeism for trends such as weekends, holidays, and vacation days. Additionally, a doctor's note is required after two consecutive shifts off due to unscheduled absenteeism 80% of the time; and when three consecutive shifts are off due to unscheduled absenteeism 20% of the time. Of the 20 chiefs surveyed, 20% have developed a wellness program that specifically identifies behavioral health; 33% believe the program has reduced absenteeism. 100% of respondents said their employees have access to an EAP.

Table 3

IAFF Behavioral Health Survey

Q.1 Have you experienced critical stress on the job?	94.92% Yes
Q.3 Do you suffer lingering stress?	76.66% Yes
Q.6 Do you believe there is a stigma that creates a barrier	86.77% Yes
to seek help regarding behavioral health issues?	
Q.7 What is the reason that you don't seek help?	80.93% believe they will be
	considered unfit for duty
Q.8 Have you used your employee assistance program	28.54% Yes
	71.46% No
Q.11 Have you ever participated in Critical Incident Stress	
Debriefing (CISD)?	74.46% Yes
	25.54% No

Discussion

The relationship between behavioral health and absenteeism in the general workforce population was important for comparison sake to the Bedford Fire Department. Sandoiu (2018) suggests anxiety and depression are the leading cause of absenteeism; these behavioral health attributes and others account for 43% of Bedford Firefighters absenteeism and 46% for Cuyahoga County Firefighters. Lancet Psychiatry (2018) study states that low job control and high job demands are a major stressor in the workplace. With 94.92% of firefighters nationally admitting being exposed to critical stress on the job and 76.66% believe they are suffering lingering effects of stress (Wagner et al., 2018), one could reasonably conclude the length of service would expose the firefighter to increase exposure to stressful events.

Martin (n.d.) found genetic make-up, pre-conceived notions, and your cognitive reaction play a role in how stressful a situation is to each; this is apparent in the IAFF study where 94.92% of firefighters who experienced a stressful event, 76.66% suffer lingering stress from that stressful event. Of the retired Bedford Firefighters, 75% admitted using an unexcused absence due to behavioral health issues; with the average time of service of twenty-four years, they were exposed to stressful events, and their unexcused absences could be related to lingering stress similar to the IAFF study. Beshears (2017) suggests the routine exposure to department politics and smaller events on a routine basis account for a build-up of stress throughout a career. Employees who consider their workplace unhealthy, 46% have admitted using an unscheduled absence last year (*TNS Global*, 2014). Bedford and Cuyahoga County Firefighters have used an unscheduled absence at 43% and 46% respectively; perhaps these percentages are too similar not to have a relationship with their common cause.

It is reasonable to assume that the number of Bedford Firefighters affected by behavioral health issues related to unscheduled absenteeism should increase as the number of fire and EMS calls increase and as the department continues to age. Although on average Bedford Firefighters have an unscheduled absentee rate nearly identical to what the Cuyahoga County Fire Chiefs' Survey Results considered normal, it was impossible to determine exactly at what stage of a career unscheduled absenteeism increases, the dramatic differences between an increase of behavioral health and unscheduled absenteeism in years of service suggests the need for further study.

The results of this study clearly show a relationship between behavioral health as it relates to absenteeism and years of service. To reduce unscheduled absenteeism firefighters, need to be educated on behavioral health and how to identify signs and symptoms to have both physical and emotional well-being along with controlling indirect and direct costs of employee unscheduled absenteeism.

Recommendations

The data from this applied research project identified self-identified behavioral health issues related to absenteeism at the Bedford Fire Department. During the research process, it became evident that behavioral health issues related to absenteeism have a stigma attached that makes reporting and treatment difficult to track.

Since detailed information on behavioral health related unscheduled absenteeism was not available through the department reporting procedures, enough research data is available to suggest at a minimum, 43% of Bedford Firefighters have used an unscheduled absence related to behavioral health. Therefore, at a minimum, a behavioral health program should be implemented. The National Fallen Firefighters (NFFF); Everyone Goes Home, FLSI 13 suggests

departments move away from traditional Employee Assistance Programs (EAP) and move to Behavioral Health Assistance Programs (BHAP) that are marketed and tailored to the fire service ("NFFF, FSLI13," n.d.).

