



# IPSA JOURNAL

Eighth Edition

EXECUTIVE LEVEL JOURNAL

*Peer-reviewed articles*

EDITOR-IN-CHIEF

Heather R. Cotter



## Editor's Note

*By Heather R. Cotter, IPSA Executive Director/CEO, Founder, and Editor-in-Chief*



Thank you for your interest in the **Eighth Edition** of the *IPSA Journal*. This scholarly resource is available to all public safety professionals. The IPSA was fortunate to have several public safety authors and peer reviewers contribute to this executive-level, peer-reviewed publication. The *IPSA Journal* is an opportunity to publish manuscripts about leadership issues and best practices applicable to all facets of public safety.

The *IPSA Journal* is for the public safety community so they can gain timely access to pertinent information that impacts decision-making, policy, administration, and operations. Our readers represent the entire public safety community: law enforcement, fire service, EMS, 911 telecommunications, public works (water, sanitation, and transportation), public health, hospitals, security, private sector, and emergency management. In this issue, readers will see the following peer-reviewed manuscripts:

- 1. The Inclusion of a Financial Component to a Health and Wellness Program in Fire Emergency Organizations by John Paul Roper, Ed.D., Colorado State University***
- 2. The Extent Police Officers' Emotional Workload and Leader-Member Exchange Predict Their Emotional Engagement by Valarie J. Serrano, Grand Canyon University and Brad J. Castle, Grand Canyon University***

3. *Analysis of the Incident Command System and Decision-Making-Process of Wilderness-Search-and-Rescue-Philippines (WISAR) by John Matthew Villapol, Wilderness Search and Rescue Philippines*
4. *Barriers Associated with Behavioral and Mental Health in Firefighters by Marcus S. Ketner, Twinsburg Fire Department*
5. *Police Department Civil Liability: Law Enforcement Officers and Alcohol a Review of 33 Federal Court Case by Gregory Walterhouse, Bowling Green State University*

The IPSA has a systematic process in place for approval, rejection, and resubmissions of manuscripts. The IPSA enlists peer reviewers made up of public safety practitioners and academicians with experience in scholarly writing to review all manuscripts.

It is the IPSA's vision to continually accept manuscripts and to release future editions of the *IPSA Journal*. We seek high-quality manuscripts from all public safety professionals, academia, researchers, and scholars. I encourage you to download and review the IPSA Manuscript Guidelines, use the *IPSA Journal* Template, and submit a manuscript to us for publication consideration. There is so much knowledge to share within and between each public safety discipline, and I invite you to be a part of it.

Stay safe,

*Heather R. Cotter*

Heather R. Cotter



## *IPSA Journal*

If you have any questions about the Eighth Edition of the *IPSA Journal*, any of its contents or would like to contact an author, please contact us at [info@joinipsa.org](mailto:info@joinipsa.org).

The IPSA maintains copyright of all articles within the *IPSA Journal*. When citing any articles within this publication, please reference it as follows:

Author Name. (2022). Manuscript Title. *IPSA Journal, Eighth Edition.*, page number/s.



The Inclusion of a Financial Component to a Health and Wellness Program in Fire Emergency  
Organizations

John Paul Roper, Ed.D.  
Colorado State University  
8571 S. Doubleheader Ranch Rd.  
Morrison CO 80465  
Phone: 720-939-1035  
Email: johnpaulroper@gmail.com

# **The Inclusion of a Financial Component to a Health and Wellness Program in Fire Emergency Organizations**

**John Paul Roper**

**Colorado State University**

## **Abstract**

Firefighting is a dangerous occupation. Aside from the obvious dangers associated with firefighting a more dangerous risk to the occupation exists. Firefighters are at high risk of being unhealthy. Firefighters are at risk of unhealthy diets, physical shape, poor sleep, PTSD, stress and cancer. Emergency organizations are not required to have a health and wellness program addressing all of these needs. Recent studies have shown that a high occurrence of firefighters is in favor of adding a financial advising component to a health and wellness program at their fire emergency organization. The literature review focused on health and wellness for firefighters, health and wellness programs in general, and health and wellness coaching. The discussion focused on the impact of a financial component in a health and wellness program. Several limitations were discussed and their impact on the article. Recommendations are made with the first being a recommendation after buy-in is achieved to add a financial component to the health and wellness program in providing financial resources to firefighters through the health and wellness program. Future research should investigate what specific components of the financial piece of the health and wellness program should be added for future use.

**Key Words: Firefighter, Health and Wellness, Emergency Organizations, Firefighter Financial Health, Emergency Management Organizations, Public Administration, Organizational Wellness, Public Safety, Operational Stress Injuries, Holistic, Physical Fitness.**

## **Introduction**

Health and wellness programs for fire emergency organizations come as a mixed bag at fire emergency organizations across the country. Some fire emergency organizations have robust health and wellness programs. Many fire emergency organizations do not have a health and wellness program at all to speak of. For those fire departments that have health and wellness programs; their programs could be enhanced by the addition of a financial health component to their health and wellness program. According to Dejoy, Smith, and Dyal (2017), there are over 1 million firefighters, that respond to an array of incidents, including hazardous materials, firefighting operations, motor vehicle crashes, and emergency medical alarms.

Emergency organizations and fire departments have the option to implement an organizational health and wellness program or not. These organizations also have the option as to how well these programs will or would not be funded or committed to. Although there are recommendations from the NFPA, each organization has the ultimate decision to incorporate programs based on what is best for their specific organization. Typically, fire departments with larger budgets are more likely to have more robust health and wellness programs.

The National Fire Protection Association (NFPA) is a national self-funded nonprofit organization that was established in 1896 that is committed to eliminating injury, death, and economic and property loss due to fire and other related hazards, according to its website. The NFPA has many standards and codes that apply to fire departments as a guiding document to assist them with their function in the community. It is incumbent upon the fire department which standards they will follow or not follow, or perhaps they will follow some of the individual standard.

The NFPA standard relating to health and wellness programs is *NFPA 1583 Standard on Health-Related Fitness Programs for Fire Department Members*. The purpose of this standard is to produce minimum requirements for fire department health and wellness programs to produce the minimum standard for the firefighter to have the ability to perform functions such as fire suppression efficiently and safely whilst providing a means to reduce injury, disease and premature death.

While the recommendations from the NFPA are good and well and aim to support the firefighters and the fire departments, there is opportunity for improvement. Fire departments are able to customize health and wellness programs to maximize the program and tailor it to the needs of the department. Many of the components that are featured in fire department health and wellness programs focus on strength and ability to physically perform their firefighting duties. Many health and wellness programs could benefit from including more support in other areas considered healthy for firefighters.

With the majority of health and wellness programs focusing on physical performance, a more tailored program must be implemented to better serve those who are serving. If an expanding health and wellness program were to be a more holistic approach, this would be an all-inclusive program for firefighters. Holistic health is being defined by Psychologist Judd Allen in 2004 as encompassing factors such as lifestyle, spiritual and mental wellness, and well-being, including environmental factors (Arloski, 2009).

Financial health is a known factor in personal well-being and prosperity. Roberts, Golding Towell & Weinreb (1999) stated that poorer mental health was directly related to the long hours being worked and stress build up from difficulty in paying bills. Firefighters face all the same financial constraints and challenges as many people across the U.S. Roberts et al (1999)



confirmed the negative impact finances can have on one's health concluding that people that quit school because of financial reasons had poor vitality, poor mental health, low levels of functioning socially, and poorer physical health. These same challenges are faced by today's firefighter who also struggles with financial stress.

Fire department organizations have already begun to look at mental health as a major health component in firefighters. However, there are still more components that need to be included including financial stability, sleep, PTSD, cancer, healthy eating/diets, and religious/chaplains just to name a few. Examining an expansion of health and wellness initiatives that firefighters are interested in can enhance the fire emergency organization's health and wellness program.

By asking firefighters what components they want to see in a health and wellness program, the fire emergency organization may see the biggest benefit. It is imperative to receive buy-in on the program from the line firefighters thus by getting their opinions and input, the organization will be better able to tailor a health and wellness program around the needs of their specific membership. By looking at a recent study that will be highlighted in the literature review, information can be gleaned and synthesized on which aspects or components of a health and wellness program is important to firefighters.

## **Literature Review**

Literature on the topic of health and wellness in emergency organizations is limited. Information and literature must be gleaned from a multitude of resources. For instance, health and wellness in general and practices in the private sector can be seen as an ability to apply to emergency organizations in the public sector. A robust literature review is imperative to research literature in this niche of health and wellness for emergency organizations and first responders.

To properly survey the literature that was used in this article; online databases, peer-reviewed journals, textbooks, and Google scholarly articles were reviewed. The researcher used descriptors to search the databases including health and wellness programs for firefighters, and health and wellness programs for organizations.

Theoretical foundations are the framework and foundation for any academic research. The research effort must be consistent with a theoretical foundation to serve as the groundwork for the study. This article will utilize the Burke-Litwin Model of Organizational Performance and Change. The model is described by Stone (2015) as one founded on open systems theory and external environment input. Stone (2015) stated that transformational factors (culture, leadership, mission) and transactional factors (management process, system, structure) act as a catalyst to influence motivational factors and drive the performance of the membership.

Being able to evaluate the organizational design and performance of a fire emergency organization's health and wellness program is imperative. The Burke-Litwin Model stated by Benjamin (2017) is a valid and useful diagnostic framework for identifying strengths and organizational performance. Benjamin (2017) found the reliability and the validity of the Burke-Litwin model as a reliable survey instrument and a useful tool for gathering data. The Burke-Litwin Model can also be used by organizational development practitioners for evaluation. Benjamin (2017) stated that managers and OD practitioners can utilize the Burke-Litwin model as a practical application in the diagnosis of the performance of an organization with confidence as the model highlights the most important components of the functions of the organization.

In a systematic review of the health effects of health and wellness programs for emergency organizations, empirical evidence of the research found literature is scarce. Rachele, Heesch & Washington (2014) conducted a review of health and wellness programs over the span of over

ten years. A systematic review of nine articles was conducted with methodological quality. Rachele et al (2014) suggest that evidence shows that health and wellness programs may have considerable health benefits for first responders. This article calls for more extensive academic research in the subject area of health and wellness programs for emergency responders. Rachele et al (2014) stated that better evaluation and documentation of health and wellness programs for emergency personnel is needed to advance research in this field.

Considerations can be drawn by comparing health and wellness programs in a corporate setting and health and wellness programs at fire emergency organizations. Clark (2008) stated that business organizations should focus their energy into a proactive solution to rising health care costs by integrating health and wellness programs that emphasizes condition management as well as well-being and total health. Clark found that health and wellness programs were only a benefit not only to the employee but also to the organization. Clark (2008) states that health and wellness programs have a proven track record in reducing health care costs as well as assimilating with today's workforce that are determined to be employed by an organization that understands their personal needs and is willing to make progress with the employee in mind.

In 2021, Roper (2021) conducted a doctoral dissertation, *Holistic Health and Wellness for Emergency Organizations: A Qualitative Case Study*. Interviews were utilized to gather rich qualitative data. Triangulation was also deployed by interviewing three groups within the emergency organization including health and wellness committee members, administrative fire chiefs, and the firefighters. Future research was recommended to look at the components in place for the health and wellness program. The site location of the study had implemented in their health and wellness program: peer fitness trainers, physical agility tests, METs testing, medical physicals, athletic trainers, cancer prevention, peer support services (mental health), and a

chaplain. Roper (2021) stated that future research should investigate what components of a health and wellness program are important and planning these components before implementation of a health and wellness program is key. This article took on an organizational development viewpoint looking largely at the implementation phase of a health and wellness program at an emergency organization.

There are over 1 million firefighters across the United States both paid and volunteer. Their health and wellness are at risk with several risk factors of the occupation contributing to unhealthy health factors with negative impacts considering this unique industry. Gulliver, Cammarata, Leto, Ostiguy, Flynn, Carpenter & Kimbrel (2016) state that firefighters are at an elevated risk including occupational stress, substance abuse, depression, and PTSD. This risk to the firefighter leaves the emergency organization in a vulnerable state but also leaves the emergency organization open to make positive organizational change.

With an array of health factors affecting firefighters' health and wellness, cardiovascular disease (CVD) is the leading cause of firefighter death. Mozaffarian, Benjamin, Go, Arnett, Blaha, Cushman & Turner (2015) stated that the leading cause of firefighter deaths in the United States is caused by cardiovascular disease (CVD). Nearly 50% of firefighter deaths are related to cardiovascular disease with firefighters experiencing this more frequently than the average public citizen. The most frequent cause of death amongst on-duty-firefighters from 1994 to 2004 as stated by Ranby, MacKinnon, Fairchild, Elliot, Kuehl & Goldberg (2011) is heart disease, which accounts for 45% of firefighter deaths while actively engaged in firefighting activities. With an average of nearly 100 firefighters dying each year, CVD is a major contributor. According to Fahy (2005) in addition to 99 firefighters dying each year, in a review of 3450

documented injuries, 28.57% of those injuries were a direct result of a lack of health and wellness.

Not only is health and wellness important to the public safety domain but also it is important in other applications as well. Kohler, Contacos-Sawyer & Thomas (2015) stated that with employee participation and more appropriate timing, at the University, both the organization and the participants benefit. One of the challenges that might face the fire department is buy-in and participation from the firefighters. Health and wellness have been identified as being important for one's health not only in the public sector but also in the private sector.

Implementing a health and wellness program at an emergency organization is challenging. In 2015, Calderwood, Gabriel, Rosen, Simon, and Koopman authored an article published in the Journal of Organizational Behavior entitled, 100 Years Running: The Need to Understand Why Employee Physical Activity Benefits Organizations. The article highlights that many organizations are beginning to implement health, wellness & activity programs in their organizations. Calderwood et al (2015) state that although organizations are implementing these programs to benefit their organization, they are deficient in the understanding of the constructs and the theoretical foundations of the findings these programs produce. The article goes on to highlight positive outcomes of a health and wellness program including but not limited to: Decreased cost with illness, better affect and cognition, and increased energy. Calderwood et al (2015) stated that health and wellness programs were most successful when implementing a voluntary health and wellness program as opposed to a mandatory program. This must be considered when implementing a health and wellness program in an emergency organization.

Diet continues to be a concern for firefighters. Long shifts and an abundance of calls during long shift periods may contribute to an unhealthy diet. Brown in 2014 authored a dissertation entitled, *Weight Loss Advice, Diet, Physical Activity, and Obesity Among Firefighters*. The study examines and highlights the unhealthy eating habits of firefighters as well as the general public. Brown (2014) calls for more research on the relationship between unhealthy eating habits and obese firefighters. Brown (2014) states that moderate consumption of vegetables, lean meats, fruits, and dairy might be a positive factor for firefighters, however, more research is needed.

Sleep is another factor affected by a firefighter's career. Long shifts and interrupted sleep patterns due to emergency alarms affect the quality of healthy sleeping patterns for firefighters. In 2014, Lim, Baek, Chung, and Lee authored an article published in the *Annals of Occupational and Environmental Medicine* entitled, *Factors Related to Sleep Disorders among Male Firefighters*. The study was comprised of 730 firefighter participants that included: The Back-Depression Inventory, Pittsburgh Sleep Quality Index, Psycho- Social Well-Being Index, Korean Occupational Stress Scale, and the Nordic Musculoskeletal Questionnaire. It was discovered that depression, shift work, and musculoskeletal symptoms are all relatable with sleep disorders and disrupted sleep patterns Lim et al (2014). Lim et al (2014) stated that to achieve better sleep quality for firefighters, systematic health management is required.

PTSD, mental health, and suicide also continue to be an issue for firefighters. In 2014, Sattler, Boyd, and Kirsch authored a special issue paper in the department of psychology titled, *Trauma-exposed Firefighters: Relationships among Posttraumatic Growth, Posttraumatic Stress, Resource Availability, Coping and Critical Incident Stress Debriefing Experience*. The article identified four factors from 286 participants that contribute to post-traumatic stress symptoms

including (a) occupational effort, (b) disengagement coping, (c) years of firefighting experience, and (d) burnout. The conclusions of the article show that future recommendations for health and wellness programs should include: creating more resources for firefighters, minimizing occupational stress, and increasing the resilience of firefighters.

With an array of issues facing firefighters today, one article focuses on all of them. *Health Concerns of the U.S. Fire Service: Perspectives from the Firehouse* written by Jahnke, Poston, Jitnarin, and Haddock and published in 2012 by the American Journal of Health Promotion focuses on the health risks facing firefighters in today's fire service. The article states that while firefighters must be ready at a moment's notice, the expectation from the public is that they are healthy so that firefighters may keep us safe. The study utilized a cross-sectional qualitative methodology utilizing interviews with firefighter participants. Key informant interviews and focus groups were sources of data. Jahnke et al (2012) state that one of the needs that arise is the need for epidemiological oversight of the firefighters in the emergency organization as well as innovative modernized health whilst creating policy for the emergency organization. Jahnke et al (2012) state that one of the findings is that there are specific areas for policies, research, and intervention to include these risk factors: injury prevention, sleep, mental health, fitness, nutrition, physical activity, cardiovascular disease, and cancer.

## **Discussion**

A health and wellness program for emergency organizations should contain several different components to the program. Some components are required by NFPA 1583 that are directed at the performance of occupational activities that are aimed at the reduction of disease,

risk of injuries, and premature death. Other components may be imperative to add to a health and wellness program in an emergency organization.

There is a direct impact of financial health on productivity and thus lifestyle. Kirsten (2010) states that the purpose of a health management program is to measurably improve total health including productivity and performance and its impact on health-related costs. Kirsten (2010) goes on to state that next to a good working environment, the organization should provide resources and information to benefit personal change. According to Kirsten (2010), there are two main features in order to obtain good health for the employees while increasing productivity (a) an integrated health management breaking down existing silos (b) a holistic approach addressing psychosocial factors as well as individual health issues.

As seen in Table 1, from Roper (2021), ten firefighter participants were asked if they would be interested in the health and wellness program included these components including (a) certified personal trainers, (b) financial advisors, (c) cooking demonstrations, (d) Registered Dietitians, (e) athletic trainers, (f) chaplains. There was enthusiasm for several different components of the health and wellness program. The most interesting number in Table 1 is that 100% of firefighter participants wished to have financial advising.

With financial concerns being a major part of everyone's lives, it only makes sense to include them in a health and wellness program. In 2004, Dr. Allen, a Ph.D. Psychologist surveyed several experts in the wellness fields and the definition of wellness was realized in three bullet points listed by Arloski (2009).

- Wellness is a conscious, self-directed, and evolving process of achieving full potential.
- Wellness is multi-dimensional and holistic (encompassing such factors as lifestyle, mental and spiritual well-being, and the environment).



- Wellness is positive and affirming. (Arloski, 2009, p.12)

Financial health appears to fall into the wellness category with it being holistic and encompassing factors in your life including your lifestyle. Having a healthy financial health, this factor would be positive and affirming.

With financial health being a large concern of firefighters and their wellness and lifestyle, it may be prudent to add a component of financial wellness to the health and wellness program in an emergency organization. As stated by one participant from a recent study stated:

Money is probably the biggest stressor in most people's lives, for me and I would benefit from having a financial advisor give me some advice, and that was included as part of my job, and I would take full advantage of that trying to get myself set up for the best success for my family and me and for the future (Roper, 2021).

By including a financial health component in a health and wellness program for emergency organizations, firefighters can be provided with tools for their financial success thus bringing up their productivity at work and improving their lifestyle. After having identified from Roper (2021) that financial advising was a desire among 100% of participants, leaders in the fire service must respond by creating and implementing an inclusive, holistic wellness initiative to adopt for their emergency organization.

## **Limitations**

Limitations occur in research of all kinds. There are limitations to the research related to this article in particular. Limitations would occur in a research realm of limited availability in the area of health and wellness programs in an emergency organization. The limitations that exist for this research are as follows.

1. There is a lack of female representation in the studies. Due to a lack of limited data collected from female firefighters, this gender may be underrepresented.

2. There may be a limitation of diversity across participant data collected. According to Blitz and Harnisher (2012), there is a ratio of 3 to 1 of Caucasian firefighters to any other race represented. This might leave some races underrepresented.
3. Healthier more wellness conscious firefighters may participate in studies relating to health and wellness programs in emergency organizations. This can skew the data collected. A more accurate study would involve an entire fire department ensuring that all employees are captured as data as far as a health and wellness program is concerned.
4. A limitation might exist based on the location of the fire department organization where the data was collected. Some regions or areas in the United States might be considered more healthy or less healthy based on their location. With healthier or unhealthier locations comes firefighters working for fire departments in those areas. Thus, the data collected from studies performed in certain areas might be scaled to be more appropriate for those regions.
5. This research study mainly pertains to career firefighters, those paid to be professional firefighters spending a great deal of time at work. Another limitation is the limited amount of sample data collected in regard to the target population. Hylton, Haynes & Stein (2016) state that there are 346,150 professional firefighters as current of 2014. Thus, the sample size researched is relatively small compared to the target population.
6. A limitation might occur whereas there may be health and wellness programs for emergency organizations that function and are popular and successful. Although an exhaustive review of the literature was performed, there is a limitation some

literature or real existing programs do exist that include financial components to health and wellness programs for emergency organizations.

## **Recommendations**

Statistical analysis of Table 1 shows that in the study (Roper, 2021) that 100% of firefighter participants from the study were in favor of financial advising as being a component of the health and wellness program in the emergency organization. This was a striking number as it was the only suggested component for the health and wellness program that earned an 100% affirming vote. Other components also earned a high number of participants including certified personal trainers, registered dieticians, and athletic trainers.

Recommendations include two parts. The first would be that buy-in must be present for the program to be successful. Roper (2021) stated that there was a disconnect between the administration and the firefighters participating in the health and wellness program. The first step should be creating focus groups/health and wellness committees/surveys to ensure the components of the health and wellness program match the needs of the firefighters at the specific emergency organization. By ensuring buy-in and positive input from firefighters, there is a higher chance that the program and subsequent components will be successful.

The second recommendation would be to implement a financial advising component into the health and wellness program for emergency organizations. Data from Roper (2021) show that 100% of firefighter participants were in favor of a financial advising component in a health and wellness program. Implementing this component may give the peace of mind that financial stress and worries for firefighters may be alleviated to some extent. This assistance will allow the firefighter to be less stressed over finances and focus on overall health and wellness and well-being.

Wellness includes a healthy lifestyle. By implementing a financial advising component in the health and wellness program, the emergency organization is ensuring a healthy lifestyle for the firefighter. By adding additional help for firefighters, you are increasing wellness.

Wellness is the experience of living life with high levels of awareness, conscious choice, self-acceptance, interconnectedness, love, meaning, and purpose. Wellness is the individual's life journey (and our society's larger task) of taking Abraham Maslow's concept of self-actualization and applying it to mind, body, spirit, and our interconnectedness with other people and our environment. (Arloski, 2009, p.14).

By improving financial health for firefighters, they will be able to experience life with high levels of awareness by having conscious choices about their finances. Financial advising should be implemented along with the other components identified as important components in a health and wellness program. This directly ties to the literature review.

Given the complex and negative health implications of firefighting as an occupation, it is important to focus on all domains of health rather than focus on any singular issue to create the largest impact. (Jahnke et al, 2012, p.117).

By expanding the health and wellness program components to include a financial component, emergency organizations will be creating the largest impact.

Future recommendations would include looking at the specifics of the financial advising component implemented in a health and wellness program. Future research should investigate the effectiveness of brokers, mortgage loan officers, financial advisors (certified financial planners), retirement assistance (pension advisors), stockbrokers, wealth managers, etc. If possible, investigate the impact of lawyer assistance on wills/trusts and other law-based issues that would fall under the realm of financial advising. Implementation of such components in the

financial advising component should be recorded and data tracked to investigate its effectiveness in the health and wellness program in fire emergency organizations.

Future research should investigate the full impact of a financial advising component on a health and wellness program. The full investigation should include looking at the cost associated with bringing in content experts to aid with the program. Future research should also include investigating the impact that a financial advising component has on the fire emergency organization as well as on the firefighters.

Future research should investigate financial health between paid/career firefighters vs. non-paid/volunteer firefighters. The dynamics are different with the volunteer firefighter typically holding a regular day-time occupation. Further documentation and investigation on health and wellness programs including a financial component should be researched in a volunteer emergency organization setting.

## References

- Arloski, M. (2009). *Wellness coaching for lasting lifestyle change*. Duluth, MN: Whole Person Associates.
- Benjamin, H., O (2017) *The use of mixed-methods research to diagnose the organizational performance of a local government*. *SA Journal of Industrial Psychology*, (1). doi:10.4102/saiip.y43i0.1453
- Blitz, D. L., & Harnisher, J. V. (2012). *Improving the validity & fairness of a firefighter selection process with the addition of Integrity Testing*. Retrieved from:  
<https://www.ipacweb.org/Resources/Documents/conf12/blitz.pdf>
- Brown, A. (2014). *Weight loss advice, diet, physical activity, and obesity among firefighters* (Doctoral dissertation). Retrieved from:  
<https://search.proquest.com/openview/747529830f34aedc98ca0872f36cdc50/1?pq-origsite=gscholar&cbl=18750&diss=y>
- Calderwood, C., Gabriel, A. S., Rosen, C. C., Simon, L. S., & Koopman, J. (2015). *100 years running: the need to understand why employee physical activity benefits organizations*. *Journal of Organizational Behavior*, 37(7), 1104-1109. Retrieved from:  
<https://doi.org/10.1002/job.2064>
- Clark, A. D. (2008). The New Frontier of Wellness. *Benefits quarterly*, 24(2).
- DeJoy, D. M., Smith, T. D., & Dyal, M. A. (2017). *Safety climate and firefighting: focus group results*. *Journal of Safety Research*, 62, 107-116. Retrieved from:  
<https://doi.org/10.1016/j.jsr.2017.06.011>
- Fahy, R. F. (2005). US firefighter fatalities due to sudden cardiac death, 1995-2004 (p. 9). Quincy, Mass.: National Fire Protection Association.
- Gulliver, S. B., Cammarata, C. M., Leto, F., Ostiguy, W. J., Flynn, E. J., Carpenter, G. J., & ... Kimbrel, N. A. (2016). Project Reach Out: A training program to increase behavioral health utilization among professional firefighters. *International Journal Of Stress Management*, 23(1), 65-83. doi:10.1037/a0039731
- Hylton, J., Haynes, G., & Stein, G. P. (2016). *US fire department profile 2015*. Quincy, MA: National Fire Protection Association. Retrieved from:  
<https://www.ifsjlm.org/sites/default/files/NFPA%202017%20US%20Fire%20Department%20Profile.pdf>

- Jahnke, S. A., Poston, W. S., Jitnarin, N., & Haddock, C. K. (2012). Health concerns of the US fire service: perspectives from the firehouse. *American Journal of Health Promotion*, 27(2), 111-118.
- Kirsten, W. (2010). Making the link between health and productivity at the workplace—A global perspective. *Industrial health*, 48(3), 251-255.
- Kohler, K., Contacos-Sawyer, J., & Thomas, B. (2015) Employee wellness programs: savings for organizations and employees. *Competition Forum*, (2). 210. Retrieved 191 from: <https://search.proquest.com/openview/d745c60745a25a553653ba173847e52d/1?pq-origsite=gscholar&cbl=39801>
- Lim, D. K., Baek, K. O., Chung, I. S., & Lee, M. Y. (2014). *Factors related to sleep disorders among male firefighters*. *Annals of Occupational and Environmental Medicine*, 26(1), 11. doi: <https://doi.org/10.1186/2052-4374-26-11>
- Mozaffarian, D., Benjamin, E. J., Go, A. S., Arnett, D. K., Blaha, M. J., Cushman, M., ... & Turner, M. B. (2015). *Heart disease and stroke statistics—2015 update a report from the american heart association*. *Circulation*, 131(4), e29-e322. doi: <https://doi.org/10.1161/CIR.0000000000000152>
- Rachele, J. N., Heesch, K. C., & Washington, T. L. (2014). Wellness programs at firefighter and police workplaces: a systematic review. *Health Behavior and Policy Review*, 1(4), 302-313.
- Ranby, K. W., MacKinnon, D. P., Fairchild, A. J., Elliot, D. L., Kuehl, K. S., & Goldberg, L. (2011). *The PHLAME (promoting healthy lifestyles: alternative models' effects) firefighter study: testing mediating mechanisms*. *Journal of Occupational Health Psychology*, 16(4), 501. doi: <https://psycnet.apa.org/doi/10.1037/a0023002>
- Roberts, R., Golding, J., Towell, T., & Weinreb, I. (1999). The effects of economic circumstances on British students' mental and physical health. *Journal of American College Health*, 48(3), 103-109.
- Roper, J. P. (2021). *Holistic Health and Wellness for Emergency Organizations: A Qualitative Case Study* (Doctoral dissertation, Grand Canyon University).
- Sattler, D. N., Boyd, B., & Kirsch, J. (2014). *Trauma-exposed firefighters: relationships among posttraumatic growth, posttraumatic stress, resource availability, coping and critical incident stress debriefing experience*. *Stress and Health*, 30(5), 356- 365. doi: <https://doi.org/10.1002/smi.2608>
- Stone, K. B. (2015). Burke-Litwin organizational assessment survey: Reliability and validity. *Organization Development Journal*, 33(2), 33-50.

## Tables and Figures

Table 1

*Firefighter Support for Health and Wellness Program Components*

	Yes/For	No/Against
Certified Personal Trainers	90%	10%
Financial Advisors	100%	0%
Cooking Demonstrations	60%	40%
Registered Dietician	90%	10%
Athletic Trainer	90%	10%
Chaplain	40%	60%

*Note. Data gathered from Roper (2021) and collected from ten firefighter participants.*



### Author Biography

Dr. John P. Roper is a Lieutenant at Mountain View Fire Rescue located in Longmont Colorado serving Boulder & Weld counties. Dr. Roper has been serving in the fire service since 2005. Dr. Roper also teaches as an adjunct faculty instructor at: Colorado State University (Fire & Emergency Services Administration) and Front Range Community College. He holds degrees from: Red Rocks Community College (A.A.S Fire Science Technology), Colorado State University (B.S Fire & Emergency Services Administration), Colorado State University Global (M.S Organizational Leadership/ Human Resource Management), Grand Canyon University (E.D.D Organizational Leadership & Development). His research specializes in health and wellness in emergency organizations and the development and implementation in public sector entities.

Although John enjoys the fire service and academic accolades, he adores his children more. He has two amazing daughters with his wife of almost ten years. His firefighter shift schedule allows him time to spend raising his daughters and enjoying being a dad. John and family make their home in Morrison Colorado and enjoy spending time outdoors.



**The Extent Police Officers' Emotional Workload and Leader-Member Exchange Predict  
Their Emotional Engagement**

Valarie J. Serrano  
Grand Canyon University  
3300 W Camelback Rd.  
Phoenix, AZ 85017  
Phone: 623.707.5905  
Email: valarieserrano2020@gmail.com  
(Corresponding Author)

Brad J. Castle  
Grand Canyon University  
3300 W Camelback Rd.  
Phoenix, AZ 85017  
Phone: 419.651.8158  
Email: brad.castle@my.gcu.edu

# **The Extent Police Officers' Emotional Workload and Leader-Member Exchange Predict Their Emotional Engagement**

**Valerie Serrano, Grand Canyon University**

**Brad Castle, Grand Canyon University**

## **Abstract**

The purpose of this quantitative predictive correlational study was to find if and to what extent police officers' emotional workload and leader-member exchange predict their emotional engagement among a diverse sample of police officers in the United States. The Questionnaire on the Experience and Evaluation of Work, 2.0 emotional workload subscale, measured emotional workload. The Leader-Member Exchange (LMX) -Multidimensionality measured leader-member exchange. The Job Engagement Scale emotional engagement subscale measured emotional engagement. Using Amazon Mechanical Turk to collect data, a final sample of 147 police officers was obtained. Multiple linear regression analysis examined the predictive relationship between police officers' emotional workload and LMX on their emotional engagement. The multiple regression model results were statistically significant for two of the three relationships. Emotional workload and LMX combined:  $F(2, 144) = 68.270, p < .001$ , adjusted  $R^2 = .480$ ; emotional workload individually:  $\beta = -.017, p = .785$ ; LMX individually:  $\beta = .702, p = .001$ . The null hypotheses for RQ 1 and RQ 3 were rejected since the multiple regression models were statistically significant. The null hypothesis for RQ 2 was not rejected as the model was not statistically significant. Ultimately, this suggests that while emotional workload alone cannot predict an officer's emotional engagement, LMX can be used to predict an officer's emotional engagement individually. Therefore, using emotional workload and LMX theories and practices in day-to-day operations and training may strengthen emotional engagement among police officers as well as aid officer retention.

*Keywords:* emotional workload, leader-member exchange, emotional engagement, police leadership, officer retention

## Introduction

Emotional engagement in the police profession is a challenging yet fundamental element for success within law enforcement. The challenge comes from the fact that police officers experience emotional job-related demands as they deal with complaints, deliver unwelcome news, and receive the brunt of customer frustration, despair, and even rage (Andersen & Papazoglou, 2015). Lam et al. (2018) states that people become exhausted under repeated exposure to such job demands. To emphasize this emotional collapse, Capellan et al. (2020) established that the emotional strain placed on officers due to increased public scrutiny has resulted in police officer disengagement. Policing is stressful and emotionally distressing, and these factors trigger officers to switch off emotionally and become robots (Lennie et al., 2019). Proponents of such disengagement, known as de-policing, indicate this practice may be responsible for a surge in crime rates.

De-policing suggests that officers withdraw from proactively policing their communities. According to Nix et al. (2018), de-policing is conceptualized as using less force and slower response times. Regardless of whether the crime rate has surged, there are dangers involved when police disengage. Oliver (2017) found that some officers believe that supportive supervisor relationships are one solution to the problem of de-policing. When officers perceive that their direct supervisor supports them, they are more inclined to engage emotionally (Oliver, 2017). Additionally, Wolfe et al. (2018) identified that the quality of employee-supervisor relationships is vital for the success of public safety. Despite these known details, the emotional engagement of police officers is understudied, as is the police profession collectively.

The purpose of this quantitative predictive correlational study was to find if and to what extent police officers' emotional workload and leader-member exchange predicted their

emotional engagement among a diverse sample of police officers in the United States. Leader-member exchange theory (LMX) consists of relationship-based leadership behaviors such as mutual trust, meaningful working relationships, and mutual commitment (Fein et al., 2020). The results elucidated the query posed by Lam et al. (2018) as to whether emotional engagement is possible in emotionally demanding professions. According to Afrahi et al. (2021), work engagement is crucial in human resource management, with ample research on the topic. However, significantly less attention is paid to disengagement (Afrahi et al., 2021). This leaves out part of the puzzle when designing interventions to address engagement.

The researcher advanced the knowledge and practice of emotional workload, LMX, and emotional engagement by bringing attention to the relationship between emotional workload, LMX, and emotional engagement. Plus, added attention was given to the extent emotional workload, and LMX predicts emotional engagement in an emotionally demanding profession. This added attention on the subject matter may provide insight into disengagement and how the police profession can address this growing issue.

The researcher made three contributions. First, the researcher endorsed why emotional workload, LMX, and emotional engagement are worth studying. Second, the researcher offered insight into the theoretical frameworks that help explain why the research questions exist. Third, the researcher suggested how the results further advanced the knowledge and practice of using emotional workload and LMX to predict the emotional engagement of police officers as the results provided methods to be used in policing to address police officer disengagement.

## **Literature Review**

The concept of de-policing (officers engaging less vigorously in proactive policing) goes back to the 90s (Nix et al., 2018). Investigation into this concept did not take hold until after

2014 when Michael Brown was shot and killed in Ferguson, MO. This is evidenced by the limited number of studies on de-policing that predate 2014. According to Capellan et al. (2020), de-policing is dangerous for the community as it has been linked to increased crime rates. It is also hazardous for officers as a decrease in proactive policing may cause an officer to hesitate in critical life or death situations.

After the 1991 beating of Rodney King, the Los Angeles Police Department underwent significant police reform. This reform included the use of greater data analytics (which led to de-policing) to track individual officer complaints and use of force (Stone et al., 2009). De-policing during this era was more in response to avoiding having to fill out extensive paperwork. In 1994, New York City saw a substantial decrease in crime rates, eventually turning around. According to Kelling and Bratton (1997), one reasonable explanation for the NYC crime increase was that de-policing was perceived as no one cared, leading to increased crime and urban decay. However, this changed with the concept of "broken windows," which characterized the authorities taking back control in the city, doing something about even minor crimes, and taking a more hands-on approach –the antithesis of de-policing.

Literature from Wortley and Tanner (2004) showed a lack of research on racial profiling. This lack of research occurred because of the fear of de-policing. The fear was that data might be misunderstood and adversely impact officer behaviors. Studies have shown that officers take on a self-protective mindset and attempt to reduce the chances of becoming involved in any activity which might generate a complaint –particularly when they do not trust their administrations and particularly in politically charged situations (Castle et al., 2022).

Some police professionals suggest that there is a modern-day war on Cops. Public scrutiny of the police has been at the highest rate since the 1960s (Tyler, 2017). This increase in

public scrutiny is fueled by high-profile questionable police behavior. According to Wolfe and Nix (2016), de-policing, also known as the "Ferguson Effect," is a term used to describe police officer disengagement from proactive policing, mainly in response to the public's scrutiny of Michael Brown's 2014 death in Ferguson, Missouri. Prior research by Lam et al. (2018) states that organizations typically expect personnel to be emotionally engaged during emotionally demanding tasks. Sometimes this requires the employees to alter their feelings and utilize empathy. However, this alteration of emotions leads to disengagement (Lam et al., 2018). In the case of police officers, this disengagement harms community and officer safety.

Emotional engagement or psychological presence turns mediocre work into quality work. According to Book et al. (2019), an antecedent of engagement is leadership. It is already known that leadership influences organizational performance (Fein et al., 2020). According to Gregory and Osmonbekov (2019), positive exchanges with leaders results in open support that helps an employee weather specific work demands. A positive change in leadership can generate a host of beneficial behaviors when officers engage with civilians, such as less 'heavy-handed' tactics and fewer uses of force (White, 2003). Additionally, it is already known that officers who have confidence in their legitimacy as authority figures or who view their respective departments as just will collaborate more with the public to resolve issues despite damaging publicity (Wolfe & Nix, 2016). Conversely, whether job demands and LMX predict emotional engagement was not known.

Knowing the answer to this added to the broader societal need to keep crime rates from increasing due to de-policing. A greater understanding of emotional workload and LMX led to a solution for de-policing. Therefore, the research that needed further exploration was if and to

what extent emotional workload and LMX predict emotional engagement in the police profession.

### **Purpose of the Study**

The purpose of this quantitative predictive correlational study was to find if and to what extent police officers' emotional workload and LMX predict their emotional engagement among a diverse sample of police officers in the United States. Police officers regularly interact with community members and offenders, resulting in emotionally taxing situations (van Gelderen et al., 2017). The police profession is struggling with de-policing, which is the withdrawal of assertive policing practices, and despite concerns, little is known about this practice. According to Grant et al. (2019), the police profession is not only emotionally demanding, but is also an understudied occupation. Nix et al. (2018) indicated that police officers might disengage from effectively patrolling their communities in response to the strain of emotional workload. This disengagement from patrolling, or de-policing, has increased over recent years as public scrutiny has amplified (Torres et al., 2018). Additionally, Capellan et al. (2020) found that police officer disengagement is positively correlated with public scrutiny, as evidenced by increased crime rates since 2014. A police officer's position is not naturally inherent in the world but shaped by political and social forces.

Police officers tussle with this positionality as they deal with competing tenets of the job, as exemplified by the premise that officers are trained to be warriors yet expected to act like social workers. This positionality, combined with increased public scrutiny, causes strain, which is an underlying basis for de-policing. According to Wolfe and Nix (2016), when officers hold more confidence in their authority, greater professional behaviors are exhibited, including sustained engagement. When supervisors are perceived as being fair, they cultivate this confidence among



the officers (Wolfe & Nix, 2016). The supervisor's perceived fairness may improve this positionality by minimizing the harmful effects of public scrutiny that steer an officer to participate in de-policing. This study determined if and to what extent police officers' emotional workload and LMX predict their emotional engagement. Knowing these findings could boost social exchange interventions by mitigating the adverse effects of emotional workload on emotional engagement. This study contributed to the elucidation of the phenomena of de-policing by examining if the predictive correlation between emotional workload and LMX predicts emotional engagement in police officers.

Elucidating factors that mitigate de-policing will allow police agencies to address this phenomenon using research-based practices. In addition, determining this predictive correlation will relate to Lam et al.'s (2018) assertion that LMX is a continuous source of employer resources, enriching members' psychological availability. The results of this study may contribute to the field of policing by understanding if emotional engagement is possible in an emotionally demanding job such as policing.

## **Methodology**

Since the focus of the problem statement was to numerically acquire the extent emotional workload and LMX predicted emotional engagement, a quantitative design was deemed appropriate. Additionally, Yilmaz (2013) describes quantitative research as empirical research of a social phenomenon, calling for testing a theory that may explain or predict the event. To test the hypotheses using statistics, the researcher used survey instruments to collect data on the predictor variables (independent variables) and the criterion variable (dependent variable). Quantitative research endorses the objectivity of a social problem where the researcher and the subjects stay detached and impartial, contrasting that of qualitative research (McCusker &

Gunaydin, 2015). The survey instruments used to collect the data did not involve direct contact with the survey respondents. The current research needed quantitative data for statistical analysis to test the hypotheses.

The goal of quantitative research is to understand the connections between variables. This study probed the predictive relationship between the variables. Previous studies by Book et al. (2019), Geisler et al. (2019), Kim and Gatling (2018), and Schiffinger and Braun (2020) have examined emotional workload and emotional engagement using quantitative methods. These studies used instruments to collect numerical data to determine if a relationship exists between two or more variables. Data from this study came from quantitative instruments measuring emotional workload, LMX, and emotional engagement. This type of data indicates a quantitative study because numerical data will be analyzed as opposed to the experiences of an individual, which are deemed qualitative in nature (Yilmaz, 2013). Consequently, using a quantitative method allowed the researcher to remain objective, referencing the extent of the relationship between emotional workload, LMX, and emotional engagement.

Based on the problem and the theoretical foundations, the researcher designed research questions, and subsequent hypotheses for this study to determine the extent emotional workload and LMX combined predict emotional engagement, the extent emotional workload predicts emotional engagement, and the extent LMX predicts emotional engagement within the overall model. Prior research shows that emotional workload, job resources, and LMX influence emotional engagement (Anitha & James, 2016; Lam et al., 2018; Schiffinger & Braun, 2020). However, literature addressing the extent emotional workload and LMX predict emotional engagement within policing in the United States was not found. Therefore, there was a need to

explore the extent emotional workload, and LMX predict emotional engagement among the police force.

The first predictor variable in this study is emotional workload as measured by the emotional workload subscale from the Questionnaire on the Experience and the Evaluation of Work (QEEW 2.0). The QEEW 2.0 (van Veldhoven & Meijman, 1994) emotional workload scale consists of five questions that employ Likert-type scales, and the data were treated as interval level data. The second predictor variable in this study was LMX, measured by the leader-member exchange multidimensional assessment (LMX-MDM). The LMX-MDM consists of 12 questions relating to the multidimensionality of the relationship between leader and member (Liden & Maslyn, 1998). The leader-member exchange scale employs Likert-type scales, and the data were treated as interval-level data.

The criterion variable in this study was emotional engagement as measured by the Job Engagement Scale (JES). The JES consists of three sections: physical engagement, emotional engagement, and cognitive engagement. Each section contains six questions for 18 questions that also employ Likert-type scales. The data were treated as interval-level data. However, previous literature indicates the importance of handling emotional workload with more emotional engagement; therefore, the only portion of the JES instrument used is the emotional engagement subset (Lam et al., 2018). Lam et al. (2018) used the same emotional engagement subset in place of the entire JES scale, resulting in a reliability score of .85. According to Rich, co-author of the JES, if research is observing the subset items for the emotional factor, using just the emotional subset is allowed if both the antecedents and outcomes are related (Bruce Rich, personal communication, October 15, 2019).

The QEEW 2.0, the LMX-MDM, and the JES contain Likert-type scales, with the individual questions being treated as interval-level data. Though a parametric analysis was conducted with the aggregated data to provide scores for each variable and then considered interval-level data. Data from the QEEW 2.0, the LMX-MDM, and the JES are continuous interval-level data that hold a sense of order and rank, including units equal in magnitude. According to Carifio and Perla (2007), if an instrument contains 5 to 7-point Likert-type responses, it is appropriate to analyze the data using parametric analysis such as multiple regression analysis. Lam et al. (2018) used both LMX-MDM and JES data as interval-level data in a moderation analysis, and Basit (2020) used JES data in a meditational analysis.

However, the QEEW 2.0 has 4-point Likert-type responses, but previous research has used QEEW 2.0 data as interval-level data. This is exemplified in Lam et al. (2018) and their use of QEEW 2.0 data in a moderating regression analysis and Bakker et al. (2005) and their use of QEEW 2.0 data in a multiple regression analysis. According to Mircioiu and Atkinson (2017), when a parametric analysis was applied to real survey data, the same conclusions were drawn as those conclusions drawn when applying the non-parametric analysis. Therefore, the use of Likert-type scales with less than 5-points can create parametric statistics that are robust. When working with interval level data, the data can be summarized using percentiles, mean, median, mode, range, and standard deviation allowing for statements to be made about the data collected (Sullivan & Artino., 2013).

### ***Validity***

In this study, participants completed three standardized instruments where the authors of the three instruments tested for validity and reliability. Validity is the notion that an instrument measures what it claims to measure. Correlations are used to determine validity by observing if

test scores of a construct are related to other measures of the same construct (Gravetter & Wallnau, 2017). The first instrument, the QEEW 2.0, was validated using the Mokken scale, a psychometric data reduction method. A Mokken scale is unidimensional, consists of hierarchically ordered items measuring the same underlying latent concept, and is considered one of the least strict item-response models resulting in shorter and more pragmatic scales (van Veldhoven et al., 2015). The QEEW 2.0 provides consistent measures through unidimensional and internal consistencies.

The second instrument, the LMX-MDM, has the most psychometric testing of all the LMX instruments (LMX, LMX-6, LMX-7) and holds the strongest psychometric properties (Gottfredson et al., 2020). Divergent and discriminant validity of the LMX-MDM were strongly supported by a 4-factor model using exploratory factor analysis and conformation using confirmatory factor analysis of independent samples. The correlations between the four dimensions of LMX were not significant (-.01 affect, .04 loyalty, -.10 contribution, and -.01 professional respect), showing there was no susceptibility to response biases. Convergent validity was conducted by comparing exploratory and confirmatory factor analyses to those loadings expected based on theory. These results for convergent validity were supported by correlations between the LMX-MDM and the LMX-7, .71 affect, .71 loyalty, .55 contribution, and .70 professional respect, while the results were supported for discriminant validity by correlations between independent samples .12 affect, .25 loyalty, .00 contribution, and .00 professional respect (Liden & Maslyn, 1998).

The JES endured psychometric analysis by Basit and Chauhan (2017) using Structural Equation Modeling to establish instrument validity. Their results showed factorial validity and convergent validity coupled with high-quality internal consistency validity for both samples.

Factor loadings for the Pakistan sample ranged between 0.72 to 0.86, while factor loadings for the Malaysian sample ranged from 0.71 to 0.89, which are all above the acceptable range of 0.70 (Basit & Chauhan, 2017). Basit and Chauhan's (2017) results consistent with earlier findings that the factorial validity of the three-dimensional conceptualization of Kahn's (1990) construct of job engagement was supported.

### ***Reliability***

Reliability is the extent an instrument produces both consistent and stable measurements. A reliable instrument will produce the same scores with repeated trials (Gravetter & Wallnau, 2017). The reliability of the results of the study were ensured by using instruments deemed reliable as noted by the instrument's internal consistency. The researcher ensured the appropriate instruments were used to measure the variables of emotional workload, LMX, and emotional engagement. Additionally, the researcher analyzed the data using multiple regression analysis. Part of this analysis involved testing eight assumptions that provided information on the accuracy of any predictions, testing how well the model fits the data, determining the variation in the criterion variable clarified by the predictor variables, and testing the hypotheses. Corrections were made to violations of the assumptions, and the assumptions were retested. If the corrections made did not allow the assumptions testing to pass, the researcher would have sought alternative statistical tests.

The reliability results for the JES variables include an acceptable degree of internal consistency reliability. According to Rich et al. (2010), job engagement is related to the conceptual antecedents and consequences, as participants were more engaged if they perceived more organizational support and value congruence. The JES, a three-factor scale (cognitive, emotional, and physical engagement), has separate scales for each component. The internal

consistency reliability approximations for each subscale were: cognitive engagement,  $\alpha = .94$  (6 items); emotional engagement,  $\alpha = .93$  (6 items); physical engagement,  $\alpha = .90$  (6 items). Additionally, the reliability estimates for the overall scale was  $\alpha = .96$ . Therefore, higher total scores across each subscale and the combined scale signified higher degrees of reported engagement (Shuck & Reio, 2014). Additionally, the JES obtained a Comparative Fit Index of .91 and a Tucker-Lewis Index of .91, demonstrating validity.

### ***Sample***

Based on multiple linear regression (fixed model,  $R^2$  deviation from zero), the necessary sample size determined for the current study by a G\*Power computation was 68. Multiple regression was conducted based on this population using a .80 statistical power ( $1 - \beta$ ), .05 alpha ( $\alpha$ ), and a .15 medium effect size with two predictors, thus a sample size of 68 was necessary to accurately reflect the target population (Faul et al., 2009).

The target population of interest for this study was all police officers, 21 years or older, living in the U. S. Currently, there are roughly 800,000 sworn police officers in America (National Law Enforcement Officers, 2020). This study used a convenience sampling method. This sampling method is typically affordable and used when the sample is willing and qualified to participate (Jager et al., 2017). Although convenience sampling has limitations, this method is useful when the target population is characterized by broad groups (Alvi, 2016).

A total of 157 police officers responded to a SurveyMonkey questionnaire via the MTurk platform. After data cleaning and screening, ten responses, representing 6% of the total responses, were identified and removed as half or more of these responses were skipped. Five additional responses had missing data filled in using the MMI method (Gimpy & Rajan Vohra,

2014). No participant demographics were collected in an effort to provide maximum participant anonymity. Grand Canyon University's Institutional Review Board exempted this study.

Participants voluntarily responded to the Questionnaire consisting of twenty-three questions that took approximately five minutes to complete. The participants' answers were based on the extent of their emotional workload, LMX, and emotional engagement. The instruments used to answer the research question were the QEEW 2.0 (van Veldhoven & Meijman, 1994) to measure the variable emotional workload, the LMX-MDM (Liden & Maslyn, 1998) to measure the variable LMX, and the JES (Rich et al., 2010) to measure the variable emotional engagement.

## **Results**

### ***Research Question One***

This research question asked: "If and to what extent do police officers' emotional workload, and LMX combined predict their emotional engagement?" Results from the multiple regression analysis provided a multiple correlation coefficient of  $R = .698$ , the proportion of variance of  $R^2$  of .487, and the adjusted  $R^2$  of .480.  $R^2$  for the overall model was 48.7%, with an adjusted  $R^2$  of 48%, a medium size effect, according to Cohen (1988). This lower adjusted  $R^2$  of 48% suggests the additional input variable (emotional job demands) did not add value to the model. LMX provided the greatest value to the model. However, the model demonstrated that the predictor variables (emotional workload, and LMX combined) statistically and significantly predicted emotional engagement,  $F(2, 144) = 68.270, p < .001$ . Thus, the null hypothesis for research question 1 was rejected.

The unstandardized regression coefficient was computed for each predictor variable. The coefficient of emotional workload was  $\beta = -.001, p = .785$ . The coefficient of LMX was  $\beta = .551$ ,



$p = .001$ . The results indicated that emotional workload was negatively correlated with emotional engagement. Essentially, when emotional workload is increased, the officers' emotional engagement decreases.

### ***Research Question Two***

The second research question asked: "If and to what extent does police officers' emotional workload individually predict their emotional engagement within the overall model?" To test the null hypothesis, one interprets the results of the multiple regression coefficients, which describe the individual predictors' contributions to the model when holding the other predictor(s) constant. The test for hypothesis two is interpreted by reviewing the coefficient for Emotional Workload (QEEW) and the resultant  $t$ -test. The results indicate  $\beta = -0.017$ ,  $p = .785$ , demonstrating the results are not statistically significant and fail to reject the null hypothesis. Because the results were not statistically significant, a post hoc power analysis was conducted. The power analysis requires calculating the specific effect of Emotional Workload, which is  $f^2 = .0010$ . Once the effect size was determined, the statistical power of the analysis was calculated, which is  $1 - \beta = .0613$ . This result suggests that an officer's emotional workload alone cannot predict their emotional engagement individually.

### ***Research Question Three***

The third research question asked: "If and to what extent does police officers' LMX individually predict their emotional engagement within the overall model?" The corresponding null hypothesis was tested. The test for hypothesis three was interpreted by reviewing the coefficient for Leader-Member Exchange (LMX) and the resultant  $t$ -test. The results indicate  $\beta = 0.702$ ,  $p < .001$ , demonstrating the results are statistically significant and reject the null hypothesis. Because the results are statistically significant, a post hoc power analysis was not

required. Ultimately, this suggests that LMX can be used individually to predict an officer's emotional engagement within the model.

## **Discussion**

Considering previous research on emotional workload and its impact on engagement, results have shown that emotional workload within careers involving the human services industry, has a stronger effect on those employees' overall wellbeing than in other industries. According to Anitha and James (2016), this occurs because these occupations involve substantial client interaction. Research has also shown that client-based work scores higher specifically on the extent of emotional demand needed compared to other aspects of job demands, such as physical demands (Ahmed et al., 2017; Anitha & James, 2016). Emotional workload cannot easily be mastered, unlike physical job demands (Van Steenbergen et al., 2018). This obscurity is what makes emotional workload so challenging to address.

Emotional workload also requires an employee to obey specific display rules managing their emotional response to affect their customers' feelings, attitudes, and behaviors, in so doing, cultivating organizational outcomes. Unfortunately, this constant regulation of emotions compounds fatigue levels because it involves exertion that leads to energy depletion (Taris & Schreurs, 2009). However, the desire to actively participate in an emotional workload is frequently why a person may choose to work in human service (Geisler et al., 2019). This study did not find emotional workload statistically significant. However, this does align with previous research on emotional workload, as evidenced by Geisler et al. (2019).

For this study, LMX did have a significant and statistical relationship with emotional engagement. LMX is positively correlated with emotional engagement and can statistically predict emotional engagement. This study uncovered a negative relationship between LMX and

counterproductive performance. At the same time, trust, job satisfaction, motivation, and empowerment mediate the impact of LMX, and LMX predicts task performance but not the other way around (Martin et al., 2016). LMX is positively related to employee engagement. Emotional workload and LMX combined:  $F(2, 144) = 68.270, p < .001$ , adjusted  $R^2 = .480$ ; emotional workload individually:  $\beta = -.017, p = .785$ ; LMX individually:  $\beta = .702, p = .001$ . The null hypotheses for RQ1 and RQ 3 were rejected since the multiple regression models were statistically significant. The null hypothesis for RQ 2 was not rejected as the model was not statistically significant. (See Appendix A).

Therefore, we see that an officer's exposure to emotionally demanding situations on the job alone cannot predict their emotional engagement (i.e., psychological presence in role performance). However, the quality of the relationship and certain leadership behaviors which lead to the degree of LMX, can indeed predict an individual officer's emotional engagement while on the job. Not only can this measure be used to monitor emotional engagement, but that measurement in turn can warn of the onset of self-protective behaviors. In another direction, this might be a tool for the use of civilian oversight to determine the effectiveness and overall quality of leadership of the law enforcement organization.

One of the interesting aspects of this quantitative study is that it independently confirms the findings of some prior qualitative studies which touch on police leadership and how important that leadership is to the success of the organization within the community. Distrust in their administration is often the reason de-policing is an issue today. There has long been a somewhat distrustful relationship between administration and officers on the street (Castle et al., 2020). If officers do not trust their administrations to have their back against political pressure, officers feel the need to protect themselves as much as possible (Castle et al., 2022; Reynolds &

Hicks, 2015). As this study shows, when officers have a good rapport (e.g., LMX) with their administrators or supervisors, they are more likely to be emotionally engaged rather than to seek self-protective behaviors.

## **Limitations**

The limitations of this study were handled in such manner as to mitigate any effects they might have had on the results of the study. However, there are always limitations and control of all limitations can never be absolutely certain.

1. Quantitative research explains phenomena mathematically, and therefore cannot describe the phenomena (Yilmaz, 2013). The present study was limited in determining to what extent (if any) officers' emotional workload and LMX predicted their emotional engagement but does not describe that phenomenon.
2. The researchers used a convenience sample of only active-duty police officers in the United States, who were 21 years old or older, with at least two months on the job, and who were registered with MTurk as survey takers. This might have two possible effects on the results. One is that since these officers are also MTurk workers and were paid for completing this online survey, there could potentially be a skewing of the results toward lower income participants. Secondly, by using MTurk, the sample was already a subset of the overall law enforcement officer population who fit the requirements of the study. An additional potential complication is that MTurk exists in a digital environment where workers are paid to answer surveys. Therefore, the potential for cheating exists and one of those possibilities is that a non-human (e.g., computer bot) is answering survey questions. There is no way for the researchers to verify the authenticity and

compliance of the survey respondents with the qualifications of the study.

However, the nature of the questions and responses gave no indication that the data was not proper and consistent with any other Internet based survey service available.

3. As with any self-report survey, response bias is a limitation. Some respondents tend to over report on socially desirable behaviors and under report on those that they perceive as socially less desirable (Bradburn et al., 1979).
4. The data collection instruments themselves may not obtain all components of the officers' emotional workload, LMX, and emotional engagement. Further, police officers in different organizations and different parts of the country are subjected to varying working conditions both outside and inside the organizations themselves.
5. As a result of the gatekeeper-like behaviors the researcher faced in recruiting participants, the secondary method of using Mechanical Turk was employed. While the respondents were to be approved according to the stated qualifications for participation in the study, the researchers have no way of verifying those conditions independently. This also results in the researchers having no demographic or geographic information about the survey participants.

## **Recommendations**

This study suggests that emotional workload and LMX combined predict the emotional engagement of police officers and that LMX individually predicts police officers' emotional engagement. In other words, LMX is positively related to employee engagement. This study also suggests that emotional workload is negatively correlated with emotional engagement, meaning

when an officer's emotional workload increases their emotional engagement decreases. The results can be applied to create evidence-based practices to manage police officers' emotional engagement, LMX, and emotional workload. Officers especially need to understand that their emotional workload combined with their LMX can predict their emotional engagement. This understanding will allow an officer to evaluate if they are on a path to emotional disengagement or already emotionally disengaged.

Such self-awareness is a tool officers' can utilize to calibrate their emotional engagement as a personal security measure. Emotional disengagement leads officers to switch off and become like robots, though it is not safe for an officer to operate in this manner. This early personal warning system can help keep officers and the community out of danger. Engaged police officers respond more to calls for service, thus keeping the crime rate from rising. Plus, being more in tune with their emotional workload, LMX, and emotional engagement, officers can more objectively see how others might perceive them and their actions. This self-awareness will help officers cope with their emotions and align their behaviors with their core values. Recognizing one's core values will lead to understanding what one needs from a supervisor and what resources are required to succeed in the job.

This study highlights the importance of managing the leader-member exchange to provide officers with adequate social support and job resources. With LMX correlated with emotional engagement, this study also highlights the need to manage police officers' LMX. Addressing both issues will promote greater job performance. Providing police officers with officer-centered social support will diminish the adverse effects of emotional workload. Clements et al. (2021) state that many police officers describe their managers as distant and lacking care and compassion. Plus, the hierarchical characteristics of a police department create

distance between police officers and managers. Police officers have expressed a desire for communication between frontline workers and management to be a two-way street (Clements et al., 2021). Quality leader-member exchange encompasses the use of both two-way communication and mutual visibility.

Training programs that highlight and incorporate the benefits of two-way communication and visibility into the organizational culture are needed. Furthermore, individual behavioral analyses should be amalgamated into organizational learning development programs. This practice will facilitate police officers' in identifying their own needs. Additionally, such approaches will support managers in recognizing their members' needs. This is one of the areas that can and does affect officer retention within police organizations. Organizational managers and administrators cannot avoid a problem they are unaware is even there.

The leadership requirements to take advantage of studies like this will not be effortless. As Castle et al. (2022) noted, the presence of cliques within an organization (which promote favoritism) was mutually exclusive to a feeling of organizational belonging. Police leaders must try to avoid the seemingly hardwired hierarchy within the police subculture. Indeed, police organizations are hierarchical in structure, but the personal and professional relationships within the organization do not necessarily have to be so to maintain a clear chain of command. Positive communication and genuine interest in how every officer and non-sworn employee is doing go a long way toward a sense of organizational belonging. Organizational belonging is organization comprehensive and should include every station within the organization. For years, the police subculture has differentiated an officer's value (for lack of a better term) on various measures. Some examples might be time on the job, full-time vs. part-time vs. auxiliary, and jurisdiction

size or population. These things should not matter in the law enforcement community and should never matter within a specific organization.

Collecting data for this study was more challenging than expected. Over twenty police agencies and police associations were contacted requesting site permission for participation in this study. Only one of those agencies was willing to allow their officers to participate in this study, despite the survey being wholly online and anonymous. The study results could lead to changes in how police managers are trained and how police managers observe officers' emotional workload. However, the researchers found that police agencies are reluctant to participate in academic research. The police profession has 800,000 police officers in the U.S., and this study had a sample of 147. A replication of this study with a much larger sample size would validate the findings and confirm the research as being accurate and generalizable. The potential for a replication of this study will be difficult because of this reluctance.

This gatekeeper-like behavior negatively affects future research within the policing profession, which is already an understudied profession. Both authors have experienced this gatekeeper behavior from police administrators in the pursuits of academic process and research. Kandakai et al. (2013) also noted similar behaviors from police administrators when asked for assistance for academic research. One arguably reasonable explanation of this gatekeeper behavior is the unwritten rule of the police subculture, which generally discourages the open expression of opinions to outsiders (Garbarino et al., 2013; Marchand et al., 2015; Ranta, 2012; Tuckey et al., 2012). For organizations and the administrations of those organizations to benefit from studies like this one, some changes will need to be made. These sorts of changes need to originate from the top of the organizations. White (2003) found that leadership and peers affect officers more than law and policy.



Though, the effect of emotional workload individually was not significant when predicting police officers' emotional engagement which does not indicate police officers do not experience a significant amount of emotional workload. When emotional workload ensues, it may present in areas of policing that are not directly observable in markers such as emotional engagement. Police officers routinely handle tasks involving violence with offenders, a common element of policing. However, many individuals join the police force for this very reason to help protect the community (Elntib & Milincic, 2021).

In summation, LMX is positively related to employee engagement. Officers who have a solid rapport with their supervisors and administrators are more likely to be emotionally engaged. If officers are emotionally engaged, they are less likely to seek self-protective behaviors. With this model, LMX can be used individually to predict an officer's emotional engagement. When emotional workload is increased, the officers' emotional engagement decreases. But an officer's emotional workload alone cannot predict their emotional engagement. Another potential aspect is as a measurement tool for civilian oversight authority charged with the health and safety of the officers in law enforcement organizations and the community in general. Used as an early personal warning system, the ability to measure LMX may help preserve both the officers' and the community's safety and well-being. Finally, it has been shown that leadership and peer relationships affect officers more than any law or policy thereby emphasizing the importance of LMX not only for officers but also for members of the community.