Gunderson (2014) noted success in resiliency training for first responders who were involved in the 2012 Aurora, Colorado movie theater shooting. Resiliency training should be part of the firehouse structure to change the culture and improve psychological health.

It is recommended the Bedford Fire Department establish resiliency training that is incorporated into the daily routine at the firehouse. The resiliency training would involve:

- Department members help establish short and long-term goals
- Encourage a healthy diet and place a higher priority on exercise
- Establish additional sleep and relaxation times
- Provide a positive environment by supervisors
- Display empathy through our words or actions
- Access to social support

For those interested in this research topic, the author recommends reviewing Table 3 in this study. Furthermore, pre-employment psychological testing and yearly psychological evaluations similar to annual physicals should be performed.

References

- 16 Firefighter Life Safety Initiatives. (n.d.). Retrieved from https://www.everyonegoeshome.com/16-initiatives/13-psychological-support
- Barnett, R. B. (1999). A closer look at the measurement of burnout. *Journal of Applied Behavioral Research*, pp. 65-78.
- (2017). *OVFD Annual Report*. Oakwood Village, Oh: Oakwood Village Fire Department. *Bedford Fire Policy and Procedures* [policy]. (2012).
- Beshears, M. (2017). Police officers face cumulative PTSDUnlike a physical injury; a mental traumatic injury can happen almost daily. Retrieved from 323686006
- Brienza, V. (2011). 10 Most Stressful Blue-Collar Jobs of 2011. Retrieved from
- Collective Bargaining Agreement. (2018). Agreement Between the City of Bedford and Bedford Firefighters Local 1683 [contract]. Bedford, OH: Author.
- J Occup Environ Med. 2007 Jan;49(1):1-10. (2007, January). Fatigue in the U.S. workforce: prevalence and implications for lost productive work time. *Journal of Occupational and Environmental Medicine*, 49(1), 1-10. http://dx.doi.org/https://doi.org/10.1097/01.jom.0000249782.60321.2a
- Jonathan Gunderson Mike Grill Philip Callahan Michael Marks, (2014). Responder Resilience.

 Retrieved from
- Kathleen Anne Moore, Cary Cooper. (1996). Stress in Mental Health Professionals: A

 Theoretical Overview. *International Journal of Social Psychiatry*, 42(2), 82-89.

 http://dx.doi.org/10.1177/002076409604200202
- Lancet Psychiatry. (2018, May 10). Prolonged exposure to job strain and long-term mental disorders. *The Lancet Psychiatry*, *5*(6), 455-456. http://dx.doi.org/https://doi.org/10.1016/S2215-0366(18)30176-7

- Martin, B. (2018). Stress and Personality. Retrieved from Martin, B. (2016). Stress and Personality. Psych Central. Retrieved on December 13, 2018, from https://psychcentral.com/lib/stress-and-personality/
- Mayo Clinic Staff. (2016). Stress symptoms: Effects on your body and behavior. Retrieved from 20050987
- Mayo Clinic. (1998). Absenteeism: causes and cures [White Paper]. Bethesda, MD: PubMed.
- Mental health problems in the workplace. Low treatment rates imperil workers' careers and companies' productivity. (2010). *Harvard Mental Health Letter*. Retrieved from https://www.health.harvard.edu/newsletter_article/mental-health-problems-in-theworkplace
- P. Daniel Patterson, J. Stephen Higgins, Hans P. A. Van Dongen, Daniel J. Buysse, Ronald W. Thackery, Douglas F. Kupas, David S. Becker, Bradley E. Dean, George H. Lindbeck, Francis X. Guyette, Josef H. Penner, John M. Violanti, Eddy S. Lang & Christian Martin-Gill. (2018). Evidence-Based Guidelines for Fatigue Risk Management in Emergency Medical Services. *Prehospital Emergency Care*, 22(1), 89-101. http://dx.doi.org/10.1080/10903127.2017.1376137
- Peacock, J. (1998). Strategies to Positively Impact Sick Leave Usage Within the Fort Worth Fire