## References

- Afrahi, B., Blenkinsopp, J., de Arroyabe, J. C. F., & Karim, M. S. (2021). Work disengagement: A review of the literature. *Human Resource Management Review*. Advance online publication. <https://doi:10.1016/j.hrmr.2021.100822>
- Ahmed, U., Shah, M. H., Siddiqui, B. A., Shah, S. A., Dahri, A. S., & Qureshi, M. A. (2017). Troubling job demands at work: Examining the deleterious impact of workload and emotional demands on work engagement. *International Journal of Academic Research in Business and Social Sciences*, 7(6), 96-106. <https://doi:10.6007/IJARBSS/v7-i6/2949>
- Alvi, M. (2016). *A manual for selecting sampling techniques in research* (Technical Report). Ludwig-Maximilians-Universität München, Germany: Munich Personal Archive. <https://mpira.ub.uni-muenchen.de/70218/>
- Andersen, J. P., & Papazoglou, K. (2015). Compassion fatigue and compassion satisfaction among police officers: An understudied topic. *International Journal of Emergency Mental Health and Human Resilience*, 17(3), 661-663. <https://doi:10.4172/1522-4821.1000259>
- Anitha, J., & James, P. F. (2016). The impact of emotional demand and job demand on emotional exhaustion: A study on sales executives of automobile showrooms. *IUP Journal of Organizational Behavior*, 15(2), 25-37.
- Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology*, 10(2), 170-180. <https://doi:10.1037/1076-8998.10.2.170>

- Basit, A. A. (2020). How does political skill lead to job and organization engagement? Role of self-evaluations. *Journal of Management Development*, 39(7/8), 895-910. <https://doi.org/10.1108/JMD-05-2019-0164>
- Basit, A. A., & Chauhan, M. A. (2017). Psychometric properties of the job engagement scale: A cross-country analysis. *Journal of Management and Research*, 4(1), 1-19. [https://doi:10.29145/jmr/41/040101](https://doi.org/10.29145/jmr/41/040101)
- Book, L., Gatling, A., & Kim, J. (2019). The effects of leadership satisfaction on employee engagement, loyalty, and retention in the hospitality industry. *Journal of Human Resources in Hospitality & Tourism*, 18(3), 368-393. <https://doi.org/10.1080/15332845.2019.1599787>
- Bradburn, N. M., Sudman, S., Blair, E., & Stocking, C. (1978). Question threat and response bias. *Public opinion quarterly*, 42(2), 221-234. [https://doi:10.1086/268444](https://doi.org/10.1086/268444)
- Capellan, J. A., Lautenschlager, R., & Silva, J. R. (2020). Deconstructing the Ferguson effect: A multilevel mediation analysis of public scrutiny, de-policing, and crime. *Journal of Crime and Justice*, 43(2) 125-144. <https://doi.org/10.1080/0735648X.2020.1652921>
- Carifio, J., & Perla, R. J. (2007). Ten common misunderstandings, misconceptions, persistent myths and urban legends about Likert scales and Likert response formats and their antidotes. *Journal of Social Sciences*, 3(3), 106-116.
- Castle, B. J., Russell, E. J., & Broome, R. E. (2020). The nature of disciplinary processes in police organizations: The disciplinary continuum. *IPSA Journal, Fifth Edition.*, pp. 68-106.
- Castle, B. J., Russell, E. J., & Broomé, R. E. (2022). Stressors related to administrative discipline of police officers: A grounded theory study. *IPSA Journal, Seventh Edition.*, pp. 5-42.

- Clements, A. J., Sharples, A., & Kinman, G. (2021). Identifying wellbeing challenges and solutions in the police service: A World Café approach. *The Police Journal*, 94(2), 81-101. <https://doi.org/10.1177%2F0032258X19898723>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2<sup>nd</sup> ed.). New York: Psychology Press.
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G\*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41, 1149-1160. <http://doi:10.3758/BRM.41.4.1149/>
- Fein, E. C., Benea, D., Idzadikhah, Z., & Tziner, A. (2020). The security to lead: A systematic review of leader and follower attachment styles and leader–member exchange. *European Journal of Work and Organizational Psychology*, 29(1), 106-125. <https://doi.org/10.1080/1359432X.2019.1696774>
- Garbarino, S., Cuomo, G., Chiorri, C., & Magnavita, N. (2013). Association of work-related stress with mental health problems in a special police force unit. *BMJ Open*, 3(7), e002791.
- Geisler, M., Berthelsen, H., & Hakanen, J. J. (2019). No job demand is an island – interaction effects between emotional demands and other types of job demands. *Frontiers in Psychology*, 10, 1-11. <https://doi:10.3389/fpsyg.2019.00873>
- Gimpy, D., & Rajan Vohra, M. (2014). Estimation of missing values using decision tree approach. *International Journal of Computer Science and Information Technology*, 5(4), 5216-5220. <http://pzs.dstu.dp.ua/DataMining/preprocessing/bibl/tree.pdf>

- Gottfredson, R. K., Wright, S. L., & Heaphy, E. D. (2020). A critique of the LMX construct: Back to square one. *The Leadership Quarterly*, 31(6), 1-17.  
<https://doi.org/10.1016/j.leaqua.2020.101385>
- Grant, H. B., Lavery, C. F., & Decarlo, J. (2019). An exploratory study of police officers: Low compassion satisfaction and compassion fatigue. *Frontiers in Psychology*, 9, 1-5.  
<https://doi.org/10.3389/fpsyg.2018.02793>
- Gravetter, F. J., & Wallnau, L. B. (2017). *Statistics for the behavioral sciences* (10<sup>th</sup> ed). Cengage Learning.
- Gregory, B., & Osmonbekov, T. (2019). Leader–member exchange and employee health: An exploration of explanatory mechanisms. *Leadership & Organization Development Journal*. <https://www.emeraldinsight.com/0143-7739.htm>
- Jager, J., Putnick, D. L., & Bornstein, M. H. (2017). More than just convenient: The scientific merits of homogeneous convenience samples. *Monographs of the Society for Research in Child Development*, 82(2), 13-30. <https://doi.org/10.1111/mono.12296>
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692-724. <https://doi.org/10.2307/256287>
- Kandakai, T. L., Ding, K., Broomfield, T. S., & Iverson, S. V. (2013). Perceptions matter: Case studies of policing statutory rape. *Journal Of Ethnographic & Qualitative Research*, 7(3), 155-168.
- Kelling, G. L., & Bratton, W. J. (1997). Declining crime rates: Insiders' views of the New York City story. *Journal of Criminal Law and Criminology*, 88, 1217.  
<https://scholarlycommons.law.northwestern.edu/cgi/viewcontent.cgi?article=6977&context=jclc>

- Kim, J. S., & Gatling, A. (2018). The impact of using a virtual employee engagement platform (VEEP) on employee engagement and intention to stay. *International Journal of Contemporary Hospitality Management*, 30(1), 242-259.  
<https://www.emeraldinsight.com/0959-6119.htm>
- Lam, L. W., Xu, A. J., & Loi, R. (2018). Is emotional engagement possible in emotionally demanding jobs? The role of LMX (LMX). *Journal of Personnel Psychology*, 17(1), 42-52. <https://doi.org/10.1027/1866-5888/a000194>
- Lennie, S., Sarah, E. C., & Sutton, A. (2019). Robocop-the depersonalization of police officers and their emotions: A diary study of emotional labor and burnout in front line British police officers. *International Journal of Law, Crime and Justice*, 61, 1-13.  
<https://doi.org/10.1016/j.ijlcrj.2019.100365>
- Liden, R. C., & Maslyn, J. M. (1998). Multidimensionality of LMX: An empirical assessment through scale development. *Journal of Management*, 24(1), 43-72.  
<https://doi.org/10.1177/014920639802400105>
- Marchand, A., Nadeau, C., Beaulieu-Prévost, D., Boyer, R., & Martin, M. (2015). Predictors of posttraumatic stress disorder among police officers: A prospective study. *Psychological Trauma: Theory, Research, Practice, and Policy*, 7(3), 212.
- Martin, R., Guillaume, Y., Thomas, G., Lee, A., & Epitropaki, O. (2016). Leader-member exchange (LMX) and performance: A meta-analytic review. *Personnel Psychology*, 69(1), 67-121. <https://doi.org/10.1111/peps.12100>
- McCusker, K., & Gunaydin, S. (2015). Research using qualitative, quantitative or mixed methods and choice based on the research. *Perfusion*, 30(7), 537-542.  
<https://doi.org/10.1177/0267659114559116>

- Mircioiu, C., & Atkinson, J. (2017). A comparison of parametric and non-parametric methods applied to a Likert scale. *Pharmacy*, 5(2), 1-12.  
<https://doi.org/10.3390/pharmacy5020026>
- Nix, J., Wolfe, S. E., & Campbell, B. A. (2018). Command-level police officers' perceptions of the "war on cops" and de-policing. *Justice Quarterly*, 35(1), 33-54.  
<https://doi.org/10.1080/07418825.2017.1338743>
- Oliver, W. M. (2017). Depolicing: Rhetoric or reality? *Criminal Justice Policy Review*, 28(5), 437-461. <https://doi.org/10.1177/0887403415586790>
- Ranta, R. S. (2012). Stress and anger management among police personnel through Indian psychological techniques. *Pertanika Journal of Social Sciences & Humanities*, 20(4).
- Reynolds, P., & Hicks, J. (2015). 'There is no justice in a police department': a phenomenological study of police experiences. *Police Practice and Research*, 16(6), 469-484. <https://doi.org/10.1080/15614263.2014.931229>
- Rich, B. L., Lepine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal*, 53(3), 617-635.  
<https://doi.org/10.5465/AMJ.2010.51468988>
- Schiffinger, M., & Braun, S. M. (2020). The impact of social and temporal job demands and resources on emotional exhaustion and turnover intention among flight attendants. *Journal of Human Resources in Hospitality & Tourism*, 19(2), 196-219.  
<https://doi.org/10.1080/15332845.2020.1702867>
- Shuck, B., & Reio, T. G., Jr. (2014). Employee engagement and wellbeing: A moderation model and implications for practice. *Journal of Leadership & Organizational Studies*, 21(1), 43-58. <https://doi.org/10.1177/1548051813494240>

- Stone, C., Foglesong, T. S., & Cole, C. M. (2009). *Policing Los Angeles under a consent decree: The dynamics of change at the LAPD*. Cambridge, MA: Program in Criminal Justice Policy and Management, Harvard Kennedy School.
- Sullivan, G. M., & Artino, A. R., Jr. (2013). Analyzing and interpreting data from Likert-type scales. *Journal of graduate medical education*, 5(4), 541-542.  
<https://doi.org/10.4300%2FJGME-5-4-18>
- Taris, T., & Schreurs, P. G. (2009). Explaining worker strain and learning: How important are emotional workload? *Anxiety, Stress & Coping*, 22(3), 245-262.  
<https://lopes.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=s3h&AN=37579737&site=eds-live&scope=site>
- Torres, J., Reling, T., & Hawdon, J. (2018). Role conflict and the psychological impacts of the post-Ferguson period on law enforcement motivation, cynicism, and apprehensiveness. *Journal of Police and Criminal Psychology*, 33(4), 358-374.  
<https://doi.org/10.1007/s11896-018-9284-y>
- Tuckey, M. R., Winwood, P. C., & Dollard, M. F. (2012). Psychosocial culture and pathways to psychological injury within policing. *Police Practice & Research*, 13(3), 224-240.  
[doi:10.1080/15614263.2011.574072](https://doi.org/10.1080/15614263.2011.574072)
- Tyler, T. R. (2017). From harm reduction to community engagement: Redefining the goals of American policing in the twenty-first century. *Northwestern University Law Review*, 111(6), 1537-1564.
- van Gelderen, B. R., Konijn, E. A., & Bakker, A. B. (2017). Emotional labor among police officers: A diary study relating strain, emotional labor, and service



- performance. *International Journal of Human Resource Management*, 28(6), 852-879.  
<https://doi.org/10.1080/09585192.2016.1138500>
- Van Steenbergen, E. F., van der Ven, C., Peeters, M. C. W., & Taris, T. W. (2018). Transitioning towards new ways of working: Do job demands, job resources, burnout, and engagement change? *Psychological Reports*, 121(4), 736-766. <https://doi.org/10.1177/0033294117740134>
- van Veldhoven, M., & Meijman, T. F. (1994). *The measurement of psychological strain at work: The experience and evaluation of work questionnaire*. Amsterdam, The Netherlands NIA.
- van Veldhoven, M., Prins, J., & van der Laken, P. (2015). QEEW 2.0. SKB Amsterdam
- White, M. D. (2003). Examining the impact of external influences on police use of deadly force over time. *Evaluation Review*, 27(1), 50-78. <https://doi.org/10.1177/0193841X02239018>
- Wolfe, S. E., & Nix, J. (2016). The alleged “Ferguson effect” and police willingness to engage in community partnership. *Law and Human Behavior*, 40(1), 1-34.  
<https://doi.org/10.1037/lhb0000164>
- Wolfe, S. E., Nix, J., & Campbell, B. A. (2018). Police managers' self-control and support for organizational justice. *Law and Human Behavior*, 42(1), 71-82.
- Wortley, S., & Tanner, J. (2004). Discrimination or ‘good’ policing? The racial profiling debate in Canada. *Our Diverse Cities*, 1, 197-201. <https://www.yorku.ca/lfoster/2019-20/RESP4052>.
- Yilmaz, K. (2013). Comparison of quantitative and qualitative research traditions: Epistemological, theoretical, and methodological differences. *European Journal of Education*, 48(2), 311-325.

## Appendix A.

### Model Summary, ANOVA Table and Regression Coefficients

#### *Model Summary Including the Durbin-Watson Test*

RQ	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	SE of the estimate	Durbin-Watson
1-3	.698	.487	.480	.49721	2.082

*Note.* The Criterion variable was the same for each RQ: Emotional Engagement. The Predictor variables were different for RQ 2 (Emotional Workload) and RQ 3 (LMX).

#### *ANOVA Table for RQ 1*

Model	SS	df	MS	F	Sig.
Regression	33.755	2	16.877	68.270	.000
Residual	35.599	144	.247	-	-
Total	69.354	146	-	-	-

*Note.* Dependent Variable: JES Composite. Predictor: LMX Composite, QEEW Composite

#### *Regression Coefficient and Standard Errors for RQ 1*

Variable	B	SE	Beta	t	Sig.
Constant	1.923	.263	-	7.322	.000
QEEW	-.001	.002	-.017	-.273	.785
LMX	.551	.049	.702	11.282	.000

*Note.* Dependent variable: JES

#### *Regression Coefficient and Standard Errors for RQ2*

Variable	B	SE	Beta	t	Sig.
Constant	1.923	.263	-	7.322	.000
QEEW	-.001	.002	-.017	-.273	.785
LMX	.551	.049	.702	11.282	.000

*Note.* Dependent variable: JES

#### *Regression Coefficient and Standard Errors for RQ3*

Variable	B	SE	Beta	t	Sig.
Constant	1.923	.263	-	7.322	.000
QEEW	-.001	.002	-.017	-.273	.785
LMX	.551	.049	.702	11.282	.000

*Note.* Dependent variable: JES



Analysis of the Incident Command System and Decision-Making-Process of Wilderness-Search-and-Rescue-Philippines (WISAR)

John Matthew Villapol  
Wilderness Search and Rescue Philippines  
Calle Alava 9, 5C, Madrid, Madrid, Spain (28017)  
+34 615-513-768  
jmvillapol@gmail.com

# **Analysis of the Incident Command System and Decision-Making-Process of Wilderness-Search-and-Rescue-Philippines (WISAR)**

**Villapol, John Matthew**

**Wilderness Search and Rescue Philippines**

## **Abstract**

This study was conducted to determine how the Wilderness Search and Rescue Philippines (WISAR) Inc, makes group decisions, specifically during the course of their training program for their Batch *Magayon*. The study sought to compare the decision-making process of the Top Ten Prominent WISAR Instructors of Batch *Magayon*, on Five Key Themes of issues faced by the group, to the process used within the Incident Command System (ICS), an ad-hoc organizational structure and management system mandated by the Philippine Government to be used by all first responder groups operating in the country.

The research had an initial survey of 75 instructors from WISAR, used to draw out the Top Ten Prominent WISAR Instructors and Five Key Themes for decision making with the use of Social Network Analysis followed by a Focused Group Discussion guided by the Function Oriented Interaction Coding System, of Hirokawa and Gouran, with the Top Ten Prominent WISAR Instructors, to further understand the decisions made and reasons thereof.

The data suggested that the actual event and organization did not entirely follow the ICS, instead the decision-making processes prioritized the whole group's intentions, whilst adapting to the ICS. Their personalization of the use of the ICS improved their efficiency at making decisions, despite having social issues among the members. The recommendations are for organizations to personalize their use, understanding, and application of the ICS, for a more streamlined decision making process that can work within first responder organizations/teams.

**Key Words:** Disaster Management, Emergency Response, Incident Command System, Volunteer, Wilderness Search and Rescue, Decision-Making, Training, Organizational Management.

## Introduction

In 2015, the Millennium Development Goals, a declaration signed in September 2000 by 189 countries including the Philippines, was updated into Sustainable Development Goals (SDG). It is through the SDGs that the need to fight climate change and its effects was revamped as one of the goals United Nations member countries must achieve in 2030. Also, SDG 11, “Make cities and human settlements inclusive, safe, resilient and sustainable”, exactly 11b which targets, “By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels.”

According to Orallo (2011), the Philippines is “one of the most disaster-prone countries in the world”. Based on history, earthquakes such as the magnitude 7.8 Luzon earthquake of 1990 can prove to be very fatal if not managed properly. The estimated 1,621 deaths of that quake, as well as with a consensus of the data gathered from various disasters, could have been prevented if there was an effective “disaster mitigation program”. One of the findings of the research report of Orallo (2011) from the Office of Civil Defense is that there should be more volunteers that undergo training courses, especially with regards to managing disasters. Furthermore, there was a need to find the “most appropriate and effective organizational framework for disaster response”, a system for the “division of disaster management responsibilities among various levels of organization”, and to emphasize “the role of NGOs in disaster management”. It is with this reason that the Philippine Republic Act 10121 or the “Philippine Disaster Risk Reduction and Management Act of 2010” was constituted.

Upon passing RA10121, then National Disaster Coordinating Council was renamed National Disaster Risk Reduction and Management Council (NDRRMC). NDRRMC adopted the United States' Incident Command System (ICS) as an on-scene, all-hazard management system. This action is in response to Memorandum Circular No. 04, s. 2012 – addressed to the agency stating the guidelines on the use of ICS. Moreover, Rule 7, in the Implementing Rules and Regulations of RA10121, established ICS as part of the country's disaster risk reduction system to manage consequences of emergencies and disasters. This system was mandated to be used in all inter-agency related disaster and non-disaster event operations nationwide. Some of these disasters and events include the aforementioned storms Yolanda, Ondoy, and Pablo, as well as, national events such as the ASEAN Summit meetings, respectively, according to Carandang (personal correspondence, September 10, 2017).

Given that the ICS is linked to the SDG's and is mandated in RA 10121 for all responder groups in the country, as a means to manage first responders during disasters and other events, especially emergency responder training, it is imperative that we look at the ICS as a point of reference when analyzing a first responder group; especially one that trains their responders with the system, as stated by Carandang (lecture, March 17, 2018).

According to Noori (2016), disasters and events “create complex conditions” that require a large amount of intra and inter-organizational coordination and hierarchical systems. The concern however, is that the nature of different organizations and individuals with different protocols, training backgrounds, and methodologies may not mesh if placed within the ICS structure as per Noori (2016). This means that it is possible that the decision-making processes of those that use the ICS may not necessarily follow the ICS to the letter. In turn, this could lead to decisions that are not deemed as high-quality.

This is somewhat confirmed to be the case in the local setting of emergency response organizations, both volunteer and mandated, as noted by Carandang (personal correspondence, September 10, 2017). He cites the example of the structure of the Philippine National Police (PNP), where the hierarchy of their system used in the decision-making process (i.e. the General is superior to the Lieutenant, wherein the Lieutenant must follow the express orders of the General without question) supersedes the ICS method of managing a situation. As claimed by Carandang (personal correspondence, September 10, 2017), during the training of the PNP for the ICS, many of the officers followed the traditional ranking system, instead of the ad-hoc system that the ICS uses.

Canadian Interagency Forest Fire Centre (2012) states that the ICS was designed to provide an avenue for these various disciplines to achieve the collaboration, meaning the pooling of information, resources, and personnel, such that they work together to achieve the common goal of responding to the disasters and events. This implies the importance of communication as a means of managing information and creating decisions among responders. This further implies that communication is considerably important, during the training of new emergency responders. The Canadian Interagency Forest Fire Centre (2012) further explains that the ICS then would produce a synergy that the response groups desperately need, to provide adequate and necessary assistance to the people on scene. The system can work from events with very large numbers of people, to very small numbers thereof. Because of its adaptable ad-hoc nature of organizational structuring, there is a need for the analysis of who made the decisions and the decision making processes itself, since a single ICS can have multiple members of a group become part of the leadership and decision making roles, and this could potentially cause some problems in decision-making.

In line with this, Wilderness Search and Rescue Philippines (WISAR), a volunteer first responder group that makes use of the ICS in order to provide its members with an ad-hoc style organizational and management structure, intends to apply the ICS during all their events and operations, as per Carandang (lecture, March 17, 2018). Carandang (personal correspondence, September 10, 2017) also explained that WISAR is a unique volunteer group as it is the only non-military organization that answers directly to the Philippine's Office of Civil Defense, and has been involved with national disasters such as Super-Typhoon Yolanda and the Bohol Earthquake in October 2013. WISAR creates a direct impact on the DRRM on the national levels, whose members are also members of DRRM councils, and work in various fields related to DRRM.

This study aims to describe the group decision-making of the Incident Management Team (IMT) of the ICS during the training of *Magayon*. The study focuses on the 9 weekends that Batch Magayon had for training. This looks at the ICS and the most critical decisions made by the instructors, such that an analysis of the actual decision-making process used during the training, could be formed. This allows for the description of the decision-making process and the determining, using the Functional Perspective of Group Decision Making of Hirokawa and Gouran, whether or not these were high-quality decisions, and its effects on the training itself. Using the ICS that the instructors used throughout the training as a basis for comparison, the ideal decision-making process of the group with the use of the IMT can be cross-referenced with the actual decision-making process during the training.

Under the assumption that the ICS was the system that WISAR had used for *Magayon*, the following would apply. Using the Social Network Analysis (SNA) theory, it is possible to determine the members of those who make critical decisions for the group throughout the



training; specifically by allowing the set of instructors to be narrowed down into the core group of decision-makers, or key actors. This study attempts to mimic what was similarly done in a study conducted by Krebs (2006) on “emergent communities among faculties in various universities”.

The SNA provides a means to understand the interaction network between the instructors that actually occurred during the training, which can help narrow down the actual IMT involved with the decision making process of the group, as Krebs (2006) had indicated that “[...] social networks can be used to represent, identify, and measure any type of correlations between any kind of [...] knowledge processing entities”. Those with the highest links between them, with regards to decision-making, will essentially be the core group that will be analyzed. The SNA’s application in a broad spectrum of fields is supported by Carrington (2005) where it is claimed that the SNA is applicable to any kind of group of individuals or entities.

From this core group, using the Functional Perspective of Group Decision Making of Hirokawa and Gouran, a set of critical decisions and an analysis of the way these critical decisions were made could be developed. Hirokawa’s Function-Oriented Interaction Coding System (FOICS) provides a checklist that can be applied to the core group, such that it can be utilized as a descriptive measurement of the decision-making processes naturally found during the event. The end result of this analysis is the identification of the critical decisions made by the WISAR Instructors. This also attempts to discover if the ICS of WISAR was able to generate what Hirokawa called “High Quality Decision[s]”, which in turn would describe the decision-making processes that had occurred, and if these resulted in the success of the ICS during the training.

With regards to the previous studies done on the effectiveness of the ICS, the study of Seibel (2016) provides a brief history and analysis of the ICS, wherein he attempts to study the effectiveness of the implementation of this system across the various fields related to disaster management and response in the United States of America. Specifically, he focuses on the ‘adult learning processes’ and how it is used to train individuals regarding the ICS. It was not a communications study but proved to be relevant with regards to understanding the ICS further.

There have been no development communication related studies to date that focus on volunteer first responder groups, such as WISAR, moreover considering the aspect of the Incident Command System (ICS) in the Philippines. Being a volunteer group, the nature of its members is not mandated and does not follow the rigid structure of roles that most organizations have, specifically the roles that a traditional emergency response organization would have, as described by Carandang (personal correspondence, September 10, 2017). One of the more notable differences is that a volunteer group relies more on the determination of its members, rather than the almost forced requirements set by the traditional emergency response organization. This makes the study relatively unique, as it is difficult to understand the workings of both the ICS and WISAR, without being oriented about them.

### **Emergency Response**

To provide a background for the study, it is crucial to understand the situation of Emergency Responders. Emergency Responders are in the front lines of any natural disaster or human induced calamity that affect people in a way that would be considered an emergency, or in events that would pose a considerable risk to human health and safety. These could include Emergency Medical Services, Fire Protection, Local and National Police, Military units, and

other similar organizations that function in the day to day lives of people, and not necessarily only during disasters or events.

As stated in this article from Professional Safety, “Emergencies are unusual events” that does not mean, however, that people should not train for these events as stated by Schroll (2002). Moreover, with the advent of climate change, emergency situations have become more frequent, such that there is a growing need for Emergency Responders and more training with regards to this, as per NDRRMC (2012).

As established by Llavador (2006), people trained in these Emergency Procedures may not always have the same procedures, as they may vary in techniques and terminologies, although possibly from the same classifications (i.e. Emergency Medical Services, Fire Protection, Police, Military, etc.). In the case of DRRM, all these professions or sub-disciplines play a role in specifically the management of disasters, wherein the risk-reduction element has already been introduced, specifically to mitigate the effects of said disaster or event, as explained through NDRRMC (n.d.).

According to Carnes (2017) is also known that as the emergency grows, scale, and length of time, there is the need for more Emergency Responders, and as such, the “heterogeneity” of the sub-disciplines also increase. This makes it difficult for the groups to coordinate and work together among themselves and other groups, to achieve the intended goal of mitigating the effects of a given disaster or event, as seen in the 2014 Landslide disaster of Washington State in the United States of America, according to Carnes (2017).

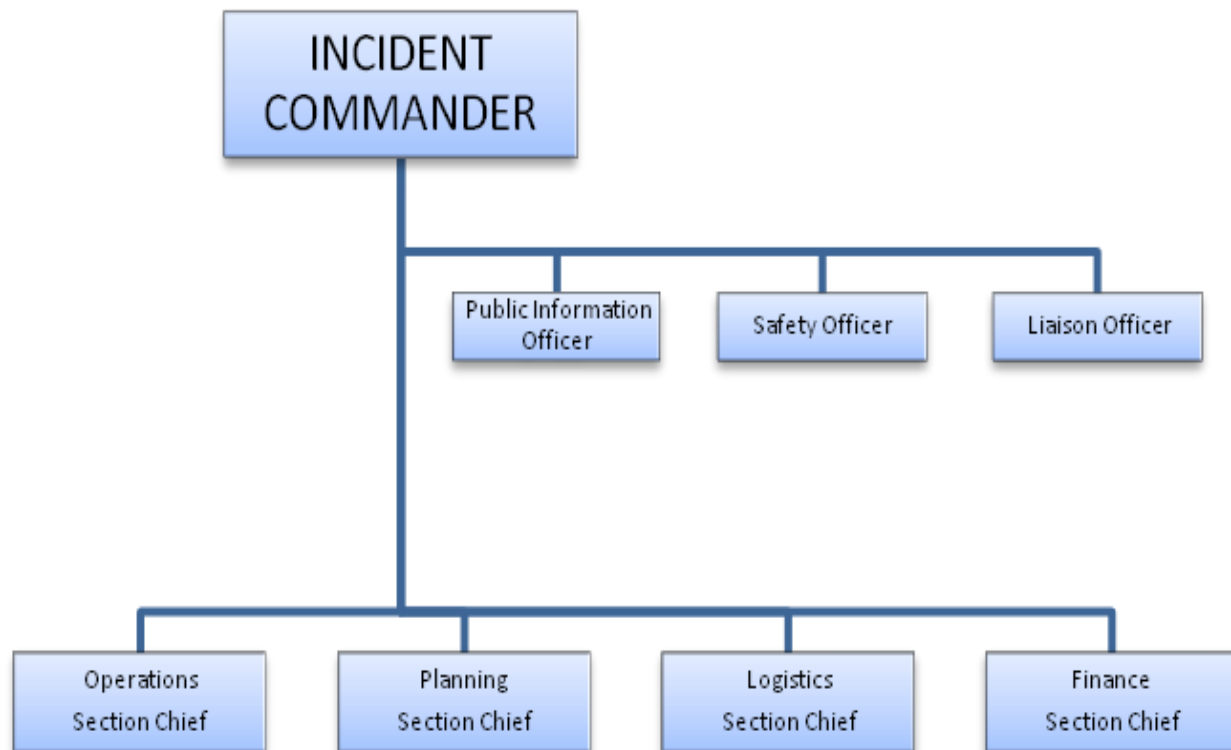
### **Emergency Response in the Philippines**

As stated by Schroll (2002), as an Emergency Responder, it is their job to protect, serve, and provide medical assistance among other things that are needed by people in an emergency.

In line with this, many Emergency Responder groups (in the Philippine setting, for example, would be the Philippine National Police, Bureau of Fire Protection, Armed Forces of the Philippines and Emergency Medical Services) must work together to provide the necessary care, relief, and protection required by individuals or groups affected by emergency situations. Furthermore, Schroll (2002) explained that their individual tasks are meant to serve different purposes in an emergency; the police force protects the population in a given area in terms of security, the emergency medical services provide medical care for wounded people, and the fire department would aid, not just in cases that have fire, but those that require high-angle rescue and even collapsed structure extrication. There are also those who work in technical rescue as stated by Phillips (2014), such as those who work in National Parks, or mountainous terrains, who also provide high-angle rescue, as well as other sub-disciplines necessary for their profession.

Considering all of these, there is a need for these diverse professions (i.e. emergency medical services, police and safety services, fire protection, urban search and rescue, wilderness search and rescue, etc.) to find a way to work together as implied by Aquino, B. S., III. Executive Order No. 082 (2012). The need for them to work together is brought about by emergency situations that are multidisciplinary in nature, primarily those that can be classified in crisis levels, as stated by Griffiths (2017) and reinforced by Howard, et al. (2017).

## The Incident Command System



*Figure 1. ICS Framework (Canadian Interagency Forest Fire Centre, 2012)*

The ICS was chosen for its unique structure and capability of effectively handling multiple emergency response organizations attempting to achieve a common goal, as well as internal organizational management, according to Hannestad (2005). The ICS has been tested, improved on and adopted by Emergency Response groups around the world as claimed by the US Department of Homeland Security (2004). Upon further research, the ICS is seen to extend into various non-emergency fields, such as in a hospital setting, as well.

As stated by Carandang (lecture, March 17, 2018), the brief history shows that there was no previous discerned need for inter-organizational structuring, considering that each department has their own protocols and procedures. However, as stated by the US Department of Homeland Security (2004), the ICS is “widely applicable” and can be used to handle long or short-term

disasters, a wide variety of events from simple to complex, including non-emergency events, at the field and managerial level, with respect to the five major areas necessary in the times of disasters or events, which will be discussed later. This system is implemented by both public and private sector, the United States government on all levels including tribal and even non-government entities and can be used to facilitate organization for various disciplines.

As stated by Hannestad (2005), the ICS is a functional system that works for disasters due to its capacity to be a modular system that allows for adaptation into the necessary tasks and roles of those in the field. He claims that the downside, however, to this is that it may not be applicable to all large-scale disasters, especially extremely large-scale ones, in the United States of America. Further, he states that although it may not be the “ideal” system to be used, as there could develop many alternatives, it does provide an easy-to-implement and cost-efficient means of managing disasters, and the information that lies within each situation. He also says that communication plays an important role in the ICS, such that without the factor of communication, it would not inherently function as it does. It is said that it was the best “bang for buck” system that could be implemented for these kinds of situations.

NDRRMC (n.d.) claims that the ICS was chosen and mandated in 2012, as the solution to the organizational structuring of the Emergency Responder groups in their respective localities or areas of operations, as well as, on large scale national level events.

In the article of Dunlop, et al. (2014), it is even recommended that the ICS be applied to school systems, in conjunction with the proper equipment, personnel, and training to increase the survivability of the students and staff of the school during times of disasters and even during events, such that these can be managed more effectively.

Therefore, it is imperative to understand the workings of the ICS such that it can be communicated to these Emergency Responders in a way that they would understand and apply the system in these situations. It is often the case that these groups come out clashing in terms of both the passing of information and orders through a system of command, especially when dealing with groups of different emergency response backgrounds or sub-disciplines, as stated by Carandang (personal correspondence, September 10, 2017).

## **Literature Review**

This literature review is primarily focused on the two theories that are being used in order to determine Key Actors within the WISAR Batch 7 *Magayon* training group, and the effectiveness of their decision making process. This is the predominant focus of the study, as the ICS is a well established system that is evidenced to function well. This is done in order to solidify the understanding of what constitutes an effective group decision, and who are the members of the group that make the decision. In turn this will help determine how well the ICS is used and how its use could be improved within the organization, as well as, with other similar organizations.

## **Social Network Analysis**

Social Network Analysis (SNA) is a key element in many studies, especially with regards to determining how relationships exist and function among people. Providing people with a graphical and image representation of networks to find the necessary information about the relations of people, the SNA has been utilized in many studies, and with the intent to use the SNA for this study to help narrow down the key actors of decision-makers within the WISAR instructors during the training of Batch Magayon. To aid in the context of the use of the SNA for this application, the following studies have been reviewed.

In 2009, another study was conducted for a master's thesis; with the implications focusing on Open Source Software Projects (OSSP) made by Vreugdenhil (2009) where small developer networks were distributed online. Although the findings were that there was no relationship between the social network community of the developers and the success of their OSSP, the relationships were not inherently unimportant as explained by Vreugdenhil (2009). The study further claims that there are many factors that can affect the study of these kinds of social networks, such as the human factors associated with each node or individual Vreugdenhil (2009).

In a set of studies conducted by Krebs (2006), it is claimed that the use of the SNA has wide applications in varieties of fields, given the condition that there are only information or knowledge processing entities involved with the network. Most of these, however, were used in conjunction with other theories. This further solidifies the use of the SNA in this study, where the condition of using only information or knowledge processing entities as subjects of the study is fulfilled. This also aids in the idea of using the SNA in conjunction with another theory to have a better grasp of the concepts being studied. Social Network Analysis (SNA) is a method of analysis that involves specifically, information processing or knowledge processing entities as per Krebs (2006). These information processing or knowledge processing entities includes a wide variety of possible subjects of the study, like cells, animals, computer software, automated machines, people, organizations, group entities (corporations, partnerships, etc), and others. It is a method of generating information that is vital to understanding of the different connections between two "nodes" or subjects inside a given social system or group. As per Denny (2014), the connections between the nodes are said to be "ties", and it is postulated that the more ties a given node has, the higher their connectivity with one another. This translates to higher "degree



centrality” as explained in Denny (2014). Nodes or subjects that have a higher degree centrality are perceived to have a higher level of participation in a given social system, as explained by Carrington (2005).

The process of analysis can be done with the use of the program called SocNetV2.4, computer software, which is designed to create a graphic representation of a social network, showing the more essential “nodes” based on the amount of “ties” that a “node” has. This also allows for the development or input of an “Adjacency Matrix”, which is essentially a table that encodes the connections between “nodes”, effectively allowing analysts to see the number of “ties” for each specific “node”, as explained by Denny (2014). This allows for the drawing out of the essential “nodes” which become the key actors; the instructors of WISAR that are to be studied using the subsequent theory.

The analysis of this study will utilize the various Centrality Properties of SNA. Specifically, this study will look at Degree Centrality, which focuses on the interconnectedness of one actor to another, as per Denny (2014), which helps in the determining of the key actors. This study will also look at Betweenness Centrality, which focuses on those actors that function as a link between two other actors, as per Denny (2014), which can further help assess the importance of the key actors. This study will also look at Closeness Centrality, which gives an idea of how close an actor is with another, in such a way that a core group can be seen, as per Denny (2014), although due to the size of the respondents of this study, may not be as distinguished. Lastly, this study will also look at the Eigenvector Centrality, which “[...] an actor is connected to other well-connected actors.”, as per Denny (2014), which further helps solidify the key actors as members of a core group. This group of key actors will essentially be the participants of the FGDs such that their decision-making processes can be observed.

For further context, the previously mentioned studies using the SNA could be related to this study. The study conducted on Open Source Software Projects relates to the training of Batch Magayon, wherein it is possible that the use of SNA alone is not enough to accurately describe and emphasize the group decision-making process that occurred during the training, hence the need for the use of another theory, such as Hirokawa and Gouran's Functional Perspective on Group-Decision Making. Further, the meta-analysis of Orlitzky and Hirokawa (2001) is instrumental in this study as it can be a point of reference for some of the more ardent questions to ask the respondents. The study of VanderVoort (2002) is also imperative in the formation of this study, as the procedure for data gathering focuses on interviews instead of a formal analysis of prerecorded situations, as well as, hopes to provide a backbone for the creation of a measuring system for the effectiveness of an ICS used in an event or disaster. The last mentioned research conducted by Gouran, et al (2016) addresses a number of concerns, specifically by looking at a group that does fulfill the theory's assumptions and focuses on the interaction between the members of the said group. The theoretical assumptions as analyzed by Gouran, et al (2016) are taken into account for this study.

### **Functional Perspective on Group Decision Making**

The following are studies that analyze the Functional Perspective on Group Decision Making by Gouran and Hirokawa and attempt to test the validity thereof. Hirokawa (1994) had begun re-assessing his theory, noting that communication is an essential part of the group decision-making process, where the utterances of the members of a group "do more than just provide information". He claimed that "it makes good sense to believe that group interaction is consequential", wherein interaction between the members of a given group can inherently affect the decisions they make, referencing a work of Charles Pavitt (Hirokawa, 1994) which criticized

his theory. He admits that Pavitt's critique does hold value but emphasizes Pavitt's claim that the problems highlighted are not "insurmountable" and can be "effectively overcome through innovative thinking and creative use of existing methods for gathering and analyzing group interaction data". This study attempts to do that with its application of the theory in a setting where there is a "Task-Oriented" volunteer group, which fulfills the theory's assumptions, being observed through Key Informant Interviews and Focused Group Discussions, rather than the recommended method of recording the entire decision-making process.

In recent years, Orlitzky and Hirokawa (2001) conducted a meta-analysis of the Functional Perspective on Group Decision Making called *To Err Is Human, To Correct For It Divine*, trying to single out and address certain criticisms for the theory that have developed over the years. Their research overall suggested that the theory was effective, although for some situations and group circumstances it may prove to be more effective than others. They further emphasized that for future researchers; there should be a focus on allowing the group in focus to discuss the Negative Decision Attributes, such that it proves to be a more powerful tool in shaping the decision-making capacity of the group towards achieving a High-Quality Decision. Further studies in recent years include VanderVoort (2002) and her article on Functional and Casual Explanations in Group Communication Research. She explained that Gouran and Hirokawa's theory had more to do with the requirements for good group decisions rather than "etiology of functional statements". She further claims that the theory's functional approach should take a casual view. As she defined casual view, the context should concern itself more with the guidelines of action, rather than an accessible description.

Even further studies, such as in Wittenbaum, et al (2004), affirm that Gouran and Hirokawa's theory is a "useful framework for understanding a variety of group performance

issues”, but in the end also “encourage readers to use the functional perspective in conjunction with other perspectives [...] to obtain a balanced approach to understanding small group processes”. Although this study does focus on the workings of a small group, Wittenbaum, et al. (2004), do note that the Functional Perspective on Group Decision Making focuses primarily with the ideas of task-oriented groups and their ability to make performance-based decisions, and their effectiveness. For this study, however, the focus is indeed the decision-making processes of the groups involved, which this article does affirm to be appropriate.

Another study that resulted in a possible limitation of the theory’s capabilities was conducted by Li (2007), where she applied the Functional Perspective on Group Decision Making as a framework, to multiple groups of students, one set of which were tasked to produce a final project through the internet, while the other set were tasked to do this through the traditional face-to-face route. Although the study was set in a controlled situation, where the respondents were not necessarily faced with making difficult and critical decisions as in the case of emergency groups, it still provided a background for the theory. The study compared the results and discovered that the recommended elements found in the Functional Perspective on Group Decision Making, did not play a role in making high-quality decisions. The study showed that there was no notable difference between the decision-making of the two groups that were intended to be studied. Li (2007) argued that the likely reason behind this is the culture of the Chinese of valuing the friendship of a person, more than the attempt to achieve a goal. This reason, however, shows that one of the assumptions of the Functional Perspective on Group Decision Making was not well accounted for. The assumption that the group being studied is one that is “Task-Oriented” was not necessarily incorporated into the study, in which case; the group must inherently value the achievement of the goal over the other socio-emotional aspects of the

groups interaction for the study to be appropriate. This study, however, draws out the “Task-Oriented” group that values the achievement of the group goal, over the socio-emotional aspect of the group’s interaction.

The issue is further discussed by Gouran, et al. (2016) as published in a journal article that focused on the current state and the evolution of the theory that they had previously proposed. They had traced the development of their theory, and the studies that were conducted on it, as well as the testing of the theory across various groups. They highlight several issues that may prove to be a hindrance to the accuracy of the theory. One of which revolves around the participant’s knowledge, capabilities, and attitudes, where they highlight that many researchers forget that one of the assumptions of the theory is that the participants of the group-decision making process should have the appropriate knowledge, capabilities, and attitudes to make the decisions. Another was that there is a lack of experimental research regarding groups that focus on interaction, wherein they say that studies should attempt to minimize other extraneous influences that may cloud the understanding of the ways communication functions to produce decisions directed towards a group goal. They summarize by stating that their theory has evolve past the “incipient stage” and has achieved “relative stability”, and that their basis on John Dewey’s work on reflective thinking proved to be fruitful for the theory.

Gouran and Hirokawa’s theory, the Functional Perspective on Group Decision Making, primarily focuses on how groups make “High-Quality Decisions”, and the process by which a group would be able to achieve these decisions, as summarized by Griffin (2012). There are four main “Functions” that are performed, which as stated by Schulz (2010), are Problem Analysis, Goal Setting, Identification of Alternatives, and Evaluation of the Positive and Negative Characteristics of the Alternatives. For each Function, a certain member of the group that is

tasked with making the decisions can have three kinds of communication acts in relation to this. These are; *Promotive* which focuses on achieving the goal, *Disruptive* which are acts that derail the group's attempt to achieve the goal, and *Counteractive* which is an act done in contrast to the Disruptive act, or an attempt to bring the group back to attempting to achieve the goal. The idea is to find out, according to Gouran (2016), "which interaction gives warrant to particular choices...".

There are several assumptions that Gouran (2016) has provided for the theory:

1. The members of the decision-making group are oriented towards making an appropriate choice or decision.
2. The choice is "nonobvious" to those making the decisions.
3. The collective resources of the group exceed the individual resources, in respect to the particular task.
4. The requisites of the task are specifiable.
5. The relevant information is available to the members, or can be acquired by the members.
6. The task to be performed is within the intellectual capabilities of the group.
7. Communication is essential to the success of the decision making process of the group.

These are all fulfilled in the case study of the Training of WISAR's Batch *Magayon*. The instructors are geared towards problem solving as indicated by Carandang (personal correspondence, September 10, 2017). The final answer to the problems that an ICS faces involves many decisions that are non-binary, such as the safety and security of the team, the logistical components, and other difficult choices. The group has shared resources, as per

Carandang (2017). The requirements and resources are specified and can be acquired by the members, as evidenced by the ICS Structure (Canadian Interagency Forest Fire Centre, 2012).

The task performed is within the intellectual capacity of the group, since the instructors themselves are first responders. Communication is essential and vital to the success of the endeavor (Canadian Interagency Forest Fire Centre, 2012).

Function Communication Acts	PROBLEM ANALYSIS	GOAL SETTING	IDENTIFICATION OF ALTERNATIVES	EVALUATION OF THE POSITIVE AND NEGATIVE CHARACTERISTICS OF ALTERNATIVES
PROMOTIVE				
DISRUPTIVE				
COUNTERACTIVE				

*Figure 2. FOICS Checklist (Griffin, 2012)*

The Function-Oriented Interaction Coding System (FOICS) Checklist as seen in Figure 2, classifies “functional utterances” or communication acts done by members of the group to classify these into the visible categories. These are then tallied and cross-analyzed with the group’s ideal achievement of the goal.

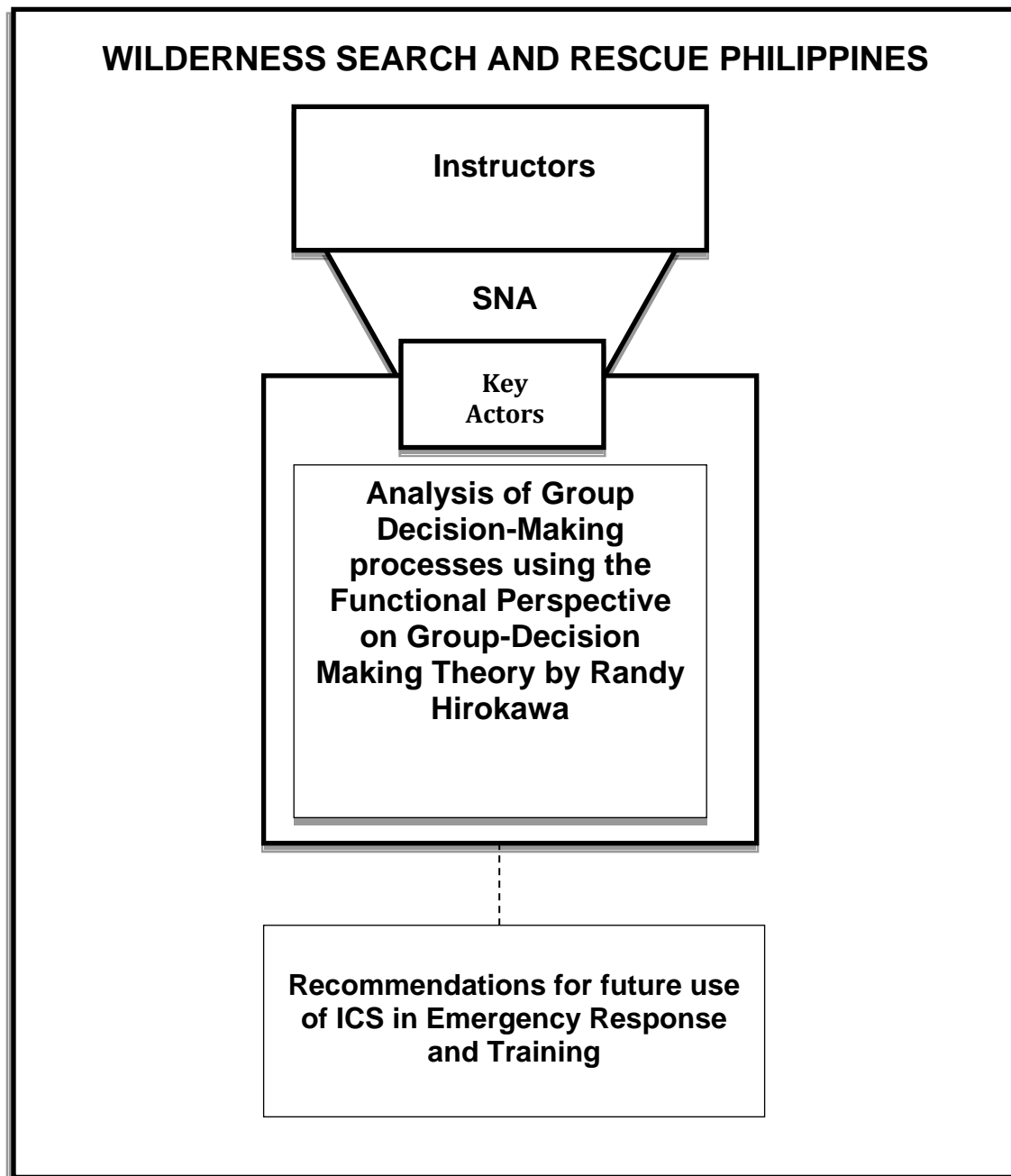
The main requirement for this type of analysis is what Gouran (2016) called “Task-Oriented Groups”, who essentially make the decisions for the group. In the case of this study, the “Task-Oriented Group” being observed is the key actors of WISAR instructors. Further explaining it, Gouran (2016) stated that with an absence of good communication between the members of the Task-Oriented Groups, it is likely that the decisions made would not be

effective. He states that the role of communications here is to assure that "...task requirements are adequately addressed". With this the key actors of decision makers in the training of Batch Magayon, as determined through the SNA, would form Hirokawa's Task-Oriented Groups.



## Discussion

### *Conceptual Framework*



*Figure 1.* Conceptual Framework based from the Social Network Analysis and Functional Perspective on Group Decision-Making

As seen in Figure 3, the idea is that the WISAR Instructors will be filtered out using the Social Network Analysis of their socio-demographic profiles and related responses from a given self-administered questionnaire. Specifically using SocnetV2.4, the analysis will highlight the necessary information that distinguishes the Key Actors from the rest of the instructors of WISAR. The SNA will also draw out the critical decisions made during the training, narrowing down the results into themes. From this, the Key Actors will undergo a Focused Group Discussion, designed to confirm the highlights and themes of the decision-making processes they had utilized throughout the training. These decision-making processes will be analyzed using the FOICS as a basis, to determine if high quality decisions were made. This would then be compared with the success of the ICS used in the training weekends of Batch *Magayon*. Working hand in hand, the theories attempt to narrow down the necessary information and analyze it, to be able to determine the decision-making process that occurs within the group, which will then be compared to the ideal system of the ICS.

## **Summary**

The socio-demographic characteristics of the WISAR Instructors were determined via survey, providing a means of observing the data based on certain socio-demographic characteristics, specifically in relation to the ICS used by WISAR during the training of Batch *Magayon*. The results were able to provide an idea as to the very nature of the field of Emergency Response in general, or specifically the nature of WISAR as an organization.

It was evident that the majority of the instructors fit the following category. The collective responses showed that the commonplace WISAR instructor was a 20-39 year old single male, a college graduate with a corporate job, and was a relatively new member to the

organization, with no specific organizational function, that preferred to communicate via face-to-face communication.

It was shown that most of the instructors were between 20-39 years old, which could be evidence of a relationship between the nature of the field being predominantly physical, and the physical capabilities of those in that age range. It was also shown that the instructors were predominantly male, which could be further evidence of the physically demanding nature of the field. It was evidenced that the instructors were predominantly of single civil status, which provides an idea as to the level of danger involved with the field. It was also seen that the occupations of the instructors were mostly of the corporate business sector, which could be attributed to the cost of this field. It was also found that the majority of the instructors had at least a college degree, which may be evidence of the educational attainment necessary to support this sort of activity. It was seen that majority of the instructors were of the previous batch and had no organizational role, which could be evidence to suggest that interest in the organization wanes over time. It is also evidenced that most of the instructors preferred to communicate face-to-face, which could be evidence to suggest that majority of the instructors are more direct communicators.

Although all of these were seen to have relations, it is important to note that these do not necessarily have causal relationships. Furthermore it is important to note that these results may be evidence of other phenomena or may be seen through a different angle than what was covered in the study. The key WISAR Instructors were seen to not be members of the board of directors for the organization, nor were they specifically members of the IMT. This suggests that the ICS was not strictly followed, and that although there is evidence of the existence of an IMT, the members of the group all took part in some way in terms of deciding for the group.

The overall findings have shown that adapting the ICS to the group's current social dynamics has proved to be an effective way of integrating the system within the very organization itself, as a means to make effective decisions during high-stress scenarios such as during training or operations. The ICS would remain an ad-hoc structure, whilst taking into consideration the strengths of the members of the group, thus allowing for a more seamless decision-making process, with the personnel who are considered effective decision makers within their fields, consolidating the necessary information and making a joint decision effectively, while taking into account the needs of each element of the ICS structure. It is, at the very least, for this organization, a viable way for the group to make effective decisions in short periods of time, with the limited resources available to the group.

## **Methodology**

### **Research Design**

This study used a case study research design in order to investigate the communication practices, specifically concerning decision-making, in its real-life or actual context. This was also done because there are multiple sources of evidence in play concerning a variety of topics, which do not just include communication and communication practices, but also organizational structuring as well as the involvement of a separate technical field of study (where the boundary between the context of the event and the event itself is taken collectively). Furthermore, there were no other studies conducted on this particular combination of topics.

### **Respondents of the Study**

The respondents were the instructors present during the nine weeks of training that WISAR had conducted for batch Magayon. These respondents were chosen because they were most likely to have the knowledge of the intra-organizational workings of the event, which

includes the ICS and group-decision making processes, according to Carandang (personal correspondence, September 10, 2017). The expected population for this study was 75 individual respondents, considering the total number of instructors present during the *Magayon* training.

### **Research Instrument**

The study used a self-administered questionnaire to provide data for the Social Network Analysis, while a set of guide questions for the key informant interviews was developed based on the FOICS checklist. Focused Group Discussion guide questions were also used to ensure that the study does not only take in the individual accounts of decision-making but rather highlight the group's collective decision making.

### **Social Network Analysis (SNA) Survey Questionnaire**

The Social Network Analysis (SNA) has been used in very broad strokes as a means to analyze connections between nodes, such that these connections can be classified and the information that was traveling across people were seen as links between the nodes. In this case the Social Network Analysis saw the members of the Wilderness Search and Rescue Philippines' group of Instructors for the training of Batch *Magayon* as the nodes, and took the 75 participants of the conducted survey as the nodes. Their connections were analyzed through the use of SocNetV 2.4 and the emergent connections were further analyzed.

The survey questionnaire was used to ask the 75 members of the Wilderness Search and Rescue Philippines' group of Instructors for the training of Batch *Magayon* about their communication actions during the training proper. The questionnaire asked the basic socio-demographic information (i.e. sex, educational attainment, occupation, etc.) of the participants and also some socio-demographic information concerned with the organization, such as their roles and their length of membership. They were also asked about the communication mediums

that they had used throughout the training of Batch *Magayon* in case it had bearing on the participants.

Furthermore, the questionnaire also asked the questions concerning the top ten most frequently contacted WISAR Instructors or Key Actors (hereafter referred to as TopTen Prominent WISAR Instructors) of each of the 75 participants of the survey. Along with this, the questionnaire also asked the participants of their communication channels used with each of their Top Ten Prominent WISAR Instructors, as well as, the topic of said communication act, whether or not this was a one-way or two-way communication effort, and whether or not the effect of the communication act was positive, neutral, or negative.

Lastly, the questionnaire asked the participants what were their top three points of discussions (in a general sense). These were then categorized into broad themes, as the individual responses varied based on the stories of the training proper that they would reference differed widely, however there were emergent themes that allowed for classification.

### **Function Oriented Interaction Coding System (FOICS) Questionnaire**

The following questionnaire focused on the five thematic highlights of the decision-making results of the survey questionnaire. The results and cited decision-making highlights were collated and categorized into themes. An example would be the topic of making sure the trainees were safe, or factoring in the darkness of the environment such that the trainees would not get lost. These would be categorized into Safety and Security. The 75 respondents to the survey were asked to list own their top three highlights of decision-making throughout the training, as well as, the Top Ten Prominent WISAR Instructors that they had spoken with during the training of Batch *Magayon*. These were then narrowed down with the SNA to produce the key actors, the Top Ten Prominent WISAR Instructors for Batch *Magayon*, and the themes that

were derived from the decision-making highlights of the survey results. Then an FGD was conducted in order to verify the findings of the SNA, while simultaneously discussing the themes. Each theme was discussed following the FOICS table, where the interviewees of the FGD had determined whether there were Promotive, Disruptive, or Counteractive actions done for each of the elements of what Hirokawa and Gouran call a “High-Quality Decision”. The same line of questioning was conducted for the collective themes during the overall training.

### **Procedure for Data Collection**

Data were collected through a set of questionnaires, such that their socio-demographic profiles and the key actors and their interactivity were drawn out. The data obtained were inputted on the Social Network Visualizer (SocNetV 2.4) application which showed the various properties of the networks. The SNA questions were a guide to find the group decision-making themes as the respondents had been attempting to solve during the training of *Magayon*. This then serves as diagnostic data collection to be crosschecked with the focused group discussion. The focused group discussion had taken a more direct approach, asking about decision-making processes of the key actors, confirming the themes of their decisions, and how their interaction during the affected their decisions, and ultimately their overall performance.

### **Procedure for Data Analysis**

Social Network Visualizer (SocNetV 2.4) has revealed the interconnectedness of key actors based on their group-decision making processes. The data were analyzed with the use of the FOICS Checklist and was used to describe the decision-making process that emerged within the ICS structure that WISAR had used for the training of *Magayon*. With this, the individual accounting of every action taken towards making a High-Quality Decision was compared with

the overarching performance of the entire training process, obtained through a Key Informant Interview as well as a Focused Group Discussion.

### **Limitations**

There have been no development communication studies to date that focus on volunteer first responder groups, such as WISAR, moreover taking into account the aspect of the Incident Command System (ICS) in the Philippines. Being a volunteer group, the nature of its members are not mandated and does not follow the rigid structure of command that most organizations have, specifically the roles that a traditional emergency response organization would have, as described by Carandang (personal correspondence, September 10, 2017). One of the more notable differences is that a volunteer group relies more on the determination of its members, rather than the requirements set by a traditional emergency response organization. This makes the study relatively unique, however, if there were another volunteer group that utilizes the ICS, especially in conjunction with a group that has a more rigid organization/command structure, then an analysis such as this would likely also be able to determine how to improve their group decision making.

The results of this study show that there exists a process of decision-making that occurs within the ICS, which could be similar to those used by other First Responder groups. In this way, a similar study can be conducted in order to understand and see if these same processes occur in other groups, such that a further comparison may be rendered. Especially, with regards to groups that follow the ICS structure, the evident themes that emerge may also shed some light as to why a certain group functions in the way it does. Collation of these possible results may allow researchers to find a way to improve the ICS to cater to or incorporate these themes into the system.



Given that the use of the ICS is diverse in terms which groups apply it, this may not only be able to provide insight into future studies on first responder groups, but to the emergency response field or even the DRRM field as a whole, where the integration of multiple teams under emergency response can better apply the ICS or where other DRRM-related organizations may apply the practice of the ICS, respectively. This also specifically applies to all fields involved with public safety.

In the field of organizational management, the thematic findings would be able to provide an idea as to how emergency response groups would react in practice. It could provide a lens with which to check the communication processes of first responder groups to see how they were able to integrate or modify the ICS to fit their needs. The findings of this study could also help provide a recommendation as to whether other groups should practice the ICS as a management system that would fit the needs of that particular group.

## **Recommendations**

### **Recommendation on the Use of the Incident Command System**

Despite all of the differences between the actual decision-making process and the prescribed ICS format, the Top Ten Prominent WISAR Instructors for Batch *Magayon* still claim that the group had made High-Quality Decisions, throughout the training of Batch *Magayon*, taking into account both the individually highlighted themes, as well as, the overall “success” of the event. Furthermore, based on the data, the evidence suggests that the ICS despite not being strictly adhered to also plays a role in making High-Quality Decisions and is generally still applicable for the organization. The notable effect of the deviation from the prescribed ICS format was an improvement in the efficiency of producing High-Quality Decisions, partly due to the closeness of the instructors and members. Further studies could be conducted to determine

whether or not the customization of the ICS to fit organizational needs and desires consistently increase the efficiency of producing High-Quality Decisions.

The general question that this paper had attempted to answer was; how does a volunteer first responder organization make decisions as a group? The answers of this question were relatively simple. They made decisions using the people who were most fit for the job descriptions given by the Incident Command System as informants such that they were able to suggest an appropriate course of action for those who were in the position to make the decisions on the ground. They also assessed each course of action, and unknowingly followed the FOICS Checklist for these decisions. Their unwritten rules that differed from the ICS had also helped reinforce their decisions, such that it may not have followed the strict guidelines; however, it was still effective for the group.

### **Recommendation on Data Gathering**

There were a handful of difficulties that were encountered during the creation of this manuscript. One of which involved the discrete nature of the organization being studied, where much of the information concerning the members, specifically, some of their socio-demographic information were initially refused to the researcher. It would be important to note that there may be cases in the future where respondents would not like to share much of their personal information, especially when dealing with organizations such as First Responder groups.

### **Recommendation on Methodology**

Moreover, there was the concern of the large volume of information, which the researcher did not anticipate would take too long to process. This resulted in clerical errors with data, which required a more detailed re-processing over a short period of time. It is important for future studies to understand that the use of this methodology may lead to extended durations of

processing the information, especially without the proper software to sort and organize the data the way this methodology attempts.

Should there be future studies concerning this, it would be beneficial to plan ahead and prepare, specifically with regards to the people who are going to be studied, such that the research would not depend solely on one specific event requiring the full attendance of specific members of the organization. It would further benefit future researchers to have a program that would allow the researchers to sort and organize the data more efficiently. It would also be beneficial to have a membership with the organization being studied prior to the data gathering stage. The bond that the members of these organizations have with one another are often related to a familial bond, hence outsiders may not necessarily be readily accepted, or be readily given the necessary information for the study.

### **Recommendation on Angle of Study**

Future studies have the possibility of taking various angles, using the socio-demographic information, paired with other related theories. Much of the socio-demographic information provided questions related to the organization's profile of members, specifically concerning educational attainment, occupations, and the perceptions of outsiders with regards to the organization itself. This information can be studied with many different theories, methodologies, and it would benefit future researchers to be able to take on more angles on the given information.

### **Recommendation for Future Studies Concerning Emergency Response**

The use of the ICS is a relatively complicated issue to tackle, especially when considering the amount of technical knowledge of the subject matter is required before fully being able to study the system itself. This study had its initial difficulties in attempting to merge

the ICS with a development communication study focusing on the organizational management aspect, considering the rigidity of the entire structure, and development communication's focus on the nature of the specific group being studied. It is advisable that future researchers take a course on the ICS prior to conducting studies related to this form of management system. The same goes for the study of the entire emergency response field in general, as emergency response evolves faster than most other fields, due to the very reactive nature of the field, and rapid evolution of related technology in relation to the variety of emergencies that occur.

In relation to this, it would also be advisable that the researcher have a background or at the very least had understood several theories related to organizational communication, such that there is enough to discern or justify the use of organizational studies for the topic. Organizational communication in itself has a lot of applicable theories that could possibly aid in understanding organizations such as WISAR or similar organizations, their training procedures, their activities, and even emergency response as a whole. It is also recommended that the researcher first attempt to apply a variety of theories before settling on their chosen theory, as some theories may provide perspectives that are not covered by other theories.

Furthermore, should a researcher be interested in studying the specific organization WISAR, it would also be advisable that the researcher attempt to join the organization as to have a more complete view of the practice that occurs within the organization. This researcher being a member of WISAR has provided a lot of insight for the study, and has given a more well-rounded depiction of the organization, especially when considering that the very nature of WISAR is to be selective of the information disclosed to non-members. At the very least, future researchers should undergo some level of the training process prior to studying the training itself. The same is recommended for researchers studying other groups similar to WISAR, as the

training programs may differ from group to group. This also goes for studying emergency response in general, as most first responder groups have an innate sub-culture with varying communication practices and guidelines within them, which makes the field difficult to organize in general. This would also result in an increase in the amount of time necessary to study the practices and processes in this field.