 Department Strategic Management of Change [White Paper]. Retrieved from

 https://www.hsdl.org/?view&did=5244
- Ricci JA, Chee E, Lorandeau AL, Berger J. (2007). Long Work Hours, Extended or Irregular Shifts, and Worker Fatigue. Retrieved from osha.gov:

 https://www.osha.gov/SLTC/workerfatigue/hazards.html

- Shannon L. Wagner Crystal A. Martin. (2012). Can Firefighters' Mental Health Be Predicted by Emotional Intelligence and Proactive Coping? *Journal of Loss and Trauma*, *17*(1), 56-72. http://dx.doi.org/10.1080/15325024.2011.584027
- State of Workplace Mental Health in Australia. (2014). Retrieved from https://www.headsup.org.au/docs/default-source/resources/bl1270-report---tns-the-state-of-mental-health-in-australian-workplaces-hr.pdf?sfvrsn=8
- Wagner, E., Bott, M., Villarreal, M., Horn, M., Usherly, D., Stulberger, E., & Manney, D. (2018). *National Data Shows Firefighters' Mental, Emotional Health Not Getting Enough Attention*. Retrieved from 475605253
- Weber, L. (2017, January, 7). No to Military, Yes to Hair: The Most and Least Stressful Jobs of 2014. *Wall Street Journal*. Retrieved from https://wsj.com/atwork/2014/01/07/10-most-and-least-stressful-jobs-2014/
- Winter (2009). PTSD in Service Members and New Veterans of the Iraq and Afghanistan wars.

 PTSD Research Quarterly, 20(1).

Appendix 1: Firefighters questioner

OFE Research Project

Q1 How often are you absent per the calend	dar year due to personal illness?				
Q2 How often are you absent per the calendar year due to family illness?					
Q3 Do you have 0-5 service years	_5-10 service years	10 plus			
Q4 Do you feel absenteeism compensation is fair? Example: Absenteeism earned per year, total hours earned, a year-end buy-out. Please elaborate.					
O5 Does psychological stress ever cause you to be absent? Can you elaborate?					

- About SurveyMonkey
- Careers
- Developers
- Privacy Policy
- Email Opt-In
- Help
- Cookies Policy

Email: Contact Us Phone: +353-1-437-6886 Your payments are protected by the Direct Debit Guarantee Copyright © 1999-2018 SurveyMonkey

Appendix 2: Chiefs' email survey

Copy of OFE Research Project- Chiefs' Survey Questions



Absenteeism is defined as scheduled and unscheduled: an unscheduled absence occurs when an employee is not present at work during a normally scheduled shift. What number of absences do you consider excessive?



Does your department track absenteeism? Did you identify any trends such as unscheduled absences before weekends, holidays, or vacation days?



When is a doctor's note required before an employee can return to work?



Have you developed a wellness program? Is stress-related illness addressed? Did this wellness program decrease absenteeism? English

Email: Contact Us Phone: +353-1-437-6886

Your payments are protected by the Direct Debit Guarantee

Copyright © 1999-2018 SurveyMonkey

•

Appendix 3: Email invite to participate

•

- FROM: haligan6@yahoo.com via surveymonkey.com
- **DATE:** Monday, December 31, 2018 1:56 PM
- **SENT TO:** 1 recipient
- **SUBJECT:** We want your opinion
- MESSAGE:

OFE Research Project

My name is Dan Dopslaf, a Lieutenant at Bedford Fire Department. I am doing a research project for the Ohio Fire Executive Program regarding absenteeism in the fire service. Can you please help me with this project by filling out the survey to the best of your ability?

Thank You,

Lt. Daniel R. Dopslaf