## References

- Abbasi, S., Shooshtari, S., & Tofighi, S. (2017). Challenges of Hospital Incident Command System (HICS) from Experts' Perspectives: A Qualitative Research. *Indian Journal of Science and Technology*, 10:28, 1-9. DOI: 10.17485/ijst/2017/v10i28/115466.
- Aquino, B. S., III. (2012). Executive Order No. 082. *Republic of the Philippines, Malacañang Palace, Office of the President*. Manila: Malacañang Palace. 1-5.
- Canadian, Canadian Interagency Forest Fire Centre. (2012). ICS Operational Description. *Canadian Interagency Forest Fire Centre*. Retrieved from <http://www.icscanada.ca/images/upload/ICS%20OPS%20Description2012.pdf>.
- Carandang, A. P. (2017, September 10). Implementation of the Incident Command System in the Philippines. Personal Interview.
- Carandang, A. P. (2018, March 17). Introduction to Incident Command System and Supporting Information[PowerPoint Slides]. Lecture presented at Wilderness Search and Rescue Training in Philippines.
- Carandang, A. P., & Ittoralba, E. (2017, April 01). Basic Incident Command System[PowerPoint Slides]. Lecture presented at Wilderness Search and Rescue Training in Philippines.
- Carnes S. L., & Schroll, H. J. (2017, May). Managerial Challenges in Early Disaster Response: The Case of the 2014 Oso/SR530 Landslide Disaster. *In Proceedings of the 14th International ISCRAM Conference*. Albi, France. 961-972. Retrieved from <https://pdfs.semanticscholar.org/54fc/06c04e70add9d2ee72ec9b392e10ff280cae.pdf>.
- Carrington, P.J., Scott, J., Wasserman, S. (2007, October). Models and Methods in Social Network Analysis. *Social Networks Journal*. 29(4):603-608. DOI:10.1016/j.socnet.2007.02.001
- Dunlop A. L., Logue K. M., Isakov A. P. (2014). The Engagement of Academic Institutions in Community Disaster Response: A Comparative Analysis. *Public Health Reports*, 4:129, 87-95. DOI: 10.1177/00333549141296S412.
- Denny M. (2014, September 26) Social Network Analysis Workshop at the Institute for Social Science Research, University of Massachusetts, Amherst. [PDF Document]. Retrieved from [http://www.mjddenny.com/workshops/SN\\_Theory\\_I.pdf](http://www.mjddenny.com/workshops/SN_Theory_I.pdf)
- FEMA. (2008). *Incident Command System Glossary* [PDF Document]. Retrieved from <https://training.fema.gov/emiweb/is/icsresource/assets/icsglossary.pdf>.
- Franco, Z. E., M.S., Zumel, N., Ph.D., Holman, J., M.S., Blau, K., B.A., & Beutler, L. E., Ph.D. (2009). Evaluating the Impact of Improvisation on the Incident Command System: A Modified Single Case Study using the DDD Simulator. *In Proceedings of the 6th International ISCRAM*

Conference. Gothenberg, Sweden. Retrieved from [http://www.mzlabs.com/NinaZumel/publications/ISCRAM2009\\_pre\\_press\\_FINAL\\_WITH\\_author\\_info.pdf](http://www.mzlabs.com/NinaZumel/publications/ISCRAM2009_pre_press_FINAL_WITH_author_info.pdf).

Gazmin, V. T. (2010). Implementing Rules and Regulations for Republic Act 10121. *Philippines, Department of National Defense, National Disaster Risk Reduction and Management Council*. Quezon City National Disaster Management Center. 17-18.

Gouran, D., Hirokawa, R., Julian, K., Leatham, B. (1993). The Evolution and Current Status of the Functional Perspective on Communication in Decision-Making and Problem-Solving Groups. *Annals of the International Communication Association*, 16:1, 573-600. DOI: 10.1080/23808985.1993.11678870.

Griffin, E. (2006). *A First Look at Communication Theory*. McGraw-Hill Companies Inc., 6, 215-222.

Griffin, E. M. (2012). *A First Look at Communication Theory*. McGraw-Hill Companies Inc., 8, 233-246.

Griffiths, J., & McKirdy, E. (2017, June 02). ISIS claims attack that left 37 dead in Manila casino. *CNN*. Retrieved from <http://edition.cnn.com/2017/06/01/asia/resorts-world-manila-philippines/index.html>.

Hannestad, S. H. (2005, April). Incident Command System: A Developing National Standard of Incident Management in the U.S. *In Proceedings of the 2nd International ISCRAM Conference*. Brussels, Belgium. Retrieved from [http://idl.iscram.org/files/hannestad/2005/559\\_Hannestad2005.pdf](http://idl.iscram.org/files/hannestad/2005/559_Hannestad2005.pdf).

Hirokawa, R. (November 4, 1994). Functional Approaches to the Study of Group Discussion Even Good Notions Have Their Problems. *Small Group Research*. SAGE Publications Ltd., 25:4, 542-550. DOI: 10.1177/1046496494254007.

Homeland Security, U.S. Department of. (2004, March 1). *National Incident Management System*, Washington DC.

Howard, A., Agllias, K., Bevis, M., & Blakemore, T. (2017). "They'll tell us when to evacuate": The experiences and expectations of disaster-related communication in vulnerable groups. *International Journal of Disaster Risk Reduction*, 22, 139-146. DOI: 10.1016/j.ijdr.2017.03.002.

Krebs, V. (2006). *Social Network Analysis: A Brief Introduction*. (Website includes a list of recent Social Network Analysis applications and descriptions). Retrieved from <http://www.orgnet.com/>

Llavador M., Letelier P., Penades M. C., Chanos J. H., Borges M., Solis C. (2006). Precise yet Flexible Specification of Emergency Resolution Procedures. *In Proceedings of the 3th*

*International ISCRAM Conference*. New Jersey, USA. Retrieved from [http://www.iscram.org/legacy/ISCRAM2006/ISCRAM2006Proceedingszip/PapersMonday/S1\\_T3\\_1\\_llavador\\_etal.pdf](http://www.iscram.org/legacy/ISCRAM2006/ISCRAM2006Proceedingszip/PapersMonday/S1_T3_1_llavador_etal.pdf).

Li, SC. (2007). Computer Mediated Communication and Group Decision Making A Functional Perspective. *Small Group Research*. SAGE Publications Ltd., 38;5, 593-614. DOI: 10.1177/1046496407304335.

Lindell, M. K., Perry, R. W., & Prater, C. S. (2005). Organizing response to disasters with the incident command system/incident management system (ICS/IMS). *International Workshop on Emergency Response and Rescue*, October 31 – November 5, 2005. Retrieved from [https://www.researchgate.net/profile/Michael\\_Lindell/publication/228652534\\_Organizing\\_response\\_to\\_disasters\\_with\\_the\\_incident\\_command\\_systemincident\\_management\\_system\\_ICSIMS/links/0046352250fcaafd78000000.pdf](https://www.researchgate.net/profile/Michael_Lindell/publication/228652534_Organizing_response_to_disasters_with_the_incident_command_systemincident_management_system_ICSIMS/links/0046352250fcaafd78000000.pdf).

NDRRMC. *Incident Command System: An Overview*. (n.d.). Lecture presented at National Disaster Risk Reduction and Management Council in Philippines.

NDRRMC. *Memorandum Circular No.04, s.2012: Implementing Guidelines on the Use of Incident Command System (ICS) as an On-Scene Disaster Response and Management Mechanism under the Philippine Disaster Risk Reduction and Management System (PDRRMS)*. (2012, March 28). Retrieved from [https://ndrrmc.gov.ph/attachments/article/401/MEMO\\_No\\_4\\_s\\_of\\_2012\\_re\\_Implementing\\_Guidelines\\_on\\_the\\_use\\_of\\_ICS.pdf](https://ndrrmc.gov.ph/attachments/article/401/MEMO_No_4_s_of_2012_re_Implementing_Guidelines_on_the_use_of_ICS.pdf)

Noori N. S., Wolbers J., Boersma K., Cardona X. V. (2016). A dynamic perspective of emerging coordination clusters in crisis response networks. In *Proceedings of the ISCRAM 2016 Conference*. Rio de Janeiro, Brazil. Retrieved from <http://keesboersma.com/wp-content/uploads/2014/09/ISCRAM2016Networks.pdf>.

Orallo, A.L. (2011). Study on Earthquake Risk and Vulnerability Management and Lessons Learned [Research Report]. Retrieved from [www.adrc.asia/aboutus/vrdata/finalreport/2011A\\_PHL\\_Anna\\_FRR.pdf](http://www.adrc.asia/aboutus/vrdata/finalreport/2011A_PHL_Anna_FRR.pdf).

Orlitzky, M., Hirokawa, R. (2001). To Err is Human, To Correct for It Divine, A Meta-Analysis of Research Testing the Functional Theory of Group Decision-Making Effectiveness. *Small Group Research*. SAGE Publications Ltd., 32;3, 313-341. DOI: 10.1177/104649640103200303.

Philippine National Disaster Risk Reduction and Management Council. *Incident command system and response clusters* [PDF document]. Retrieved from <http://digitaleducation.net/ndrp/wp-content/uploads/2016/09/ICS-AND-RESPONSE-CLUSTERS.pdf>.

Philips, K., & Thompson, J. (2014). *National Park Service Technical Rescue Handbook*. Washington DC: U.S. Department of the Interior, National Park Service. 11.



Retrieved from <http://mra.org/wp-content/uploads/2016/05/nps-technical-rescue-handbook-2014.pdf>.

Reynolds, P. S., Michael, M. J., & Spiess, B. D. (2017). Application of Incident Command Structure to clinical trial management in the academic setting: principles and lessons learned. *Trials Journal*, 18:62, 1-13. DOI: 10.1186/s13063-016-1755-9.

Seibel, E. J. (2016). Missing the Mark: Is ICS Training Achieving Its Goal. *Naval Postgraduate School Monterey United States*. Technical Report. DEFENSE TECHNICAL INFORMATION CENTER 8725 John J. Kingman Road, Fort Belvoir, VA. Access No. AD1031515

Schroll, R. (2002). Emergency Response Training: How to plan, conduct & evaluate for success. *Professional Safety*, 47:12, 16-21.

Schulz, P. (2010). *Communication Theory*. SAGE Publications Ltd., 3, 71-89.

VanderVoort L. (2002). Functional and Causal Explanations in Group Communication Research. International Communication Association. *Communication Theory*, 12:4, 469-486. DOI: 10.1111/j.1468-2885.2002.tb00279.x.

Vreugdenhil B. (2009) The influence of social network structure on the chance of success of Open Source software project communities, Unpublished MS Thesis, RSM Erasmus University, Rotterdam, the Netherlands.

Wang J., Rosca D., Tepfenhart W., Milewski A. (2006). Incident Command System Workflow Modeling and Analysis: A Case Study. In *Proceedings of the 3th International ISCRAM Conference*. New Jersey, USA. Retrieved from <https://pdfs.semanticscholar.org/0fcf/4da5e068447cd5025d799ddb73868fc0c35a.pdf>.

Wittenbaum G., Hollingshead A., Paulus P., Hirokawa, R., Ancona, D., Peterson, R., Jehn, K., Yoon, K. (February 1, 2004). The Functional Perspective as a Lens for Understanding Groups. *Small Group Research*. SAGE Publications Ltd., 35:1, 14-43. DOI:10.1177/1046496403259459.

## Tables and Figures

Figure 1. ICS Framework (Canadian Interagency Forest Fire Centre, 2012)

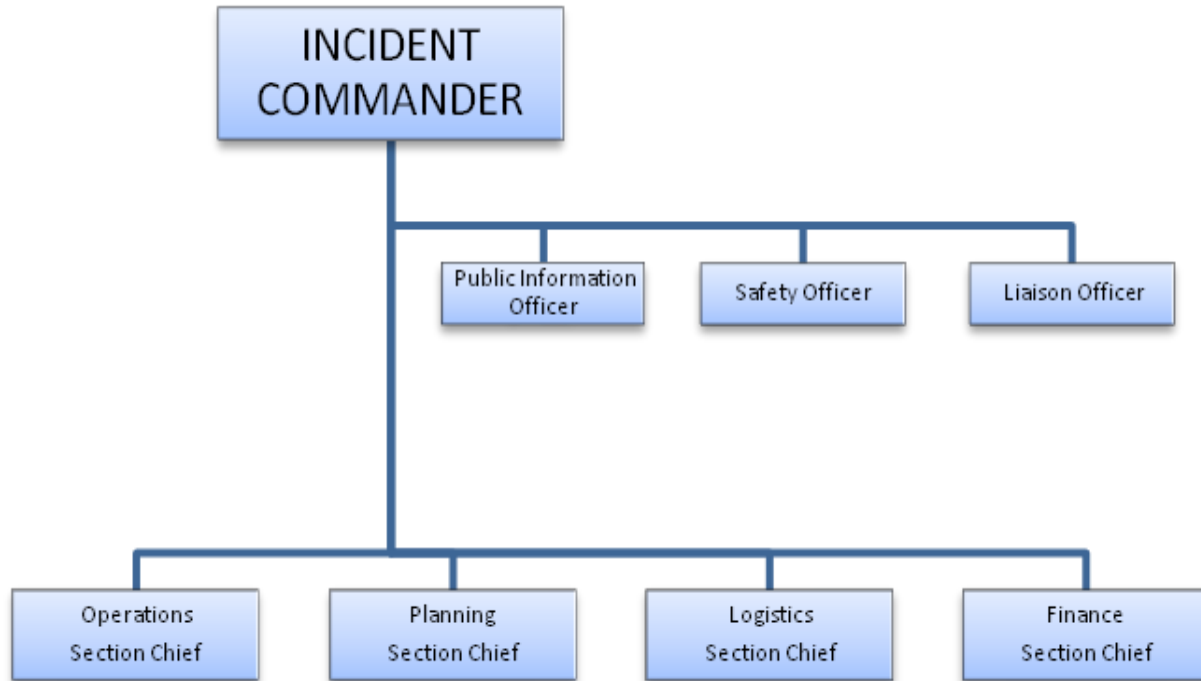
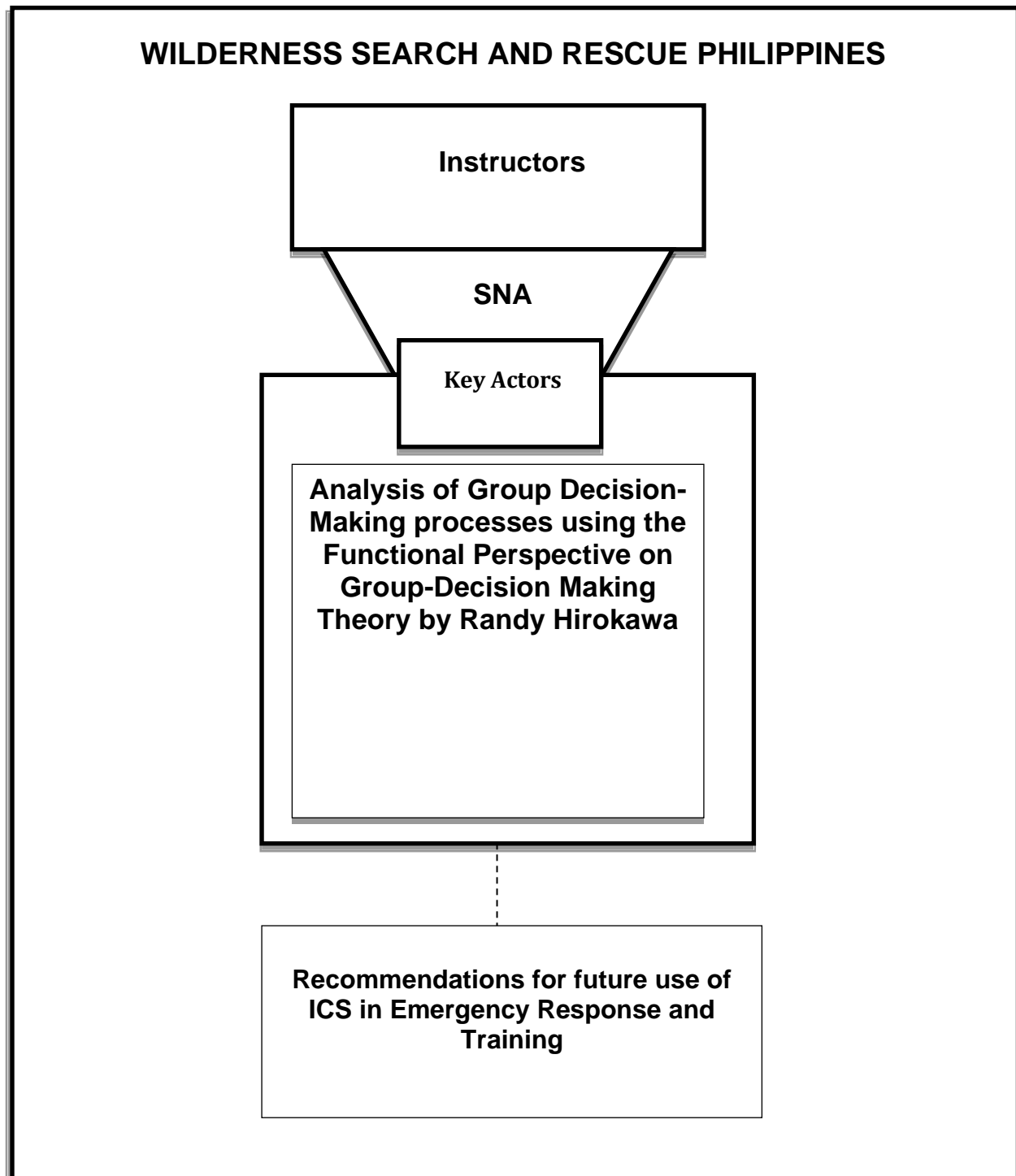


Figure 2. FOICS Checklist (Griffin, 2012)

Function Communication Acts	PROBLEM ANALYSIS	GOAL SETTING	IDENTIFICATION OF ALTERNATIVES	EVALUATION OF THE POSITIVE AND NEGATIVE CHARACTERISTICS OF ALTERNATIVES
PROMOTIVE				
DISRUPTIVE				
COUNTERACTIVE				

*Figure 2.* Conceptual Framework based from the Social Network Analysis and Functional Perspective on Group Decision-Making



## Glossary

- Adjacency Matrix – This is the matrix drawn by representing directed or undirected ties between actors (Denny, 2014).
- Betweenness Centrality – This ranks people based on how often they are an intermediary between two other people (Denny, 2014).
- Communication Channels – The method of communication through which messages are passed from a source to a receiver.
- Degree Centrality – Degree Centrality ranks people based on the number of connections each person has (Denny, 2014).
- Focused Group Discussion (FGD) – Focused Group Discussion is the method used in drawing out the data for the FOICS.
- Function-Oriented Interaction Coding System (FOICS) – Function-Oriented Interaction Coding System: The checklist used to determine if certain actions/statements aided in generating the four essential elements of a High-Quality Decision.
- Incident Management Team (IMT) – Incident Management Team: The ICS defined group of decision makers to be studied.
- Incident Commander (IC) – Incident Commander: A prescribed role under the IMT which guides the entire ICS of an event or disaster.
- Key Actors – The actual Task-Oriented Group being studied concerning their decision-making; this is the focus of the study.
- Liaison Officer (LO) – Liaison Officer: A prescribed role under the IMT which handles ICS information to be shared with government officials.
- Logistics Section Chief (LOG) – Logistics Section Chief: A prescribed role under the ICS which handles equipment that the response teams use.
- Operations Section Chief (OPSEC) – Operations Section Chief: A prescribed role under the IMT which handles the response teams and their actions.
- Public Information Officer (PIO) – Public Information Officer: A prescribed role under the IMT which handles ICS information to be shared with the public.
- Planning Section Chief (PLANSEC) – Planning Section Chief: A prescribed role under the IMT which handles the strategies for response teams to employ during an event.
- Social Network Analysis (SNA) – Social Network Analysis: Method used to narrow down members of the Core Group.

- Safety Officer (SO) – Safety Officer: A prescribed role under the IMT which handles the environmental safety for the responders.
- Socio-Demographic Profiles – Backgrounds of each individual distinguished using the following; age, gender, educational attainment, occupation, years of membership with the organization being studied, roles in the aforementioned organization.
- SocNetV 2.4 – This is the Social Network Analysis software that is used for the SNA (Denny, 2014).
- Wilderness Search and Rescue Philippines (WISAR) – Wilderness Search and Rescue Philippines: The volunteer organization that uses the ICS, where the IMT is drawn from.

## **Author Biography**

John Matthew Villapol  
Instructor, Wilderness Search and Rescue Philippines  
Instructor, Emergency Rescue Association, Quick Response Team  
Medical Training Director and Instructor, BreakPoint System S.L.

John Matthew Villapol is the current Medical Training Director of BreakPoint System S.L., an accredited Health and Safety Institute Instructor (Level 3), and an instructor/ambassador for the Stop the Bleed Program from the American College of Surgeons. He is also a Tactical Medic and Instructor for the Emergency Rescue Association, Quick Response Team (Philippines), and an Instructor of the Wilderness Search and Rescue Philippines.

He was a former Personal Assistance Nurse for Hospital Hestia (Madrid), a former Tactical Paramedic and Instructor for the Philippine Army Reserve Command Emergency Response Unit, a former Private Security and Safety Officer, and a former member of the Batong Malake Fire Brigade. His work has been published/featured in the New York Times, the Philippine Daily Inquirer, ABS-CBN News, and other Philippine news agencies.

He is a graduate of BS Development Communication (Specialized in Education Communication, Broadcasting, Development Journalism, and Science Communication) from the University of the Philippines, with a Postgraduate in Bilingual Education from the Pontifical University of Comillas (Madrid). He also has Postgraduate certificates from Stanford Medical (USA), BoundTree University (USA), and the Postgraduate Institute for Medicine (USA).



## Barriers Associated with Behavioral and Mental Health in Firefighters

Marcus S. Ketner  
Twinsburg Fire Department  
12246 Chamberlain Rd. Aurora, OH 44202  
Phone: 330-704-5882  
Email: MSKetner@outlook.com

**Barriers Associated with Behavioral and Mental Health in Firefighters**  
**Marcus S. Ketner**  
**Twinsburg Fire Department**

**Abstract**

There is significant research that demonstrates barriers to behavioral and mental health. Specifically, researchers have looked at firefighters and first responders as a unique subgroup of the population facing unique challenges and circumstances that may affect recognition, seeking help, access, and treatment. These elements represent barriers that specifically involve firefighters and behavioral / mental health. This research explored the barriers firefighters face in maintaining behavioral / mental health. The exploration and identification of behavioral / mental health barriers is essential in establishing programs for support, treatment, and prevention. This paper explored three main categories influencing firefighters and barriers. Barriers specific to the individual firefighter are explored considering stigmas, personal thoughts and feelings, availability, and financial constraints. Employers and organizations face barriers in providing resources and programs. These barriers include financial constraints, confidentiality, staffing, and content. Treatment, counseling, and access are influenced by the unique qualities in this subgroup and are explored. This paper identified significant barriers allowing for guidance in developing behavioral / mental health programs specifically for firefighters. Discussion is conducted to evaluate common and influential barriers. This paper concludes by constructing a list of barriers that most commonly influence firefighters in recognizing, accessing, and maintaining behavioral / mental health. Compiling the most influential barriers is essential to providing for the needs of firefighters maintaining, seeking, or requiring these services. Barriers noted in this research are; stigma, fire service culture, leadership, availability of treatment, clinical treatment, and clinician knowledge of fire service.

**Keywords: Knowledge, Barrier, Intrinsic, Extrinsic, Stigma, Culture, Mental Health, First Responder Mental Health, First Responder Behavioral Health**



## Introduction

Behavioral and mental health is currently a topic of concern for many people. The stresses of daily life, career, and the imposing COVID-19 Pandemic are just a few factors that play on the human mind. These stresses can build up and manifest in any number of issues. Recognizing these issues, seeking help, and completing treatments are all essential to maintaining behavioral / mental health. Every individual has their own personal experiences, abilities to cope, and self-awareness levels. Firefighters have their own experiences and issues maintaining their behavioral / mental health. The goal of this research is to examine barriers faced by firefighters in behavioral / mental health.

Firefighters have a unique situation considering personal stress, trauma, and behavioral / mental health issues. Firefighters are routinely called to emergencies with fires, medical conditions, psychiatric issues, and exposure to members of the public. On every call for service, the community invites firefighters to share in their stressful or traumatic situation. These exposures place additional stress on firefighters, as they work to help the public and provide needed services. These continued responses add additional stresses and trauma to firefighters as they deal with their own personal experiences and life. There are only a few career fields that have similar *exponential* doses of stress and trauma, law enforcement, emergency medical services, and other first responders. Each of these fields share similar exposures and experiences. Considering the culture, shift work, job demands, and requests for service, firefighters can be singled out and examined as a sub-group. How do firefighters deal with these stresses, trauma, and maintain their behavioral / mental health?

There is a vast wealth of research and evaluation of behavioral and mental health in the general population examining barriers, access, and clinical experiences. A focused examination

of firefighter's behavioral / mental health, access, knowledge, and care contributes to their overall well-being. What influences or affects a firefighter's ability to recognize, access, and receive needed behavioral / mental health care? What barriers to behavioral and mental health directly affect firefighters? Do firefighters face personal barriers? Are there barriers related to fire departments, government subdivisions, and organizations? Are there specific barriers related to the treatment provided by clinicians and therapists? A review of the available literature will examine barriers to behavioral / mental health for firefighters.

## **Literature Review**

There is a significant amount of research and data concerning access and usage of behavioral / mental health resources. This research often focuses on gender, age groups, races, and other demographics. Examining what barriers firefighters face in behavioral / mental health requires an exhaustive search of research journals and studies. A few select studies examine firefighters and barriers to behavioral / mental health. Review of these studies provide foundational data to evaluate firefighters and barriers. Several studies examine specific behavioral / mental health crises in firefighters such as post-traumatic stress, substance use /abuse, depression, and suicidality. The examination of these specific conditions and firefighters allows data to emerge concerning barriers as well. Several international studies examine firefighter's behavioral / mental health in Canada and South Korea. Considering these international studies provides data correlating firefighter's behavioral / mental health, the unique stresses firefighters are exposed to, various nations and the fire service culture.

Literature and research yield significant data to examine specific questions concerning firefighters and behavioral / mental health. This research project intends to examine barriers to behavioral / mental health and firefighters. The foundation of this research is based on the

question, “*What barriers are associated with behavioral and mental health in firefighters?*” This question is supported by focusing on three specific areas: individual firefighters, organization / culture, and clinical treatment and care. The focus on these elements is intended to yield significant data concerning barriers to behavioral / mental health unique to firefighters. The literature will develop these focal points and allow for correlations, comparisons, contrasts, and analysis to be drawn.

Identifying barriers is key to firefighters’ recognition of need, accessing support, and participating in effective, appropriate, focused care. Behavioral / mental health compliments physical health in the overall well-being of individuals and firefighters. The intended result of this research is to provide vital insight and awareness of behavioral / mental health and supporting the collective well-being of firefighters. Maintaining firefighter well-being allows firefighters to provide service effectively and efficiently to their communities.

### **Evaluating Barriers, Facilitators, and Knowledge Components**

To examine barriers, it is necessary to understand common observed barriers, facilitators, and how behavioral / mental health knowledge influences both. Barriers and facilitators share an inverse relationship in that a barrier blocks or prevents while a facilitator enables or allows something. In researching barriers, understanding, and recognizing facilitators allows potentially unseen barriers to be revealed. The review of available literature intends to build a broad understanding of barriers and expand the knowledge of barriers to behavioral / mental health. This review intends to examine barriers faced by firefighters in behavioral / mental health with a focus on the individual firefighter, organizational, and clinical barriers.

Research and studies concerning behavioral / mental health often use surveys and statistical data to examine various elements concerning individuals. A commonly used tool is the

Barriers to Mental Health Services Scale-Revised (BMHSS-R) (Pepin et al., 2015). This scale is used to produce data and measure how individuals perceive and use mental health services. The BMHSS-R is produced using a 44-question survey that allows participants to self-report on barriers to their mental health care (Pepin et al., 2015). The use of this scale is ideal as it references ten commonly reported and recognized barriers to care. The scale provides data and recognizes these common barriers: help-seeking, stigma, knowledge / fear of psychotherapy, ability of therapist, normalcy of depression symptoms, costs concerns, ageism, qualifications of therapist, physician referral, transportation, and compiled scores for intrinsic and extrinsic barriers (Pepin et al., 2015). These “common” barriers are used routinely in research involving behavioral / mental health surveys utilizing the BMHSS-R. The BMHSS-R asks a series of questions, collecting data concerning these barriers and scores their significance (Appendix A). The BMHSS-R also categorizes responses into intrinsic and extrinsic barriers to provide further data on the nature and origin of barriers (Pepin et al., 2015). The intrinsic and extrinsic nature of barriers provides a means to correlate and evaluate perceived behavioral / mental health barriers.

Understanding the nature and origin of barriers to behavioral / mental health is important in alleviating barriers and creating facilitators to awareness, care, and services. Considering the common list of barriers examined, they can be separated into two general groups or domains: intrinsic and extrinsic (Kishore & Shaji, 2021). Intrinsic barriers are those that affect the individual from within, like personal views of mental health, benefits of therapy, or perceived stigma (Kishore & Shaji, 2021). Intrinsic barriers place focus on the individual and their needs. Extrinsic barriers are those acting from outside the individual, often outside their control. Examples of some common extrinsic barriers are costs and financial resources, availability of therapy, and the clinical experience of therapists (Kishore & Shaji, 2021). Knowledge of

barriers' nature and origins through intrinsic and extrinsic categories provides a deeper understanding and ability to address barriers at the source and provide means and facilitators to overcome the obstacles they create.

Countless studies examine behavioral / mental health across the population and specific sub-groups. Common barriers and associated facilitators are examined in these studies. Researchers noted in a study that 100% of their participants referred to the need for education and a “culture-wide awareness” for issues concerning behavioral / mental health (Jones et al., 2020). Citing the responses, these themes required attention and focus. Awareness and education were considered as separate themes initially, but continuously were correlated and complimented throughout the study (Jones et al., 2020). The prevalence of these two themes coinciding caused researchers to recognize them under one specific theme, creating a foundation for barriers and facilitators, *knowledge*. The researchers cited knowledge as a theme in their research and operationalizing it as, “familiarity, awareness, or understanding of something, such as facts, information, descriptions, or skills, acquired through experience / exposure or education” (Jones et al., 2020, p. 47). Knowledge will become an overall focus considering barriers and facilitators to behavioral / mental health. Barriers and facilitators rely on some level of knowledge.

Focused research on the effects of knowledge and behavioral / mental health barriers was conducted in Canada, with public safety professionals. The research found significant support for their hypothesis that behavioral / mental health knowledge directly affects and reduces barriers to care (Krakauer et al., 2020). Knowledge was examined across sub-groups such as type of service, gender, and sex. Correlations were examined across subgroups and demographics, the resulting data suggests that predictions were consistent with the hypotheses, specific service types had increased levels of knowledge that affected behavioral / mental health awareness and

care usage (Krakauer et al., 2020). The focus on knowledge identified an individual's ability to identify and self-report symptoms, facilitating behavioral / mental health care (Krakauer et al., 2020). Knowledge is a foundational element in understanding barriers and facilitators to behavioral /mental health.

Evaluating barriers across the population of firefighters and first responders provides significant correlations that quantifies most barriers under the theme of knowledge. Public safety professionals (PSP) identify several themes when discussing behavioral / mental health. These themes connect, compliment, and often cross categories. Researchers found that personal (intrinsic) barriers joined with notable (extrinsic) barriers like work / culture, training programs and education, management and leadership, health care, with influences from society through attitudes and policy (MacDermid et al., 2021). This places knowledge as a key factor to both intrinsic and extrinsic, providing a foundation and building blocks to both barriers and facilitators to behavioral / mental health. Knowledge influences and supports barriers and facilitators (Jones et al., 2020). The codependence of barriers and facilitators on knowledge is evident in the responses from PSP's participating in research as they identified the "two sides to the coin" aspect of many factors seen as barriers or facilitators (MacDermid et al., 2021). Often contextual differences influence experiences, incidents, and perceptions on behavioral / mental health (MacDermid et al., 2021). Knowledge and awareness are essential to support behavioral / mental health and defeating barriers. The vacuum created by this "lack of knowledge" is generating a "silence" in the firefighter community (Heyman et al., 2018). Conversations must be generated to break the silence. This silence is deadly, contributing to untreated behavioral /mental health issues and the loss of essential community servants (Heyman et al., 2018). Knowledge is a key theme supporting continued, expanded, and extensive research. Further

examination, evaluation, and analysis is required of the intrinsic and extrinsic nature of perceived barriers and facilitators to behavioral / mental health.

This research intends to define barriers experienced by firefighters in their behavioral / mental health. Focus is placed on the individual firefighter (intrinsic), organizational and clinical experiences (extrinsic). Researchers have defined “common” barriers to behavioral / mental health in evaluation devices such as the BMHSS-R (Appendix A). The BMHSS-R specifically examines both categories of barriers, intrinsic and extrinsic (Pepin et al., 2015). Barriers are examined intrinsically to determine individual factors and extrinsically to determine what affects firefighters outside their control.

### ***Intrinsic Barriers***

The individual firefighter is the primary focus of this research. To determine significant barriers to firefighters’ behavioral / mental health, it is essential to examine the intrinsic barriers providing the greatest influences. The intrinsic barriers examined in the BHMSS-R are help-seeking, stigma, knowledge / fear of psychotherapy, beliefs of the abilities of psychotherapists, and believing depression symptoms are normal (Pepin et al., 2015). Several studies utilize the BHMSS-R or elements of it in conducting research. Stigma is the predominant barrier reported in the data. Stigma and stigma-related elements are reported consistently more often than other barriers to care (Haugen et al., 2017). The prevalence of stigma as a reported barrier establishes it as a significant barrier to behavioral /mental health. Stigma is a prevalent barrier concerning society and is particularly significant in the sub-group of first responders and PSP’s (Jones, 2017). This prevalence is concerning as stigma holds a certain “discrediting” influence and power (Ricciardelli et al., 2020). The effects of stigma on the individual can devalue their social identity, resulting in a significant barrier (Ricciardelli et al., 2020). Firefighter’s help-seeking is a

consistent issue as it can be stigmatized as a sign of weakness (Carpenter et al., 2020). Firefighters are seen by society, the organization, and individually, possessing the qualities of bravery, fearlessness, and macho identities that the stigma of weakness would negatively affect help-seeking and care for behavioral /mental health issues (Henderson et al., 2016). Firefighters are concerned with their bonds with co-workers, administrators, and the community. Significant stigma concerns are reported concerning reputation, impression of fellow firefighters, and the public (Hom et al., 2016). Another factor attributed to defining stigma is being “perceived as different, dangerous, or unacceptable,” lending significant strength to stigma as a barrier (Isaac & Buchanan, 2021). Researchers found expanded factors that contribute to perceived stigma and compounding the barrier, such as embarrassment of the condition, career jeopardizing, and the stigma of “not being a healthy and fit firefighter” (Thews et al., 2020). Considering stigma related barriers, reputation and embarrassment reported by firefighters, were differentiated by seeking behavioral / mental health care (Hom et al., 2016). Stigma issues are compiled into a very powerful barrier amongst firefighters. Studies seek to determine the reach of stigma across the firefighter population.

Researchers examined barriers reported in women firefighters, looking for differential data. Women firefighters, across various ranks, departments, and experiences all report significant influence in stigma related issues as a barrier to behavioral / mental health (Hom et al., 2018). Women differed from men in having no specific barrier determining users and non-users of behavioral / mental health care (Hom et al., 2018). Stigma is a significantly reported barrier in firefighters. First responders suffer from significantly low rates of help-seeking due to “perceived or experienced” stigma (Horan et al., 2021). Stigma proves to be a strong barrier to behavioral / mental health care, prevalent in the research. Researchers conducted a nation-wide



study in South Korea with all 37,000+ career firefighters, finding that stigma was the most prevalent barrier to behavioral / mental health (Kim et al., 2018). Stigma is represented across international boundaries, gender, and other demographics. The differences in career and volunteer fire services present significant variations to be examined.

Significant data results from studies comparing volunteer and career fire service agencies and firefighters. Differences are noted between career and volunteer agencies, yet stigma is still reported as a common barrier perceived by both groups of firefighters (Pennington et al., 2021). Career and volunteer firefighters experience and perceive similar levels of stigma as a significant barrier to behavioral / mental health, yet volunteer firefighters report more “structural” or extrinsic barriers (Stanley et al., 2016). Differences in career and volunteer service organizations do not eliminate stigma as a perceived barrier among firefighters. Volunteer firefighters note that the organizational differences do allow different barriers to emerge based on extrinsic factors.

Stigma is noted as regularly perceived barrier across several studies in individual firefighters. Self-imposed stigma can be addressed by firefighters. Researchers have examined the personal skill or trait of self-forgiveness and its effects on self-imposed stigma. The operationalization of self-forgiveness is “the degree to which people avoid self-punitive responses” (Carpenter et al., 2020). Simply stated, the individual gives leeway or “slack” concerning issues and does not assume unnecessary blame, relieving considerable stress. Significant data supports the effectiveness of self-forgiveness on self-imposed stigma in firefighters (Carpenter et al., 2020). This “facilitator” skill can significantly contribute to overcoming the barriers imposed by stigma in behavioral / mental health of firefighters.

## ***Extrinsic Barriers***

Extrinsic barriers are those outside the individual and often outside of their control. Extrinsic barriers are generally part of the individual's environment, organization, and clinical care. This research intends to focus on organizational and clinical barriers to behavioral / mental health. There is a significant amount of literature and studies that provide data concerning extrinsic barriers.

Firefighters have a unique work environment, exposing them to significant stresses and trauma, affecting their behavioral / mental health needs. Firefighter's behavioral / mental health can be examined considering their unique sub-group, putting aside their personal stress, and encountering a diffuse dose of traumatic situations (Caruso, 2021). Several factors differentiate firefighters from the public as well as other first responders. Firefighters work shifts (24-hours), experience disrupted sleep, and the "invisible enemy" of stress and trauma (Caruso, 2021). This arrangement within the fire services generates a family atmosphere and "brotherhood." This "brotherhood" may provide many positive attributes, it also promotes isolation and a reluctance to report behavioral / mental health issues (Henderson et al., 2016). The camaraderie seen in the fire service *culture* promotes many negative influences and promotes barriers among firefighters. The culture serves to support stigmas, influence help-seeking, re-enforces thoughts of weakness, and promotes "silence" in the face of behavioral / mental health issues (Henderson et al., 2016). Firefighters and their shift-mates make-up a very tight knit cohesive group, necessary to take on events like fires, motor vehicle accidents, and disasters. The high level of cohesion seen in firefighters can be both a barrier and facilitator, depending on context (Johnson et al., 2020). The duality of the culture within public safety forces is unique. Public safety professionals in one study perceived their colleagues as "unaccepting of mental illness" conversely those same

colleagues reported themselves as “less judgmental” concerning mental health (Heyman et al., 2018). This demonstrates a uniquely dynamic nature in the *culture*. The nature of firefighting continues to promote the need for strength and skills. There is an overbearing concept that firefighters “can’t show weakness,” contributing to barriers to behavioral / mental health (Jones et al., 2020). The family atmosphere and brotherhood of the fire service contributes significant extrinsic barriers on firefighters. The organization and its policies, procedures, and format also influence barriers to behavioral / mental health.

Firefighters perceive several extrinsic barriers that are directly related to their fire service organizations such as costs / insurance, availability, confidentiality, and management / leadership support. Several researchers support these potential barriers with data from studies involving firefighters. The fire service has an inherent risk for work-place stress and trauma, supporting the need for behavioral / mental health programs (Attridge, 2019). A workplace program covers many of the listed extrinsic barriers of concern to firefighters. An Employee Assistance Program (EAP) is an essential component in promoting health (Attridge, 2019). NFPA 1500 *Standard on Fire Department Occupational Safety, Health, and Wellness Program* covers both physical and mental wellness concerns for the fire service (National Fire Protection Association [NFPA], 2021). The standard sets forth the establishment and maintenance of behavioral / mental health programs in all fire service organizations. Wellness programs often face difficulties that reflect reported extrinsic barriers. Acceptance (buy-in), financial, leadership support, and labor management are reported as areas of concern in operating and maintaining wellness programs in the fire service (Harrington, 2018). Researchers examine costs and insurance related concerns as barriers to behavioral / mental health (Pepin et al., 2015). There are significant noted benefits to employers in operating and maintaining wellness programs.

Employers / organizations typically see the costs to provide behavioral / mental health “wellness” are significantly less than the costs associated with utilizing provided health (medical) insurance (Maeng et al., 2021). These programs shift treatment and costs from standard health care practitioners to appropriate behavioral / mental health professionals (Maeng et al., 2021). Placing firefighters into appropriate care channels is a significant facilitator and challenges potential barriers. Costs were often reported in studies comparing barriers in volunteer and career firefighters (Pennington et al., 2021). Budget constraints, ability to provide services, and personal costs affect volunteer firefighters over their counterparts in the career service. Volunteers are five-times more likely to perceive costs as a barrier versus career firefighters (Pennington et al., 2021). The differences in service types can provide context for the perceived barriers of cost for firefighters.

It is important for the fire service organization to offer and support behavioral / mental health programs. Firefighters perceive extrinsic barriers through the department leadership and management. Firefighters need to see support for behavioral / mental health from their chief, officers, and the administration to perceive it as important and valuable to their personal health (Harrington, 2018). No matter the rank, leadership has the best opportunity to influence firefighters and other department members concerning behavioral / mental health. Supervisor’s attitudes and influence directly affect firefighters’ decisions and attitudes toward behavioral / mental health (Britt & McFadden, 2012). Those in leadership roles cite “leading by example” as one of the best ways to promote programs within the organization (Harrington, 2018). Firefighters report varying levels of trust and seeking out assistance or information concerning behavioral / mental health programs (Gulliver et al., 2019). Organizational leaders are vital in promoting services and maximizing awareness.

Organizations can explore cost as a barrier to behavioral / mental health as they construct and operate programs and general organizational policies and procedures. The International Association of Fire Chiefs produces a “Yellow Ribbon Report” outlining best practices in behavioral wellness for the fire service (International Association of Fire Chiefs [IAFC], 2021). The report covers a broad range of items, typically from an organizational / policy point of view. Suggested practices include health care insurance that covers behavioral / mental health needs, orientation / education of recruits to familiarize them with available services, readily available peer counseling, and annual educational programs (IAFC, 2021). The “Yellow Ribbon Report” is a valuable guide in recognizing and overcoming extrinsic barriers in organizations.

Firefighters report other extrinsic barriers to behavioral / mental health concerning clinical treatment and addressing stresses and trauma. Firefighters overwhelmingly report knowledge of organizational programs and services (Gulliver et al., 2019). Firefighters’ individual preferences and experiences influence choices in who they seek out for counseling. Firefighters seek counsel from family, friends, officers, and clinical providers (Gulliver et al., 2019). Firefighter’s time in service directly affects their choices in counseling. Those with fewer years in the fire service sought family, friends, and officers for counseling while more senior members sought out professional clinical services (Gulliver et al., 2019). Counseling and peer-assistance is essential to behavioral / mental health in firefighters. As firefighters progress into professional clinical care, barriers surface that impeded behavioral / mental health care.

Specific barriers are realized when firefighters consider professional clinical counselors and care. Firefighters consider costs and insurance coverage as a barrier when considering professional clinical care (Gulliver et al., 2019). Professionals and counselors from outside the fire service generate greater concerns with firefighters and behavioral / mental health. The most

noted barriers concerning clinical providers is awareness of the *fire service* work culture (Gulliver et al., 2019). Firefighters seek counselors and clinicians that know the “service language,” know their department, and understand their workplace (Caruso, 2021). Firefighters insist that clinical providers be trustworthy. Clinical providers must be aware they will be tested and must build confidence with firefighters, to provide care (Caruso, 2021). Clinical providers should seek “on the job training” to become familiar with the fire service and the culture. Clinical treatment should be based in and incorporate work related experience to reflect work related stresses and trauma (Britt & McFadden, 2012). Firefighters prefer clinical providers with a working knowledge of the fire service, culture, and work conditions. Professional counseling causes concern in firefighters with confidentiality and clinicians (Gulliver et al., 2019). Privacy and confidentiality in behavioral / mental health care facilitates seeking assistance and helps to overcome barriers.

An exhaustive review and examination of research and literature concerning firefighters and behavioral / mental health presents several notable barriers. The barriers examined come from internal, individual sources (intrinsic) and external sources outside the control of the individual (extrinsic). Stigma concerning behavioral / mental health is most often reported as an intrinsic barrier. Extrinsic barriers exist within organizations and the clinical care provided by professional counselors. Costs, availability, confidentiality, support from leadership, and the knowledge of clinical providers are reported as extrinsic barriers. Knowledge of barriers and facilitators in behavioral / mental health allows for reducing barriers, supporting, and developing facilitators and ensuring firefighters support their behavioral / mental health.

## **Methodology**

A systematic literature review was conducted utilizing scholarly sources from researchers examining various elements concerning behavioral / mental health. Academic and scholarly journal articles provided guidance and substantiated the research question and focus areas. Research literature concentrated on firefighters and public safety personnel to ensure significant data sampling. Meticulous and systematic analysis was conducted of the available research, yielding compelling results. The resulting qualitative research and integration of data was quite extensive. Analyzing the expansive resources in the systematic review realizing more than a simple sum of the results.

## **Materials**

Twenty-eight sources were obtained in a search of scholarly, peer-reviewed research studies and published fire service standards. Academic and scholarly journal articles helped to define the research question, focus areas, and guide the research. Academic and scholarly journal articles provided validation of the research question and research focus areas. All research journals and articles were reviewed and processed in an annotated bibliography to allow for assessment and evaluation, for inclusion or exclusion within this research. Each research study was noted for its topic of concentration, sample size, and participation levels.

## **Procedure**

The meta-synthesis required several steps and elements to produce relevant findings. The chosen topic required a logical, concise, and clearly stated research question. Firefighters and behavioral / mental health served to inspire this research. The resulting research question was chosen, *“What barriers are associated with behavioral and mental health in firefighters?”* Three focal areas were selected to provide related data and resources, individual (firefighter),

organizational, and clinical factors. The research would prove to qualify these factors as either intrinsic (internal / individual) or extrinsic (external). The two categories intrinsic and extrinsic help define the nature and origin of the barriers considered.

Searches for related studies were conducted through various library search engines and other scholarly search criteria. Search criteria utilized key words such as: *behavioral / mental health, barrier, facilitator, firefighter, and public safety*. Alternate searches were conducted to broaden the results and obtain all available research and data possible. Alternate topics and keywords used were *firefighter PTSD, depression, first responders, public safety personnel, anxiety, counseling, and treating firefighters*. Fifty to sixty related studies were acquired as well as several fire service standards related to the key word searches. Each research study report / article was given a primary review utilizing the abstract and conclusions. Sources that were obviously outside the parameters of this research were initially eliminated. Lower limits were placed on studies more recent than 2010. Primary resources were further evaluated for quality and content.

The pool of available, current, and pertinent studies was evaluated further to determine the quality of each and its value in this research. Individual research projects were noted for participation size, sample size, fire or public safety service relation, demographics, nation of origin, and other valuable background. Most research studies used in this meta-synthesis were qualitative studies. Several studies used quantitative elements supporting qualitative results and conclusions. Fire service standards were evaluated for qualitative data and significance. Research sources that did not contribute relevant data were eliminated from the pool. Research was considered for alternate or contradicting data. One source provided some unique findings with both supportive and contradictory data. Several international studies provided a global



perspective to this research and contributed to the significance of the sample. The qualifying, twenty-eight research sources were analyzed and selected for meta-synthesis.

Research studies were compared and evaluated. Data provided showed the significant impact of intrinsic barriers and extrinsic barriers were noted with sufficient weight and impact. The themes generated in the analysis contribute to the meta-synthesis. The results are considered in the discussion and conclusions drawn. Limitations of the research are noted and evaluated. The conclusion results from a measured impact of the research limitations, comparative analysis, and synthesis.

## **Discussion**

The purpose of this study was to gain a better understanding of the behavioral and mental health barriers associated with firefighters. Behavioral / mental health is a growing concern in society. Firefighters are faced with compounding stress from their personal lives and the stress and trauma associated with assisting the public in calls for service. This places firefighters in a unique sub-group in studying behavioral / mental health. This research project examines several research studies, data, and standards to answer the research question “*What barriers are associated with behavioral and mental health in firefighters?*” Focus for this research was placed on the individual firefighter, organizational / culture, and clinical treatment and care. The research provides significant evidence that barriers exist on two levels intrinsic and extrinsic and can generally be considered under the umbrella of “*knowledge*” (Kishore & Shaji; 2021, Jones et al. 2020; Krakauer et al. 2020). The broad label of “*knowledge*” allows for a deeper understanding and classification of reported and perceived issues. Examining these issues as intrinsic or extrinsic provides an understanding of the nature and origin for potential barriers and developing facilitators. Developing this understanding and awareness of commonly reported and

perceived barriers generates facilitators and promotes behavioral / mental health care and clinical treatment.

Researching barriers requires careful study and examination of groups and populations experiencing behavioral / mental health issues and perceptions of behavioral / mental health. Researchers apply surveys, interviews, and tests to gather data on behavioral / mental health barriers. Researchers have utilized and revised a commonly used survey into the Barriers to Mental Health Services Scale-Revised (BMHSS-R) (Pepin et al., 2015) (see appendix A). This survey allows for participants to answer forty-four questions to measure their perceptions concerning barriers to behavioral / mental health. The survey measures ten unique barriers and examines them as either intrinsic or extrinsic. Intrinsic barriers are those that are unique to the individual and extrinsic are those barriers outside the individual and their control. Assessment and understanding the origin and nature will allow for greater understanding of barriers and how to overcome them.

Researchers found a relationship between noted and perceived barriers and an associated level of knowledge concerning behavioral / mental health. In a study by Jones et al. (2020), 100% of the participants report the need for “culture-wide awareness”, emphasizing the need for knowledge concerning behavioral / mental health. A significant result of this research was the definition and operationalization of *knowledge* as “familiarity, awareness, or understanding of something, such as facts, information, descriptions, or skills, acquired through experience / exposure or education” (Jones et al., 2020, p. 47). Understanding knowledge and applying it on this level provides a foundation for recognizing and acknowledging barriers. Lacking knowledge is seen to generate a vacuum and promote silence among those suffering behavioral / mental health issues. The noted *silence* leads to lack of help-seeking and promotes barriers (Heyman et

al. 2018). Knowledge is viewed as a two-sided coin affecting both barriers and facilitators. The two-sided coin theme defines barriers and facilitators based on knowledge or a lack of it concerning behavioral / mental health (MacDermid, 2021). Krakauer et al. (2020) found various branches of public safety service reported different levels of knowledge concerning behavioral / mental health, perceived barriers, and help-seeking. A significant relationship can be drawn between barriers and knowledge concerning behavioral / mental health (Jones et al. 2020; Krakauer et al. 2020; MacDermid et al. 2021; Heyman et al. 2018). Levels of knowledge concerning behavioral / mental health are considered in evaluating perceived barriers.

### **Stigma (Intrinsic)**

Stigma is the negative feeling felt, imposed, or perceived by someone in a particular situation or position. It is easy to understand that stigma is associated with behavioral / mental health issues and care. Stigma has significant power, imposing a discrediting influence upon firefighters, interfering with help-seeking, and generating the appearance of weakness (Ricciardelli et al. 2020; Carpenter et al. 2020; Henderson et al. 2016). Firefighters are significantly affected by the slightest appearance of weakness, reporting stigma more often than other barriers, promoting feelings of embarrassment, concern for their reputation, fitness for duty, and being viewed as dangerous or unacceptable (Haugen et al. 2017; Jones 2017; Hom et al. 2016; Isaac & Buchanan, 2021; Thews et al. 2020). Stigma in behavioral / mental health is reported in firefighters across all boundaries, categories, and demographics. Firefighters from various nations, genders, ranks, time of service, and types of public safety service all report stigma as a top barrier in behavioral / mental health and care (Hom et al. 2018; Horan et al. 2021; Kim et al. 2018). Career and volunteer agencies operate differently and respond to similar calls for service. Firefighters from both types of agencies equally report stigma as a prevalent barrier

in behavioral / mental health, with volunteers reporting a greater number of structural or extrinsic barriers (Pennington et al. 2021; Stanley et al. 2016). Stigma is a commonly perceived barrier in individuals, those with the ability to apply self-forgiveness and avoid self-punitive responses, reduce the effects of the self-imposed stigma of behavioral /mental health (Carpenter et al. 2020). The individual firefighter is most often influenced by stigma as a barrier to behavioral / mental health.

### **Organizational (Extrinsic)**

The fire service organization is a unique environment where firefighters live, work, and respond to calls for service from the community. These organizations also generate and support barriers to firefighters behavioral / mental health. The firefighting environment provides unique work shifts, sleep patterns, stress, and trauma unseen by the public, making firefighters a unique sub-group in examining barriers to behavioral / mental health (Caruso, 2021). Fire service organizations develop a family-like atmosphere, spending a significant amount of time together, sharing stress and traumatic situations, creating a *brotherhood* (Henderson et al., 2016). This family atmosphere and *brotherhood* develops a strong camaraderie or *culture*, promoting the appearance of strength, reduced help-seeking, and “silence” in the wake of behavioral / mental health issues (Henderson et al., 2016; Johnson et al. 2020). Heyman et al. (2018), found a unique duality and misconceptions in a study of public safety personnel, reporting their colleagues as “unaccepting of mental illness” yet the same participants reported themselves as “less judgmental” concerning behavioral / mental health issues. The fire service *culture* is a dynamic barrier in behavioral / mental health.

Fire service organizations present barriers in providing for the behavioral / mental health needs of the firefighters serving within the organization. Organizations comply with accepted

industry standards in providing programs considering factors like costs, insurance providers, availability of care / providers, confidentiality, support from organization leadership / administration (Attridge, 2019; National Fire Protection Association [NFPA], 2021). Support for program utilization and knowledge of available resources requires buy-in and support from leadership and the administration of organizations (Harrington, 2018). Financial constraints and associated costs are often considered when developing, maintaining, and providing programs. Program costs, providing insurance, and maintaining wellness are regularly considered financial concerns in providing programs, with wellness costs often far less than medical insurance claims when behavioral / mental health issues require treatment and care (Pepin et al., 2015; Maeng et al. 2021). Volunteer fire service organizations often operate with smaller budgets than their career organization counterparts, with volunteers reporting costs as a barrier five-times more than career firefighters (Pennington et al., 2021). Offering services and having available care are worthless unless the programs are utilized by firefighters to fulfill their needs. Organization leadership and administrators must support and promote these programs, influencing firefighters to use the programs and seek help in their behavioral / mental health (Harrington, 2018; Britt & McFadden, 2012). Firefighters look to those who “lead by example” and instill trust in the programs and services available, leadership / administrators are tasked with providing these roles and supporting behavioral / mental health programs and care (Harrington, 2018; Gulliver et al. 2019). Leadership / administrations use policy, procedure, and practices to operate organizations effectively and efficiently. Policy and procedural guidance are provided through the International Association of Fire Chiefs “Yellow Ribbon Report,” with guidance concerning provided insurance coverage, orientation / education of recruits, counseling, and continuing education in behavioral / mental health programs and care (International Association of Fire Chiefs [IAFC],

2021). Utilizing behavioral / mental health care is vital, firefighters often report barriers in the clinical care received.

### **Clinical (Extrinsic)**

Firefighters seeking and receiving behavioral / mental health care and treatment report barriers based in the clinical care provided. Firefighters report knowing about available programs and care in behavioral / mental health, seeking care based on personal preference and experiences, selecting counseling from family, friends, clergy, department members / officers, and clinical providers (Gulliver et al., 2019). Time served in the fire service influences choices in help-seeking and those sought as counselors, firefighters with less time look to family, spouses, and officers while those with greater time on the job seek professional clinical providers (Gulliver et al., 2019). As professional clinical providers are utilized firefighters report concerns and barriers related to costs, insurance, and the ability / experience of the clinical professional (Gulliver et al., 2019). Professional clinical providers must understand they will be tested and need to build trust with firefighters in their care (Gulliver et al., 2019; Caruso, 2021). Trust is gained with firefighters by learning and understanding the fire service culture, language, work environment, schedule, stresses, and trauma on the job, while ensuring privacy and confidentiality (Caruso, 2021; Gulliver et al., 2019; Britt & McFadden, 2012). Firefighters perceive several significant elements in the clinical care of behavioral / mental health.

The research examined and synthesized in this study show several key barriers perceived and experienced by firefighters in their behavioral / mental health. Firefighters experience barriers in the three areas of focus: individually, organizational, and clinical care and treatment. Individually (intrinsic) firefighters most often report and perceive stigma and stigma related elements as a barrier in behavioral / mental health. Organizationally (extrinsic) firefighters note

barriers supported by the fire service culture. Barriers manifest in the negative impression to showing weakness in help-seeking and the support and maintenance of programs for behavioral / mental health, specifically leadership / administration, financial constraints, and policy. In clinical care and treatment (extrinsic) for behavioral / mental health issues, firefighters seek to trust those providing counsel and require counselors to have a strong understanding of the firefighter culture, workplace, stress, and trauma, noting the knowledge of clinicians and counselors as a barrier. There is a significant relationship noted throughout the research that knowledge or lack of knowledge can be closely associated with barriers and facilitators in behavioral / mental health in firefighters.

### **Future Research**

Considering the limited research on firefighters and barriers to behavioral / mental health, the BMHSS-R could be used with various fire service organizations covering metropolitan career, suburban career, combination, part-time and volunteer departments collecting data for comparative analysis. Research could utilize a modified BMHSS-R that covered the fire service and related categories. Research utilizing other emergency services and behavioral / mental health could be used for a comparative analysis of barriers.

### **Limitations**

This systematic literature review and resulting meta-synthesis is limited in several key areas, available research, qualitative vs. quantitative research and data, and the researcher's interpretation / synthesis of the data and studies. Although there was very little focused research specifically on barriers in firefighters to behavioral / mental health issues, there were a considerable number of studies concerning specific conditions mentioning assessments and evaluations of perceived barriers by firefighters in behavioral / mental health. These studies

allowed for a significant sample and broad demographic of international studies, gender, rank, time in service, and organization types. Research across these demographics provided a valuable and valid sample of research and data.

The availability and type of research data available resulted in primarily qualitative research versus quantitative. The lack of quantitative data is a significant limitation in this research. Sufficient quantitative data would allow for a meta-analysis and allow for comparisons of qualitative and quantitative data. The lack of quantitative data lends support to further research in this area.

The researcher's interpretation of the selected data is another potential limitation in this study. Considerable effort was made to evaluate and assess the available research and report significant findings. Contradictory and alternative data was considered and evaluated in the meta-synthesis. The meta-synthesis was also limited in that the research was primarily qualitative compared to a quantitative meta-analysis. The results of this research should be expanded and continued to provide further data and focus on the noted barriers. These limitations should be considered to guide and focus further research in this area.

## **Recommendations**

Firefighters face significant barriers in behavioral / mental health from various sources and levels. Focused research should be conducted to evaluate the specific barriers perceived by firefighters, discover their origins and nature, and develop the necessary facilitators to overcome these barriers. Further research will improve the level of knowledge firefighters possess concerning behavioral / mental health facilitating care, treatment, and wellness.



Considering the results of this research project several key recommendations are suggested to increase the knowledge firefighters have concerning barriers in behavioral / mental health.

- Focused research on barriers perceived by firefighters.
  - Especially stigma, it is powerful, prevalent, and destructive
- Present / disseminate research findings to ensure significant knowledge concerning behavioral / mental health is understood and utilized by firefighters and fire service leadership / administrators.
- Firefighters should increase their knowledge and skill of *self-forgiveness* techniques as a facilitator to combat self-imposed stigma.
- The fire service needs to develop a culture supporting behavioral / mental health, reducing stigma in firefighters, and increasing the knowledge of behavioral / mental health for firefighters.
- Encourage fire service leadership / administrators to utilize research findings and guidelines to develop and support policy, procedures, and programs for behavioral / mental health.

This research project provides a primary assessment and evaluation, identifying barriers experienced by firefighters in behavioral / mental health. Further, focused research is needed to expand the knowledge of barriers. Firefighters are a unique sub-group in the population and are routinely exposed to exponential levels of trauma and stress in providing service to their communities. Behavioral / mental health access is essential in the overall wellness of firefighters. Barriers to behavioral / mental health in firefighters prevents help-seeking, care, and treatment. The fire service must develop knowledge of behavioral /mental health and develop a culture that

supports firefighters to overcome barriers. Too many firefighters succumb to issues in their behavioral /mental health annually, potentially due to barriers sighted in this research. Were there barriers involved in the situation surrounding the Twinsburg firefighter murder-suicide? We are left not knowing and considering the possible answers. Could a significant level of knowledge of behavioral / mental health provided him a better outcome? We can safely assume that more knowledge would have been a benefit.

*“Knowledge is power!” (Unknown).*

## References (Do not remove the References Heading. Note single spacing for the references)

- Attridge, M. (2019). A global perspective on promoting workplace mental health and the role of employee assistance programs. *American Journal of Health Promotion*. 33(4), 622-629. <https://journals.sagepub.com/doi/full/10.1177/0890117119838101c>
- Britt, T. W., & McFadden, A. C. (2012). Understanding mental health treatment-seeking in high stress occupations. In J. Houdmont, S. Leka, & R. S. Sinclair (Eds.), *Contemporary occupational health psychology: Global perspectives on research and practice, Volume 2*. (pp. 57-73). John Wiley & Sons Ltd. <https://doi.org/10.1002/9781119942849>
- Carpenter, T. P., Pennington, M. L., Seebeck, J., Gomez, D.R., Denman, T.C., Kimbrel, N.A., Cammarata, C.M., Leto, F., Ostiguy, W.J., & Gulliver, S.B. (2020) Dispositional self-forgiveness in firefighters predicts less help-seeking stigma and fewer mental health challenges. *American Psychological Association* 5(1), 29-37. <https://doi.apa.org/doi/10.1037/sah0000172>
- Caruso, J. (2021). So, you want to work with fire fighters: a guide for clinicians, enhancing competency when working with fire service members. *Crisis, Stress, and Human Resilience: An International Journal*, 3(1), 22-25. <https://www.crisisjournal.org/article/24859.pdf>
- Garrett, A. (2019) Murder-suicide in Akron: Twinsburg firefighter kills fiancée and himself. Victim's daughter makes 911 call. *Akron Beacon Journal*. <https://www.beaconjournal.com/story/news/crime/2019/04/11/murder-suicide-in-akron/5454257007/>
- Gulliver, S.B., Pennington, M.L., Torres, V.A., Steffen, L.E., Mardikar, A., Leto, F., Ostiguy, W., Zimering, R.T., & Kimbrel, N.A. (2019). Behavioral health programs in fire service: surveying access and preferences. *Psychological Services*, 16(2), 340-345. American Psychological Association. <http://dx.doi.org/10.1037/ser0000222>
- Harrington, J. (2018). Barriers to implementation of workplace wellness programs in career fire service organizations: An exploratory qualitative study. *American Journal of Health Studies* 33(1). <https://www.proquest.com/openview/0ca25d8e322700310d6d09f5c048542e/1?pq-origsite=gscholar&cbl=18750>
- Haugen, P.T., McCrillis, A.M., Smid, G.E., & Nijdam, M.J. (2017) Mental health stigma and barriers to mental health care for first responders: A systematic review and meta-analysis. *Journal of Psychiatric Research*. 94, 218-229. <https://doi.org/10.1016/j.jpsychires.2017.08.001>
- Henderson, S.N., Van Hasselt, V.B., LeDuc, T.J., & Couwels, J. (2016). Firefighter suicide: Understanding cultural challenges for mental health professionals. *Professional Psychology: Research and Practice* 47(3), 224-230. American Psychological Association. <http://dx.doi.org/10.1037/pro0000072>
- Heyman, M., Dill, J., & Douglas, R. (2018). The Ruderman white paper on mental health and suicide of first responders. *Ruderman Family Foundation*. [https://rudermanfoundation.org/white\\_papers/police-officers-and-firefighters-are-more-likely-to-die-by-suicide-than-in-line-of-duty/](https://rudermanfoundation.org/white_papers/police-officers-and-firefighters-are-more-likely-to-die-by-suicide-than-in-line-of-duty/)

- Hom, M.A., Stanley, I.H., Ringer, F.B., & Joiner, T.E. (2016). Mental health service use among firefighters with suicidal thoughts and behaviors. *Psychiatric Services* 67(6) 688-691. <https://doi.org/10.1176/appi.ps.201500177>
- Hom, M.A., Stanley, I.H., Spencer-Thomas, S., & Joiner, T.E. (2018). Mental health service use and help-seeking among women firefighters with a career history of suicidality. *Psychological Services* 15(3), 316-324. <https://doi.apa.org/doi/10.1037/ser0000202>
- Horan, K.A., Marks, M., Ruiz, J., Bowers, & Cunningham, A. (2021). Here for my peer: The future of first responder mental health. *International Journal of Environmental Research and Public Health* 18(21), 1-13. <https://doi.org/10.3390/ijerph182111097>
- International Association of Fire Chiefs. (2021). 2021 Yellow ribbon report update: Best practices in behavioral wellness for emergency responders. *International Association of Fire Chiefs*. <https://www.iafc.org/>
- Isaac, G. M., & Buchanan, M. J. (2021). Extinguishing stigma among firefighters: An examination of stress, social support, and help-seeking attitudes. *Psychology* 12, 349-373. <https://doi.org/10.4236/psych.2021.123023>
- Johnson, C.C., Vega, L., Kohalmi, A.L., Roth, J.C., Howell, B.R., & Van Hasselt, V.B. (2020). Enhancing mental health treatment for the firefighter population: Understanding fire culture, treatment barriers, practice implications, and research directions. *American Psychological Association* 51(3), 304-311. <https://doi.apa.org/doi/10.1037/pro0000266>
- Jones, S. (2017). Describing the mental health profile of first responders” A systematic review. *Journal of the American Psychiatric Nurses Association* 23(3), 200-214. <https://doi.org/10.1177%2F1078390317695266>
- Jones, S., Agud, K., & McSweeney, J. (2020). Barriers and facilitators to seeking mental health care among first responders: “Removing the darkness.” *Journal of the American Psychiatric Nurses Association*. 26(1), 43-54. <https://journals.sagepub.com/doi/10.1177/1078390319871997>
- Kim, J.E., Dager, S.R., Jeong, H.S., Ma, J., Park, S., Kim, J., Choi, Y., Lee, S.L., Kang, I., Ha, E., Cho, H.B., Lee, S., Kim, E., Yoon, S., & Lyoo, I.K. (2018). Firefighters, posttraumatic stress disorder, and barriers to treatment: Results from a nationwide total population survey. *Plos One* 13(1), 1-14. <https://doi.org/10.1371/journal.pone.0190630>
- Kishore, N. & Shaji, H. S. (2021). Barriers to mental health services. *The International Journal of Indian Psychology* 9(4). DOI: [10.25215/0904.207](https://doi.org/10.25215/0904.207)
- Krakauer, R.L., Steinicki, A.M., & Carleton, R.N. (2020). Examining mental health knowledge, stigma, and service use intentions among public safety personnel. *Frontiers in Psychology* 11(949). <https://doi.org/10.3389/fpsyg.2020.00949>
- MacDermid, J.C.; Lomotan, M., & Hu, M.A. (2021). Canadian Career Firefighters’ Mental Health Impacts and Priorities. *International Journal of Environmental Research and Public Health*, <https://doi.org/10.3390/ijerph182312666>

Maeng, D., Cornell, A.E., & Nasra, G.S. (2021). Employer-sponsored behavioral health program impacts on care utilization and cost. *The American Journal of Managed Care* 27(8), 334-339. <https://doi.org/10.37765/ajmc.2021.88724>

National Fire Protection Association. (2021). NFPA 1500 Standard on fire department occupational safety, health, and wellness program. *NFPA Standards*. <https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=1500>

Pennington, M. L., Cardenas, M., Nesbitt, K., Coe, E., Kimbrel, N. A., Zimering, R. T., & Gulliver, S. B. (2021). Career versus volunteer firefighters: Differences in perceived availability and barriers to behavioral health care. *Psychological Services*. Advance online publication. <https://doi.org/10.1037/ser0000559>

Pepin, R., Segal, D.L., Klebe, K.J., Coolidge, F.L., Krakowiak, K.M., & Bartels, S.J. (2015). The barriers to mental health services scale revised: Psychometric analysis among older adults. *Mental Health & Prevention* 3, 178-184. <https://doi.org/10.1016/j.mhp.2015.09.001>

Ricciardelli, R., Carleton, R. N., Mooney, T., & Cramm, H. (2020). “Playing the system”: Structural factors potentiating mental health stigma, challenging awareness, and creating barriers to care for Canadian public safety personnel. *Health: An Interdisciplinary Journal for the Social Study of Health, Illness, and Medicine* 24(3) 259-278. <https://doi.org/10.1177%2F1363459318800167>

Stanley, I. H., Boffa, J.W., Hom, M.A., Kimbrel, N.A., & Joiner, T.E. (2016). Differences in psychiatric symptoms and barriers to mental health care between volunteer and career firefighters, *Elsevier*. <http://www.elsevier.com/open-access/userlicense/1.0/>

Thews, K. N., Winkelmann, Z.K., Eberman, L.E., Potts, K.A., & Games, K.E. (2020). Perceived barriers to reporting mental and behavioral illness in the fire service. *International Journal of Athletic Therapy and Training*, 25, 31-36. <https://doi.org/10.1123/ijatt.2019-0035>

## Appendix

### BMHSS-R (44 item version)

Listed below are potential reasons why people do not seek out mental health services (e.g. counseling, psychotherapy). Please read each one carefully and indicate the extent to which you agree or disagree that the following barriers affect YOUR use of mental health services. Please try to pick an answer for each item, even if you are unsure.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

1. A psychotherapist (counselor) would not understand me or my problems.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

2. Psychotherapists (counselors) would not find working with someone my age worthwhile.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

3. Feelings of sadness are typical for people my age.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

4. I would not tell my physician if I was feeling down or depressed.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

5. I would not even know how to begin to look for a psychotherapist (counselor).

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

6. Normal people do not go to psychotherapy (counseling).

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

7. Psychotherapy (counseling) is for people with severe mental health problems.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

8. I would feel embarrassed or ashamed to see a psychotherapist (counselor).

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

9. I do not feel confident I could select a psychotherapist (counselor) who is right for me.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

10. My physician does not have time to address mental health concerns.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

11. A person's problems are his or her own business, not anybody else's.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

12. It is difficult for me to find transportation to the psychotherapist (counselor).

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

13. A psychotherapist (counselor) is not qualified to help me with my problems.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

14. I am afraid of what people would think of me if I went to a psychotherapist (counselor).

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

15. I have always solved my own problems.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

16. I am not sure if psychotherapy (counseling) really works or is effective.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

17. I am concerned that I would not be comfortable with a psychotherapist (counselor).

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

18. A lot of people feel sad and down.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

19. Seeing a psychotherapist (counselor) is a sign of weakness.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

20. It would be too difficult to get transportation for weekly appointments.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

21. A psychotherapist (counselor) cannot understand the problems of someone my age.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

22. Psychotherapy (counseling) is too expensive.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

23. I cannot find a psychotherapist (counselor) who works with someone my age.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

24. It is normal to feel more depression as we age.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

25. Psychotherapists (counselors) have not been trained to work with people my age.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

26. I am concerned that the information I share with a psychotherapist (counselor) will not be kept private.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

27. It would be normal for me to sad or down given the circumstances of my life.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

28. I do not know what to look for in a psychotherapist (counselor).

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

29. People my age cannot benefit from psychotherapy (counseling).

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

30. I am uncomfortable with personal questions.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

31. I cannot afford psychotherapy (counseling).

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

32. I do not know anyone who has benefited from psychotherapy (counseling).

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

33. I do not know the reasons people go to psychotherapy (counseling).

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

34. I would not know how to find a psychotherapist (counselor).

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

35. I do not drive.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

36. People my age cannot change.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

37. Psychotherapists' (counselors') time is better spent working with younger people.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

38. Psychotherapists (counselors) would think working with someone my age is a waste of time.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

39. I need to solve my own problems.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

40. My insurance does not cover mental health care.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

41. Public transportation is not available or too burdensome.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

42. It would be difficult for me to ask my physician to refer me to a psychotherapist (counselor).

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

43. I cannot afford transportation to a psychotherapist's (counselor's) office.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

44. It is hard for me to admit that I need professional help.



1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

### **Scoring of the BMHSS-R**

44-item version

Scoring Instructions: To obtain a score on any subscale or a Total score, add all items contained in that scale.

Help Seeking (4 items): 11, 15, 39, 44

Stigma (5 items): 6, 7, 8, 14, 19

Knowledge and Fear of Psychotherapy (5 items): 17, 26, 30, 32, 33

Belief about Inability to Find a Psychotherapist (5 items): 5, 9, 23, 28, 34

Belief that Depressive Symptoms are Normal (4 items): 3, 18, 24, 27

Insurance/Payment Concerns (3 items): 22, 31, 40

Ageism (5 items): 2, 21, 36, 37, 38

Concerns about Psychotherapist's Qualifications (5 items): 1, 13, 16, 25, 29

Physician Referral (3 items): 4, 10, 42

Transportation Concerns (5 items): 12, 20, 35, 41, 43

-----  
Intrinsic Barriers: 3, 5, 6, 7, 8, 9, 11, 14, 15, 17, 18, 19, 23, 24, 26, 27, 28, 30, 32, 33, 34, 39, 44

Extrinsic Barriers: 1, 2, 4, 10, 12, 13, 16, 20, 21, 22, 25, 29, 31, 35, 36, 37, 38, 40, 41, 42, 43

Total Score: 1 - 44

---

Pepin, R., Segal, D.L., Klebe, K.J., Coolidge, F.L., Krakowiak, K.M., & Bartels, S.J. (2015). The barriers to mental health services scale revised: Psychometric analysis among older adults.

*Mental Health & Prevention* 3, 178-184. <https://doi.org/10.1016/j.mhp.2015.09.001>

## **Author Biography**

Marcus Ketner is a 30-year veteran in Fire and Emergency Medical Services. He recently graduated from Bowling Green State University (Bowling Green, Ohio), earning a bachelor's degree in Fire Administration. Marcus has been serving the community of Twinsburg, Ohio, for over 25 years, as a Lieutenant Firefighter / Paramedic for the Twinsburg Fire Department. He holds certifications as an Ohio Professional Firefighter, Fire Service Instructor, Fire Safety Inspector and Technical Rescue Technician in Rope Rescue, Confined Space Rescue, Trench, and Structural Collapse. Marcus represents Twinsburg Fire on the Summit County Technical Rescue Operations Team and as a member of the Ohio Region 5 Technical Rescue Response Team. Marcus is a certified Paramedic, holding his National Registry for nearly 30 years. He has performed many roles for Twinsburg Fire as an assistant public information officer, apparatus purchase committee chair and member, as well as a public educator. Marcus is a Supervisor for Event Medical Solutions, providing specialized emergency medical services to concert venues and events. He has also served the Ohio Fire Academy for 11 years as a Field Training Officer. Marcus and his beautiful wife Dawn are raising their daughter, dogs, and assorted animals in Mantua Township, Ohio.



Police Department Civil Liability: Law Enforcement Officers and Alcohol a Review of 33  
Federal Court Cases

Gregory L. Walterhouse  
Bowling Green State University  
124 Williams Hall  
Bowling Green, Ohio 43404  
Phone: 419-372-6009  
Email: [waltegl@bgsu.edu](mailto:waltegl@bgsu.edu)

## **Police Department Civil Liability: Law Enforcement Officers and Alcohol a Review of 33 Federal Court Cases**

**Gregory L. Walterhouse**

**Bowling Green State University**

### **Abstract**

Studies indicate that substance abuse disorders effect nearly 30% of law enforcement officers compared to 10% of the general population. Alcohol abuse can result in problem behavior by officers with consequences ranging from disciplinary action, termination, criminal charges, and civil liability for officers and departments. Examples of problem behavior identified by this research includes assault, sexual assault, domestic violence, intoxicated driving, shootings and accidental weapon discharges. The purpose of this research was the review of thirty-three federal court opinions to provide insight into the civil liability that some officers bring upon themselves and their departments resulting from problem behavior influenced by alcohol abuse. There were several findings of this research. To address alcohol abuse, departments should establish clearly stated and well-publicized drug-free workplace policies that includes drug/alcohol testing, non-punitive options for self-reporting alcohol addiction, options for treatment and rehabilitation, and strictly prohibiting the possession of alcohol on municipal property. Departments must also establish and strictly enforce policies that set forth guidelines for carrying a firearm where an officer is at risk of intoxication or impairment of judgement. Providing EAP and wellness programs that are educational, confidential, promote addiction prevention, peer referral and assist officers struggling with addiction by offering counseling, assessment and referral to qualified alcohol treatment programs that integrates the family, home and work environments are also needed. Another option is using specially trained sworn personnel to provide officers and families with confidential and nonjudgmental advice, support and guidance for alcohol disorders. Other recommendations include training officers to recognize the signs of alcohol abuse in colleagues, screening candidates for law enforcement positions for existing or potential alcohol abuse problems, adequately training and supervising officers and investigating all complaints against officers issuing appropriate counseling or discipline where warranted.

**Key Words: Addiction, Alcohol Abuse, Assault, Sexual Assault, Civil Liability, Domestic Violence, Firearm, Interventions, Law Enforcement Officer, Organizational Culture, Police, Lawsuit, Shootings, Substance Abuse, Violence.**

## Introduction

Alcohol use disorder (AUD) including binge drinking and heavy drinking have been associated with problem and at times criminal behavior by law enforcement officers. These behaviors include shootings, accidental weapon discharges, and altercations with the public, assault including sexual assault, intoxicated driving, domestic violence and constitution violations. Studies indicate that substance abuse disorders effect 20% to 30% of law enforcement officers compared to 10% of the general population (Cidambi, 2018). Pooled data from four studies found that 30% of law enforcement officers in the studies binge drank during the prior month. Binge drinking, is defined as five or more drinks in a drinking session. However, pooled data across five studies found that 18.6% of the officers studied had Alcohol Use Disorders Identification Test (AUDIT) scores of eight or more (Miller & Galvin, 2016). A score of eight suggests that a brief intervention is required. Miller also reports that one in six law enforcement officers are in need of professional intervention for substance abuse disorders and one in twenty have an untreated AUD. Alcohol abuse can result in problem behavior by law enforcement officers with consequences ranging from disciplinary action including termination to criminal charges, and civil liability for officers and their departments. Civil liability is the focus of this inquiry.

The purpose of this research is the review of applicable federal court opinions to provide insight into the civil liability that some law enforcement officers bring upon themselves and their departments resulting from problem behavior influenced by alcohol consumption. Litigation related costs are not the only costs associated with AUD. In addition to litigation and civil award costs, turnover costs related to terminating offending officers can be substantial. The Florida Public Pensions Trustee Association reports that the cost of training a new officer ranges from

\$100,000 to \$240,000 depending on department and location (FPPTA, 2018). Regarding absenteeism one study found that employees with AUD represented 9.3% of the full-time workforce and contributed to 14.1% of total reported workplace absences (Parsley et al., 2022). There are also non-monetary costs including poor public perception of law enforcement. Gallup reports that American's confidence in the police has declined from about 65% in 2004 to about 48% in 2020 (Lowery et al., 2020). Law enforcement agencies need to avoid the negative publicity these alcohol related incidents could bring.

This inquiry identifies specific alcohol influenced problem behavior among some law enforcement officers that resulted in civil liability for their departments. It is not the purpose of this research to provide legal analysis of the cases but to obtain insight from the case fact patterns and court decisions to provide guidance to departments on mitigating alcohol influenced problem behavior by officers. While the courts dismissed some of the civil cases based on sovereign or qualified immunity and other factors, nonetheless defending against such lawsuits is costly for departments and can create a poor public image. A survey of twenty cities found that the average litigation fees across all twenty cities during the time studied was about \$24 million. This includes cases dismissed by the courts (VirTra, 2018). It is not the intent of this inquiry to disparage the vast majority of dedicated and hardworking law enforcement officers in the United States, but to highlight the problem that some officers face with alcohol use disorder and to identify mitigation strategies.

## **Literature Review**

### **Section 1983**

Most of the civil cases researched are cases predicated on Title 42 U.S.C. §1983 enacted in 1871 commonly referred to as Section 1983 claims. In *Monell v. New York City Department of*

*Social Services* (1978) the Supreme Court, for the first time permitted claims against governmental entities where the claim resulted from a policy or custom of the government that was the "moving force" behind the violation. In *Canton v. Harris* the Supreme Court held that a governmental entity may be held liable under §1983 for failure to train municipal employees that results in constitutional deprivation of rights. Closely linked with failure to train is failure to supervise. In *Rizzo v. Goode*, the Supreme Court "indicated there must be an affirmative link between the supervisor and the constitutional violation" (Kinports, 1999, p.1658).

### **"Choir Practice"**

In the early morning hours of July 4, off-duty law enforcement officers gathered to socialize in a precinct parking lot with some officers consuming both beer and hard alcohol. Participants referred to these social gatherings as "choir practice" that had been occurring for decades (*McDonald v. Flake*). At some point, an altercation ensued between some of the officers and a group of six pedestrians passing-by on the sidewalk. The officers violently attacked two of the subjects resulting in thousands of dollars of medical bills. The victims brought a §1983 lawsuit claiming excessive force arguing that the department tolerated a longstanding custom that resulted in violation of their constitutional rights. The court denied defendant officer's motion for summary judgement based on qualified immunity.

A similar fact pattern was present in *Latuszkin v. City of Chicago*. According to the complaint, law enforcement officers held a party in the parking lot of a precinct at which officers consumed large amounts of alcohol, fired their weapons into the air and at passing trains, built a bon fire with "unlawfully appropriated materials" and intimidated members of the public who complained about the party. After leaving the party in his own car, an intoxicated officer drove onto a sidewalk striking and killing a pedestrian. The court dismissed the civil suit against the

City finding the officer was not acting under the color of law and was engaged in entirely private behavior.

In another somewhat similar case, off-duty law enforcement officers assaulted a pedestrian while a dozen off-duty officers stood-by and watched from a nearby parking lot where the officers were holding a beer and music party. The incident resulted in a §1983 civil lawsuit against the city for violation of the victim's civil rights (*Marrone v. City of Philadelphia*). In this case, the presiding judge found there was a genuine issue of material fact as to whether the city failed to train, investigate and discipline the officers, and whether that failure amounted to deliberate indifference regarding the victim's rights.

In New York an off-duty officer went on a twelve-hour drinking binge that started with other officers and sergeants in the parking lot of a department precinct. Later that evening after drinking continuously for twelve hours the officer sped through multiple red lights striking and killing four persons in the crosswalk. Allegedly, the officer had a history of drinking problems known to the department, though department supervisors never questioned, disciplined or counseled the officer for his alcohol use (*Pena v. DePrisco*). The victim's families brought §1983 lawsuits claiming violation of decedent's due process and the right to be free of state-created dangers. The appellate court dismissed the case based on qualified immunity, reasoning that the due process claim in the case was not clearly established.

### **Shootings**

Stemming from a road-rage incident, an off-duty officer under the influence of alcohol shot and killed the unharmed driver of the other vehicle. The officer left the scene without reporting it. The victim's survivors filed a §1983 suit claiming the officer was acting under the color of law when he shot the victim. The court dismissed the suit finding the act of shooting the



victim to be an intentional act occurring outside the scope of employment as a law enforcement officer and therefore not an act under the color of law (*Claudio v. Sawyer*). In a similar incident from the same department, security guards instructed an intoxicated off-duty law officer drinking beer in an amusement park to leave. An altercation ensued and the officer shot one of the security guards. The injured security guard filed a §1983 lawsuit alleging the officer was acting under the color of law at the time of the shooting. Hereto, the court found the officer was not acting under the color of law at the time of the shooting (*Turk v. McCarthy*).

In another incident, an off-duty officer who had consumed a pint of brandy was driving an unmarked police vehicle when he noticed another vehicle speeding. The off-duty officer started following the other vehicle whose driver eventually stopped and exited his vehicle to determine why the unmarked vehicle was following him. The off-duty officer then exited his vehicle with gun in hand and a struggle ensued while he attempted to handcuff the other driver with the officer shooting him in the leg. The victim filed a §1983 action claiming the use of excessive force which the court dismissed based on sovereign immunity (*Gough v. Louisville Jefferson County Metro Government*).

Another shooting incident involved an intoxicated off-duty officer who observed an assault in progress in the parking lot of the bar he was leaving. In the process of attempting to stop the assault, the officer shot two people killing one and injuring the other. An internal affairs investigation found the use of force justified albeit the officer violated department policies that prohibited off-duty officers from carrying a firearm while under the influence of alcohol. The victim's estate filed a §1983 lawsuit against the city and officer alleging violation of the victim's constitutional rights. The court dismissed the suit because plaintiffs failed to prove that the city's

policies encourage officers to exercise law enforcement action while under the influence of alcohol (*Rodriguez v. City of Houston.*)

In a similar incident, an off-duty officer standing in line to enter a bar observed a disagreement between two other patrons. The officer drew his service weapon and pointed it at one of the patrons who raised his hands and started to walk away when the officer fired thirteen shots hitting the patron twelve times resulting in his death. The case facts allege that the officer was intoxicated at the time. The officer who was in plain clothes never identified himself as a law enforcement officer. The victim's sister filed a §1983 action claiming a violation of due process which was dismissed by the court because she did not suffer a direct injury from the incident (*Kangalee v. City of Baltimore P.D.*).

Another shooting occurred involving an off-duty officer who had consumed several bottles of beer before the altercation. While there was some dispute over the facts of the case, it is undisputed that the off-duty officer shot one subject in the back with his department issued revolver leaving him paralyzed, resulting from a street altercation. The victim filed a §1983 action that was eventually dismissed (*Foy v. Dicks*).

In Illinois, officers working with a confidential informant (CI) arranged for the CI to purchase cocaine. After the CI purchased the cocaine officers moved in to make the arrest and while removing suspects from the vehicle an officer shot the CI. The officer alleged he discharged his weapon accidentally when the CI who was intoxicated resisted during his removal from the vehicle. The CI filed a §1983 action claiming the officers used excessive force and were consuming alcohol with the CI three hours prior to the shooting. The court denied the officer's motion to bar evidence that they consumed alcohol with the CI prior to the shooting (*Nichols v. Grieshaber*).

In this incident, off-duty officers were drinking in a bar while carrying their service weapons. The level of one officer's intoxication resulted in his removal from the bar though he remained in the parking lot. In the parking lot the officer became involved in an altercation with other patrons who were there smoking, resulting in the officer being knocked to the ground. When another patron attempted to assist the officer to his feet, the officer spun around, pulled his service weapon and shot the assisting patron in the chest. The officer did not identify himself as a law enforcement officer, and the assisting patron had no knowledge that the man he was assisting was an officer. The Plaintiff filed a §1983 claim, which the court allowed to proceed citing sufficient evidence to create questions of fact. Specifically the plaintiff claimed the department's firearm policy failed to set forth guidelines for carrying a firearm where an officer is at risk of intoxication or the officer's judgement may be impaired, rising to deliberate indifference by the department (*Bladdick v. Pour*).

A similar incident involved an off-duty law enforcement officer consuming alcohol in a New Jersey bar that resulted in an altercation with the off-duty officer shooting and killing another bar patron. The issue in this case, in addition to an alleged failure to train and supervise, was a department policy that required all off-duty officers to carry a department issued firearm, and the absence of a policy prohibiting the consumption of alcohol while carrying a firearm (*Labo v. Borger*). The Court held the policy requiring off-duty officers to carry a firearm, did not by itself, deprive citizens of their constitutional rights. The court dismissed the §1983 claim due to a lack of supporting evidence. In Kansas City, Missouri, another bar altercation occurred when an off-duty officer after consuming alcohol was flashing his service weapon and credentials to bar patrons. Security asked the officer to leave citing a prohibition of weapons on the premises. The officer became angry and a struggle ensued as security attempted to remove

him. During the altercation, the officer waived his weapon at security personnel and the weapon discharged striking one of the security staff in the torso. The injured security member filed suit under the Kansas Tort Claims Act (*Babbs v. Block*) against the city on a number of negligence theories that the court eventually dismissed based on immunity.

The Law Enforcement Officers Safety Act, 18 U.S.C. §926B (2004) exempts law enforcement officers from the concealed carry laws of the fifty states, District of Columbia and U.S. Possessions. However, §926B (c) (5) of the act prohibits law enforcement officers, who at the time of carrying a concealed firearm pursuant to the LEOSA exemption, from being under the influence of alcohol.

### **Domestic Violence**

An off-duty officer with a known history of alcohol abuse shot and killed his girlfriend with his service weapon climaxing a domestic dispute. The officer was allegedly under the influence of alcohol at the time of the murder. The estate of the deceased brought a §1983 claim against the city for failure to train, supervise, investigate and discipline amounting to deliberate indifference. The court dismissed the case, as the officer was not acting under the color of law at the time of the murder (*Burkhart v. Knepper*).

### **Bar Altercations**

An off-duty officer who had been consuming alcohol became involved in an altercation with security guards in a bar. The officer submitted to a breathalyzer test at the station after the incident, resulting in a dispute as to whether the test was voluntarily. The officer filed a §1983 lawsuit claiming violation of his Fourth Amendment rights. The court dismissed the case reasoning that the officer was not “seized” when he submitted to the breathalyzer test (*Pennington v. Metropolitan Government*).

Two on-duty plain-clothes officers entered a bar and began questioning a patron. It was unbeknownst to the officers that the patron was an off-duty officer. The officers, drug the patron into a corridor and one officers beat the patron without allowing him to identify himself. Other officers including a lieutenant watched allowing the assault to continue. The assaulting officer went to the bar, and returned with a Heineken beer and continued to beat the patron whom the officers did not allow to identify himself. The off-duty officer alleged that the on-duty officers had been drinking at a retirement party before going on-duty at 5:30 P.M. Records indicate the assaulting officer had a history of treatment for alcoholism. The assaulted off-duty officer filed a §1983 lawsuit claiming the assault occurred under the color of law. The court dismissed the suit finding the plaintiff failed to establish a city policy or custom that led to the incident (*Edwards v. City of New York*).

On the West Coast, an off-duty officer was drinking alone in a bar when another patron engaged him in conversation. As the evening went on tensions increased and a physical altercation occurred in the parking lot where the other patron took the off-duty officer to the ground. The officer alleged that his personal off-duty weapon fell from his waistband and as he grabbed for the weapon it discharged striking the other man in the chest killing him. At the time of the shooting, the officer had a blood alcohol level of .209 percent while the other man's was .18 percent. The family of the deceased filed a §1983 claim against the county. The court dismissed the case, finding the off-duty officer was not acting under the color of law at the time of the shooting. In their complaint, plaintiffs cited department records documenting sixty-three off-duty shootings and seventeen off-duty brandishing of weapons from 1989-1994, fifteen of which involved alcohol (*Huffman v. County of Los Angeles*).

In yet another bar altercation, two off-duty officers drinking at a bar got into an altercation with another patron. During the altercation, the officers allegedly choked the patron until he was unconscious and then drug him into the parking lot where they continued to batter him while unconscious. The victim filed a §1983 action against the city for excessive use of force. The court dismissed the claim, finding that the City's policies did not give rise to his harm (*Bohanon v. City of Indianapolis*).

### **Sexual Assault**

This is a condensed version of the complex and lengthy fact pattern of this case. Two officers assigned to the Special Victims Unit traveled out of state to interview a sexual assault victim. In brief, the officers persuaded the victim to join them for a drink that evolved into a 10-hour *pub-crawl*. The officers then coaxed the victim to spend the night in their hotel room where one of the officers kissed and fondled the victim against her wishes. The victim filed a §1983 suit against the City for failure to supervise, failure to train and deprivation of her Fourteenth Amendment rights by the officers under the color of law (*Izzo v. City of New York*). The court held that the officers were not entitled to qualified immunity and directed the parties to appear at a settlement/scheduling conference.

In another case with a similar fact pattern, two veteran male officers asked a female probationary officer to join them at a local bar. As in the case above, it is necessary to condense the lengthy fact pattern. In short, the female officer was too intoxicated to drive so she rode home with one of the officers. There a sexual encounter occurred between the three officers with the male officers claiming the encounter was consensual and the female officer claiming it was not. The department ordered the victim officer to submit to a "fitness for duty evaluation" and ultimately terminated her based on concerns about her drinking habits, decision-making, and

judgment. The probationary officer filed suit, alleging retaliation in violation of Title VII of the Civil Rights Act of 1964. The court dismissed the case finding the plaintiff failed to show any discriminatory animus on the part of the City with regard to her fitness for duty evaluations or her subsequent termination. (*Bicknell v. City of St. Petersburg*).

In another forcible sexual assault, a Pine Ridge Indian Reservation officer raped a thirteen-year-old curfew violator in the backseat of the patrol vehicle while his partner stood-by but did not intervene. While the case facts do not indicate if the offending officers had been consuming alcohol at the time, the department hired the assaulting officer without a full background investigation, which would have revealed a history of alcohol abuse and treatment and a number of misdemeanor violations. The victim's father filed suit under the Federal Tort Claims Act, alleging vicarious liability on the part of the tribal police department. The court awarded damages to the victim. This incident is dated, occurring in 1989, yet highlights the importance of conducting complete background and psychological evaluations on law enforcement candidates, including evaluation for alcohol abuse (*Red Elk Ex. Rel. v. U.S.*)

A U.S. Department of Justice funded study identified 6,724 arrest cases of 5,545 sworn law enforcement officers from 2005 - 2011. Ten percent of the cases were sexual assault offenses with 5.2% consisting of forcible fondling and 4.8% forcible rape. The study found that children are particularly vulnerable to sex crimes committed by law enforcement officers (Stinson, et. al., 2016).

### **Driving While Intoxicated**

An off-duty officer crashed a motor vehicle while driving intoxicated resulting in a ten-day suspension from the department. The officer agreed to a last-chance agreement where he agreed to substance abuse treatment, and refraining from consuming alcohol for one year. The

officer, who identifies as being an alcoholic, and subsequent to the last-chance agreement again became intoxicated and was involved in an off-duty incident whereby the officer became belligerent with 911 dispatchers and law enforcement officers from another agency, resulting in his termination. The officer filed suit against the city claiming denial of Family Medical Leave Act (FMLA) benefits. The court dismissed the suit (*Allen v. City of Sturgis*).

After consuming alcohol at a party for officers graduating from the police academy, a senior officer gave one of the graduates a ride home on his motorcycle. During the ride home, the senior officer lost control of his motorcycle and crashed. Both officers obtained rides home by others, and the probationary officer later sought treatment at a hospital for her injuries. The department arrested the senior officer for leaving the scene of an injury accident though the prosecutor declined to formally charge the officer. The department suspended the officer for neglect of duty in violation of department policy. The officer filed a §1983 action against the department for false arrest that the court dismissed (*Robert v. City of Detroit*).

In Tennessee, officers on routine patrol encountered an intoxicated off-duty officer parked near the city garage. One of the on-duty officers drove the off-duty officer's car to a female friend's apartment so she could drive the intoxicated officer home. The other on-duty officer followed in his patrol vehicle. Though some of the facts are in dispute, while in the parking lot of the apartment building, the intoxicated officer got behind the wheel of his vehicle, threatened the on-duty officers with his weapon, and at some point, the female friend got into the vehicle. A pursuit ensued with the intoxicated officer losing control of his vehicle resulting in a crash that killed himself and his passenger. The parents of both deceased individuals brought a §1983 suit alleging denial of due process and equal protection under the Constitution. The court



held that neither the city nor officers acting in their official capacities deprived plaintiffs of their Constitutional rights (*McCoig v. Jefferson City*).

An off-duty intoxicated officer struck another vehicle from behind killing the driver and seriously injuring two other occupants of the vehicle. At the time of accident, the officer was awaiting a scheduled disciplinary hearing seeking his suspension or removal from the department for a previous incident involving reckless driving again while intoxicated. The accident victims brought a §1983 claim against the city for due process violations. The court dismissed the case based on immunity and failure to produce sufficient evidence (*Bilbili v. Klein*).

In Shreveport, the police department received a complaint that an off-duty officer was driving a marked patrol vehicle while intoxicated. The officer failed a field sobriety test administered by two lieutenants. As a result, they arrested the officer and transported him to the police station. There was however some dispute as to whether the officer consented to a blood test which resulted in the officer filing a civil action against the department for violation of his Fourth Amendment rights. The court held that the department did not violate his constitutional rights by conducting the blood test (*Hensley v. City of Shreveport*).

An off-duty officer on disability, after leaving a bar a 3:00 a.m. was driving with a blood alcohol level of .16 percent. The officer became involved in a road rage incident where he drew his firearm on the other driver. An altercation ensued with the other driver (Davis) disarming the officer and after a short chase; he shot the officer in the head leaving him with a permanent disability. A court convicted Davis of numerous criminal charges. Davis filed a §1983 claim against the city. The city filed a motion for dismissal of the claim, which the court denied citing several prior complaints against the officer were not meaningfully, investigated which inferred

deliberate indifference, and a need for better supervision to protect against constitutional violations (*Davis v. Lynbrook Law enforcement Department*).

Stinson et al., (2016) studied 6724 arrest cases of law enforcement officers from 2005 to 2011 with 12.5% of these arrests for driving under the influence of alcohol. Fifty-one percent involved traffic accidents, with victim injury in 24.1% of the incidents, and fatalities in 4% of the incidents. This led the authors to conclude, “Sworn law enforcement officers engaging in drunk driving is a major problem and concern” (p. 23). It is important that drug and alcohol policies be comprehensive and include non-punitive options for self-reporting alcohol addiction and options for treatment and rehabilitation.

### **Accidental Weapon Discharge**

A number of victims have suffered gunshot wounds from the weapons of intoxicated off-duty officers. One such case is *Falcon v. City of Chicago*. An off-duty Chicago officer spent the evening in the bar with a friend becoming intoxicated. When the two returned to the officer’s home, the officer placed her service weapon, which she had been carrying during the evening, on the kitchen counter when it discharged killing her friend. The victim’s estate filed a §1983 action against the City for failure to train and supervise. The department general orders prohibit officers from carrying a firearm while off-duty if consuming alcohol. The facts of the case indicate that in the seven years preceding this incident at least three people suffered gunshot wounds in the homes of intoxicated off-duty officers. The court denied the city’s motion to dismiss.

### **Doing the Right Thing Challenged**

*Grow v. City of Milwaukee*, involves several incidents where off-duty law enforcement officers were required by department supervisors to submit to sobriety tests resulting from various off-duty incidents in which they were involved. The officers brought a §1983 action

alleging the department subjected them to unreasonable search and seizure in violation of the Fourth and Fourteenth Amendments. The court upheld the department policy requiring police officers, whether on or off duty, to submit to alcohol tests whenever two supervisors observing the officer have a reasonable suspicion to believe that the member is intoxicated. The policy makes no exception for officers suspected of being intoxicated in their homes. The appellate court remanded to the trial court to rule on the reasonableness of entering officers homes without consent under the policy.

In response to numerous officers being involved in incidents of serious misconduct, some involving criminal conduct, and all related to alcohol abuse, the NYPD referred officers to the Counseling Services Unit (CSU) to undergo alcohol abuse treatment. Some examples of misconduct while intoxicated include domestic violence, arriving to work intoxicated, altercation with landlords and neighbors, threatening spouses and neighbors with service weapons, driving department vehicles while intoxicated, public urination, threatening to commit suicide and acting irrationally at home. Interestingly, family members notified the NYPD of many of these incidents. A group of officers filed actions against the City alleging disability discrimination under the Americans with Disabilities Act, based on the NYPD's decision to refer the officers to the CSU for evaluation and treatment. The Court concluded that the officers failed to state a claim and dismissed the case (*Macshane v. City of New York*).

A sergeant assigned to the internal affairs unit of a law enforcement agency, filed internal complaints alleging misconduct and cover up by the agency of alcohol abuse and drunk driving by officers. Getting no satisfaction, the sergeant then complained to the office of the state attorney general. Following a long sequence of events, the sergeant filed a §1983 claim alleging

violation of his First Amendment rights. The court dismissed for “failure to state a claim upon which relief could be granted” (*Matthews v. Connecticut*).

In a similar case, a sergeant with a history of favorable work reviews, tested for the position of lieutenant being placed in the highest band of candidates but was not promoted prior to expiration of the promotional list. The sergeant filed a \$1983 lawsuit against the department alleging retaliation of his First Amendment rights by his superiors because of his reports of misconduct in the department including officers drinking during work hours. The court denied the county’s motion for summary judgement (*Robinson v. County of LA*).

### **Interventions**

Employer costs associated with alcohol abuse by employees include absenteeism, medical costs, property damage, litigation, increased insurance administration expenses, poor work performance, turnover and more. The U.S. Department of Health and Human Services (HHS) reports that coupling peer support, with a program to change workplace culture and management support for alcohol abuse rehabilitation and testing is promising. Their data indicates a savings of \$24 of each \$1 spent on workplace peer support and drug testing. By adding alcohol testing the savings jumps to \$63 for every \$1 spent (HHS, 2008). Webb et al., (2009) in a review of workplace interventions for alcohol related problems, also concluded that peer referral has potential to produce beneficial results. Regarding organizational culture, Roman and Blum (2002) report that a strong correlation exists between tolerance and encouragement of drinking by workplace culture and consumption of alcohol. The authors conclude that changing problematic workplace culture is challenging and point to health promotions and wellness programs as a potential solution.

The Hazeldon Betty Ford Foundation (2017) recommends an important step for employers to take in combating alcohol addiction is to establish and strengthen employee assistance programs. Ranes (2016) supports this approach. To be effective the programs must be educational and confidential, promote addiction prevention and assist employees struggling with addiction by offering counseling, assessment and referral to qualified alcohol treatment programs. A study by Baicker et al., (2010) found that workplace wellness programs generate savings. The authors found that savings from such programs can reduced medical costs by \$3.27, and reduce absenteeism costs by \$2.73 for every dollar spent.

According to Miller and Galvin (2016) employers with clearly stated and well-publicized drug-free workplace policies, health and wellness programs, EAP's, educational materials and drug testing experience fewer substance abuse problems compared to employers without these programs. Cidambi (2018) opines that treating law enforcement officers with substance abuse disorders requires knowledge of their work environment and unique stressors. The author warns that in-patient treatment, that removes officers from their living environment can be counter-productive. Conversely, treatment that integrates the home and work environment works better. Bringing the family into treatment to facilitate dialogue and support is key to successful rehabilitation (Cidambi, 2018). Some departments, for example Chicago and San Diego, use specially trained sworn personnel, to offer department members and their families with confidential and nonjudgmental advice, support and guidance for alcohol disorders (CPD, 2021; Lansdowne, 2012). Other departments are taking unique approaches, for example, free taxi rides for off-duty officers that have been drinking, and training officers to recognize the signs of alcohol abuse in colleagues (Lansdowne, 2012).

Dr. Leanor Boulon Johnson reported at the Congressional Hearing: On the Front Lines: Police Stress and Family Well-Being (1991) that alcohol abuse tends to exacerbate officers emotional exhaustion, depersonalization of citizens and had detrimental effects on marital relationships. Moreover, that 90% of police officers studied believe departments should provide marital enrichment programs and psychological counseling. In addition, about 80% of officers believe it is important to provide alcohol rehabilitation and stress reduction programs.

### **Methodology**

The methodology used herein is qualitative legal research. In qualitative legal research, data collection is from a relatively small group of subjects and not statistically analyzed. A subdivision of qualitative legal research is grounded theory practice involving observation from various data sources including review of records (Lyer, n.d.). This research consisted of reviewing records of thirty-three federal court cases to determine patterns and trends in civil liability for individual law enforcement officers and their respective departments resulting from the officer's abuse of alcohol.

The *Nexis Uni* search engine through the Bowling Green State University online library was the tool used for this research. Search criteria included federal civil cases related to law enforcement officers and alcohol related problem behavior. Search queries consisted of "intoxicated law enforcement officer", "officer with alcohol", "officer drinking alcohol", "officer drinking w/p alcohol", "officer consuming w/p alcohol", "drunk law enforcement officer", "law enforcement officer w/p consuming, w/p alcohol" and "law enforcement officer w/p "alcohol abuse" (w/p is a filter for words in a paragraph). To keep the number of cases manageable and current the search parameters were set between 2000 and 2020. However, even with this filter some cases dating prior to 2000 populated during the search and if factually applicable to this research were included. In addition, older case law cited as controlling by the courts in the cases reviewed were also included.

Sixty-nine cases were located and after review and elimination, thirty-three cases were included for analysis. Examples of cases eliminated from analysis include duplicate cases, inapplicable cases, for example, a case involving immigrants describing encounters with intoxicated law enforcement officers in their home countries and cases involving intoxicated subjects not intoxicated law enforcement officers. Other examples include cases not related to this research but that referenced case law involving intoxicated law enforcement officers, cases with insufficient facts to analyze, and cases heard in state courts that slipped past the search filter. Review of the cases was limited to the fact patterns linking alcohol consumption by law enforcement officers to problem behavior, and outcomes in the form of civil liability for the officers and departments.

## **Results**

Thirty-three federal court cases were reviewed see Table 1 for a summary of the cases. All cases stem from civil actions brought against officers and departments. Twenty-seven were brought under §1983, two under the American's with Disabilities Act, and one each under the Fourth Amendment, Family Medical Leave Act, Title VII and the Kansas Tort Claims Act (Table 2). In the majority of cases, twenty-eight, comprising about 85% of the total, officers exhibiting problem behavior while intoxicated were off duty. In four cases, comprising 12% of the total, officers were on-duty and in one case, the behavior occurred both on and off duty.

Alcohol related problem behavior by police officers included: fourteen shootings (42%), seven DWI's (21%), three resulting in fatalities, five assaults (15%), three sexual assaults (9%), two involving more than one offense, and two claims of alleged retaliation by departments against officers reporting alcohol abuse within the department (Table 3).

Theories of liability presented by plaintiffs include nine claims of failure to train (27%), eight claims of failure to supervise (24%), seven claims of deliberate indifference (21%), six claims of due process violation (18%), four claims each of excessive force, failure to discipline and failure to investigate, and one each of vicarious liability and false arrest (Table 4).

Dispositions of the cases include eight set for settlement/trial (24%) and one award of damages to the plaintiff. Courts dismissed twenty-four cases for the following reasons. Six for lack of evidence, five because the violation of rights did not occur under the color of law, three based on sovereign immunity and three because policy or custom was not the "moving force" behind the violation (*Monell*). Two because there was no constitutional violation, two for failure to state a claim upon which relief could be granted, one on qualified immunity, one because the plaintiff (family member of deceased) received no direct injury, and in one case the rationale for dismissal was not stated (Table 5).

## **Discussion**

Miller & Galvin (2016) found that one in six law enforcement officers are in need of professional intervention for substance abuse disorders and one in twenty have an untreated alcohol use disorder. Highlighting the problem, plaintiffs in one case cited department records documenting sixty-three off-duty shootings and seventeen off-duty brandishing of weapons from 1989-1994, fifteen of which involved alcohol (*Huffman v. County of Los Angeles*). Alcohol abuse also tends to exacerbate officers emotional exhaustion, depersonalization of citizens and has detrimental effects on marital relationships (Johnson, 1991).

Alcohol abuse by police officers, both on and off duty, can result in actions that result in civil liability for officers and departments. These include intentional and accidental shootings, assault, sexual assault, DWI, road rage incidents, domestic violence, disorderly conduct and



others. Of the cases in this analysis, twenty-seven were brought under Title 42 U.S.C. § 1983 claiming policy or custom was the moving force behind the alleged violation of the victim's constitutional rights. Courts dismissed three cases because policy or custom did not cause the harm, two because no constitutional violation existed and two for failure to state a claim upon which relief could be granted. Four of the cases analyzed stemmed from beer parties by off-duty officers in police department parking lots. In one case, victims filed suit claiming excessive force arguing that the department tolerated a longstanding custom that resulted in violation of their constitutional rights (*McDonald v. Flake*).

Courts dismissed five of the cases because the off-duty officers were not acting within the scope of their employment or under the "color of law" at the time the violation of constitutional rights occurred. Yet, simply being off-duty does not foreclose an officer from having acted under the color of law (*Robles v. City of Fort Wayne*; *Pickrel v. City of Springfield*). The nature of the specific acts performed, determines if an officer is acting under the color of law. A governmental entity may be held liable under §1983 for failure to train or supervise municipal employees that results in constitutional deprivation of rights, albeit there must be an affirmative link between the supervisor and constitutional violation (*Canton v. Harris*; *Rizzo v. Goode*). However, courts have also held that negligent training or supervision of a single officer does not automatically constitute an official policy or custom under the guidelines laid down by the Supreme Court in *Monell* (*Turk v. McCarty*) and city administrators, not law enforcement supervisory staff, establish official policy and custom (*Luskin v. City of Chicago*). Similarly, a single off-duty officer violating a department policy of carrying a firearm while under the influence of alcohol fails to prove that the city's policies encourage officers to exercise law enforcement action while under the influence of alcohol (*Rodriguez v. City of Houston*.)

Department policies requiring off-duty officers to carry a firearm do not alone deprive citizens of their constitutional rights (*Labo v. Borger*). However, department firearm policies that fail to set forth guidelines for carrying a firearm where an officer is at risk of intoxication or the officer's judgement may be impaired could rise to deliberate indifference by the department (*Bladdick v. Pour*). In Illinois the victim's estate filed a §1983 action against the City for failure to train and supervise resulting in an accidental shooting death of an off-duty officer's friend. The department general orders prohibit officers from carrying a firearm while off-duty if consuming alcohol, though an officer violated the policy while drinking in a bar while armed. The facts of the case indicate that in the seven years preceding this incident at least three people suffered gunshot wounds in the homes of intoxicated off-duty law enforcement officers. The court denied the city's motion to dismiss.

Nine of the cases alleged failure to train, eight alleged failure to supervise, seven alleged deliberate indifference followed by excessive force, failure to investigate and failure to discipline. In one case, the presiding judge found there was a genuine issue of material fact as to whether the city failed to train, investigate and discipline officers and whether that failure amounted to deliberate indifference regarding the victim's rights (*Marrone v. City of Philadelphia*). In a second case, involving allegations of failure to train and supervise, the court held the officers were not entitled to qualified immunity (*Izzo v. City of New York*). In another case, the plaintiff alleged that the offending officer had a history of drinking problems known to the department, though department supervisors never questioned, disciplined or counseled the officer for his alcohol use, though the case was dismissed based on qualified immunity (*Pena v. DePrisco*). A court denied a city's motion to dismiss §1983 claim, citing several prior complaints against the officer involved in the suit were not meaningfully investigated which

inferred deliberate indifference, and a need for better supervision to protect against constitutional violations (*Davis v. Lynbrook Law enforcement Department*).

Twenty-four percent of the cases reviewed proceeded to trial or settlement conference with 76% of cases dismissed by the courts for various reasons. Not only are the costs of settlement awards expensive so is successfully defending against civil actions (VirTra, 2018). However, in an attempt to avoid civil litigation stemming from alcohol influenced problem behavior by officers some departments are taking proactive steps. In *Grow v. City of Milwaukee*, the court upheld a department policy requiring police officers, whether on or off duty, to submit to alcohol tests whenever two supervisors observing the officer have a reasonable suspicion to believe that the officer is intoxicated. However, the appeals court remanded to the trial court to rule on the reasonableness of entering officers' homes without consent under the policy.

In response to numerous officers being involved in incidents of serious misconduct, all related to alcohol abuse, the NYPD referred officers to the Counseling Services Unit (CSU) to undergo alcohol abuse treatment. Interestingly, family members notified the NYPD of many of these incidents. After some officers filed suit the court held that NYPD's decision to refer the officers to the CSU for evaluation and treatment did not violate the Americans with Disabilities Act (*Macshane v. City of New York*). Data supports a positive return on investment when organizations implement intervention strategies.

The U.S. Department of Health and Human Services (HHS) reports that coupling peer support, with a program to change workplace culture and management support for alcohol abuse rehabilitation and testing is promising. Their data indicates a savings of \$63 for every \$1 spent. The work of Baicker et al., (2010) supports these findings. Research has found that peer referral has potential to produce beneficial results (Webb et al., 2009). Another study concluded that

changing problematic workplace culture is challenging and point to health promotions and wellness programs as a potential solutions (Roman & Blum, 2002). To be effective the programs must be educational and confidential, promote addiction prevention and assist employees struggling with addiction by offering counseling, assessment and referral to qualified alcohol treatment programs (The Hazeldon Betty Ford Foundation, 2017).

Research has found that clearly stated and well-publicized drug-free workplace policies, health and wellness programs, EAP's, educational materials and drug testing experience result in fewer substance abuse problems (Miller & Galvin, 2016). However, treating law enforcement officers with substance abuse disorders requires knowledge of their work environment and unique stressors and in-patient treatment, that removes officers from their living environment can be counter-productive with research suggesting that treatment that integrates the family, home and work environments works better (Cidambi, 2018). One approach is the use of specially trained sworn personnel, to offer department members and their families with confidential and nonjudgmental advice, support and guidance for alcohol disorders (CPD, 2021; Lansdowne, 2012). In addition training officers to recognize the signs of alcohol abuse in colleagues has proven beneficial (Lansdowne, 2012).

More than 90% of police officers in one study believe departments should provide marital enrichment programs and psychological counseling with 80% believing it is important to provide alcohol rehabilitation and stress reduction programs (Johnson, 1991).

## **Limitations**

Because of the considerable number of cases to draw from particularly in the state courts, and the voluminous number of pages contained in the court opinions, data reduction is necessary, and is therefore limited to U.S. Federal Court cases. It is also necessary to limit discussion of

court opinions to the most pertinent facts of the case as related to the research topic. A number of the cases presented are court orders on motions to dismiss. Under Rule 12(b)(6) of the Federal Rules of Civil Procedure, the Court presumes the allegations in the complaint are true and construes the complaint in the light most favorable to the plaintiff. However, at this point, courts have not vetted the facts, which may be disputable during later proceedings.

This research is limited to a review of federal court cases and does not take into consideration civil actions involving intoxicated officers filed in state courts. This research also does not include cases involving intoxicated officers that were resolved by consent agreement, or administrative disciplinary actions by departments. The small sample size is another limitation of this research.

Another limitation is that of the cases currently available, some occurred more than ten years ago. A limitation of using older data is it may not represent contemporary impact or recognize corrective actions taken by law enforcement agencies since adjudication of these cases. Pooled data from four studies (Miller & Galvin, 2016) found that firefighters suffer from alcohol abuse problems at a rate similar to law enforcement officers. Another limitation of this research is that firefighters were not included and is a recommendation for future study. A final limitation is that this research does not take into account the potential effect of COVID-19 on alcohol disorders among law enforcement officers, and is a recommendation for future study.

## **Recommendations**

- Establish clearly stated and well-publicized drug-free workplace policies that includes drug and alcohol testing (Miller & Galvin, 2016). Policies need to include non-punitive options for self-reporting alcohol addiction and options for treatment and rehabilitation (Stinson, et al., 2016). Include provisions for reasonable suspicion sobriety tests for

officers exhibiting signs of alcohol intoxication (*Grow v. City of Milwaukee*). Strictly prohibit possession and consumption of alcohol on municipal property.

- Establish and strictly enforce policies that set forth guidelines for carrying a firearm where an officer is at risk of intoxication or the officer's judgement may be impaired. Failure to have such policies may infer deliberate indifference.
- Provide or strengthen existing employee assistance and wellness programs that are educational, confidential, promote addiction prevention, peer referral and assist employees struggling with addiction by offering counseling, assessment and referral to qualified alcohol treatment programs that integrates the family, home and work environments (Cidambi, 2018; The Hazeldon Betty Ford Foundation, 2017; Webb et al., 2009; Roman & Blum, 2002).
- Consider using specially trained sworn personnel to offer department members and their families with confidential and nonjudgmental advice, support and guidance for alcohol disorders (CPD, 2021; Lansdowne, 2012). In addition training officers to recognize the signs of alcohol abuse in colleagues has proven beneficial (Lansdowne, 2012).
- Identify and support officer's families who are at risk of domestic violence, including an opportunity for family members to speak freely and openly if help is needed; and to access resources to remove themselves from an at risk situation.
- Offer stress reduction programs that emphasize healthy stress management strategies.
- Offer marital enrichment and psychological counseling programs (Johnson, 1991).
- Screen candidates for law enforcement positions for existing or potential alcohol abuse problems.

- Departments must adequately train, supervise and investigate all complaints against officers issuing appropriate discipline where warranted, failure to do so may infer deliberate indifference.
- Strictly and consistently, enforce all policies to avoid claims of deliberate indifference.

## **Conclusion**

Human capital is the greatest asset of any organization. Police departments have a substantial monetary and knowledge investment in their officers, making it costly to lose officers through resignation, termination, disability and other factors. American society today is generally not friendly to law enforcement officers, with movements to defund the police leaving departments understaffed, ambushes and other violence against officers, and anti-police rhetoric. These factors are negative stressors compounding the already stressful nature of police work. Unfortunately, some officers turn to alcohol as a maladaptive coping behavior.

It is incumbent on departments to take affirmative steps to prevent alcohol abuse by screening and educating new officers on the risks of alcohol abuse, and to recognize alcohol abuse among current officers and provide them with the needed resources to address alcohol abuse in its early stages. Because families of officers also suffer from an officer's alcohol abuse, programs to address the problem must also include families. This includes options for confidentially reporting alcohol abuse, domestic and sexual violence, having a voice, being involved in treatment options and having access to marital enrichment and psychological counseling options. Failing to address alcohol abuse among law enforcement officers, will result in rising monetary costs related to turnover, absenteeism, and litigation, and social costs of compounding an already negative perception of law enforcement officers, and make recruiting and retaining officers more difficult than it already is.

## References

- Allen v. City of Sturgis, 559 F.Supp. 2d 837 (W.D. Mich. 2008).
- Babbs v. Block, 167 F.Supp. 3d 1025 (W.D. Mo. 2016).
- Baicker, K., Cutler D., & Song Z. (2010). Workplace Wellness Programs Can Generate Savings. *Health Affairs*, (29)2. <https://doi.org/10.1377/hlthaff.2009.0626>
- Bicknell v. City of St. Petersburg, Case No. 8:03-cv-1045-T-27MAP (2006).
- Bilbili v. Klein, No. 02-2953 (JBS) (D.N.J. 2005).
- Bladdick v. Pour, 833 F.Supp 2d 1032 (S.D. Ill. 2011).
- Bohanon v. City of Indianapolis, 491 F. Supp. 3d 367 (S.D. Ind. 2020).
- Burkhart v. Knepper, 310 F.Supp. 2d 734 (W.D. Pa. 2004).
- Chicago Law Police Department. (2021). *Alcohol assistance program*. Retrieved May 23, 2021 from <https://home.chicagolawenforcement.org/information/employee-assistance-program-eap/alcohol-assistance-program/>
- City of Canton v. Harris, 489 U.S. 378 (1989)
- Cidambi, I. (2018, March 30). *Law enforcement and addiction officers are nearly three times as likely to suffer from addiction as others*. <https://www.psychologytoday.com/us/blog/sure-recovery/201803/law-enforcement-and-addiction>
- Claudio v. Sawyer, 675 F.Supp, 2d 403 (S.D.N.Y. 2009).
- Davis v. Lynbrook Police Department, 224 F.Supp.2d 463 (E.D.N.Y. 2002).
- Edwards v. City of New York, 692 F.Supp. 1579 (S.D.N.Y. 1988).
- Falcon v. City of Chicago, LEXIS 94953, (N.D. Ill. 2018).
- Florida Public Pension Trustees Association (2018). *What a Police Officer Costs...Priceless (Fact Sheet)*. FPPTA <https://fppta.org/what-a-police-officer-costs-priceless-fact-sheet/>
- Foy v. Dicks, 146 F.R.D. 113 (E.D. PA. 1996).
- Foy v. Dicks, 135 F.3d 764 (3rd Cir. 1997).
- Gough v. Louisville Jefferson County Metro Government, No. 3:12-cv-849-DJH-CHL (W.D. Ky. 2017).



Grow v City of Milwaukee, 84 F.Supp. 2d 990 (E.D. Wis 2000)

Hazeldon Betty Ford Foundation. (2017, January 17). *Workplace addiction help practical steps employers can take*. <https://www.hazeldenbettyford.org/articles/workplace-addiction-help>

Hensley v. City of Shreveport, NO. 13-2331 (W.D. La. 2015).

Huffman v. County of Las Angeles, 147 F.3d 1054 (9th Cir. 1998).

Izzo v. City of New York, LEXIS 101927 (S.D.N.Y. 2016).

Johnson, L. (1991). *On the front lines: Police stress and family well-being. Hearing before the select committee on children, youth, and families*. <https://files.eric.ed.gov/fulltext/ED338997.pdf>

Kangalee v. City of Baltimore Police Department, No. RDB-12-01566 (D. Md. 2012)

Kinports, K. (1999). Supervisory liability in section 1983 cases. *Touro Law Review*, (15), 1657-1670. [https://elibrary.law.psu.edu/cgi/viewcontent.cgi?article=1184&context=fac\\_works](https://elibrary.law.psu.edu/cgi/viewcontent.cgi?article=1184&context=fac_works)

Labo v. Borger, LEXIS 17176, (D.N.J. 2005).

Lansdowne, B. (2012). Police chiefs discuss a tough issue:Alcohol and drug abuse by officers. *Subject to Debate* (26)5, p.1-2. <https://bit.ly/3ugbpOI>

Latuszkin v. City of Chicago, 250 F.3d 502 (7th Cir. 2001).

Lowery, W., Crabtree, S., Gramlich, J., & Walsh, A. (2020, October 7). *Public Perceptions of the Police*. Council. <https://counciloncj.org/public-perceptions-of-the-police/>

Lyer, K. (n.d.). *Types of legal research*. Legodesk. <https://legodesk.com/blog/legal-practice/types-of-legal-research/>

Macshane v. City of New York, LEXIS 36099 ((E.D.N.Y. 2015).

*Marrone v. City of Philadelphia*, No. 98-5381 (E.D. Pa. 2001).

*Matthews v. Connecticut*, No. 3:10cv325 (MRK) (D. Conn. 2010).

*McCoig v. Jefferson City*, Nos. 94-6045 & 94-6046 (6th. Cir. 1995).

McDonald v. Flake, 814 F.3d 804 (6th Cir. 2016).

Miller, T. & Hendrie, D. (2008). *Substance Abuse Prevention Dollars and Cents: A Cost-Benefit Analysis*, DHHS Pub. No. (SMA) 07-4298. <https://www.samhsa.gov/sites/default/files/cost-benefits-prevention.pdf>

Miller, T. & Galvin, D. (2016). Assessing and responding to substance misuse in law enforcement. *Southern Illinois University Law Journal* (40). 475-499.  
[https://law.siu.edu/\\_common/documents/law-journal/articles-2016/spring-2016/12%20-%20Miller%20-%20sm.pdf](https://law.siu.edu/_common/documents/law-journal/articles-2016/spring-2016/12%20-%20Miller%20-%20sm.pdf)

Monell v. New York City Department of Social Services, 436 U.S. 658 (1978).

Newman, A. (2002, May 4). *Ex-Officer Guilty of Manslaughter In Crash Following Drinking Bout*. <https://www.nytimes.com/2002/05/04/nyregion/ex-officer-guilty-of-manslaughter-in-crash-following-drinking-bout.html>

Nichols v. Grieshaber, LEXIS 13778, (N.D. Ill., 1990).

Off Duty Officers Inc. (2020). *Firearm safety: 8 rules for safe gun handling*. Retrieved May 22, 2021 from <https://www.offdutyofficers.com/firearm-safety-8-rules-for-safe-gun-handling/>

Parsley, I.C., Dale, A.M., Fisher, S.L., Mintz, C.M., Hartz, S.M., Evanoff, B.A., & Bierut, L.J. (2022). Association Between Workplace Absenteeism and Alcohol Use Disorder From the National Survey on Drug Use and Health, 2015-2019. *JAMA Network Open* 5(3), 1-10.  
doi: [10.1001/jamanetworkopen.2022.2954](https://doi.org/10.1001/jamanetworkopen.2022.2954)

Police Board City of Chicago (2010). *Article V. Rules of Conduct*. Retrieved May 23, 2021 from <https://bit.ly/3wrvK59>

Pena v. DePrisco, 432 F.3d 98 (2d Cir. 2005)

Pennington v. Metropolitan Government of Nashville and Davidson County, No. 07-5180 (6th Cir. 2008).

Pickrel v. City of Springfield, No. 94-2425 (7th Cir. 1995).

Ranes, B. (2016). *Alcohol abuse among law enforcement officers*. <https://bit.ly/3fclFms>

Red Elk Ex. Rel. V. U.S. 62 F.3d 1102 (8th Cir. 1995).

Rizzo v. Goode, 423 U.S. 362 (1976).

Robert v. City of Detroit, No. 16-cv-12778 (E.D. Mich. 2016).

Robinson v. County of LA, No. 07-56312 (9th Cir. 2009)

Robles v. City of Fort Wayne, No. 96-2302 (7th Cir. 1997).

Rodriguez v. City of Houston, No. 15-20476 (5th Cir. 2016).

Roman, P.M., & Blum, T.C. (2002). The workplace and alcohol problem prevention. *Alcohol Research and Health*, (26)1. 49-57. <https://pubs.niaaa.nih.gov/publications/arh26-1/49-57.pdf>

Stinson, P., Liederbach, J., & Brewer, S. (2016). *Law enforcement integrity lost: A study of law enforcement officers arrested*. <https://www.ojp.gov/pdffiles1/nij/grants/249850.pdf>

Tafoya v. United States Dep't of Justice, Law Enforcement Assistance Admin., 748 F.2d 1389 (10th Cir. 1984).

Tigard Police Department, (2021 March, 23). *Tigard Police Policy Manual*. <https://bit.ly/3u5AAmC>

Turk v. McCarthy, 661 F.Supp. 1526 (E.D.N.Y. 1987).

18 U.S.C. §926B (2004).

VirTra, Inc. (2018). How lawsuits involving police officers can cost a city a whopping amount of money. <https://www.virta.com/how-lawsuits-involving-police-officers-can-cost-a-city-a-whopping-amount-of-money/>

Webb, G., Shakeshaft, A., Sanson-Fisher, R., & Havard, A. (2009). A systematic review of work-place interventions for alcohol-related problems. *Addiction* (104)3, 365-377. <https://doi.org/10.1111/j.1360-0443.2008.02472.x>

**Table 1*****Case Summaries***

<i>Case Citation</i>	<i>City</i>	<i>Duty Status</i>	<i>Problem Behavior</i>	<i>Action</i>
<i>Allen v. City of Sturgis</i>	Sturgis, MI	Off	DWI/Disorderly	Civil <sup>(5)</sup>
<i>Babbs v. Block</i>	Kansas City	Off	Shooting	Civil <sup>(1)</sup>
<i>Bicknell v. City of St. Petersburg</i>	St. Petersburg	Off	Sexual Assault	Civil <sup>(3)</sup>
<i>Bilbili v. Klein</i>	Egg Harbor, NJ	Off	DWI/Fatal	Civil <sup>(2)</sup>
<i>Bladdick v. Pour</i>	Granite City, IL	Off	Shooting	Civil <sup>(2)</sup>
<i>Bohanon v. City of Indianapolis</i>	Indianapolis	Off	Assault	Civil <sup>(2)</sup>
<i>Burkhart v. Knepper</i>	Johnstown, PA	Off	Shooting	Civil <sup>(2)</sup>
<i>Claudio v. Sawyer</i>	NYC	Off	Shoot/Road Rage	Civil <sup>(2)</sup>
<i>Davis v. Lynbrook Police Dept.</i>	Lynbrook	Off	Shoot/Road Rage	Civil <sup>(2)</sup>
<i>Edwards v. City of N.Y.</i>	NYC	On	Assault	Civil <sup>(2)</sup>
<i>Falcon v. City of Chicago</i>	Chicago	Off	Shooting	Civil <sup>(2)</sup>
<i>Foy v. Dicks</i>	Philadelphia	Off	Shooting	Civil <sup>(2)</sup>
<i>Gough v. Louisville Jefferson Cnty.</i>	Louisville	Off	Shooting	Civil <sup>(2)</sup>
<i>Grow v. City of Milwaukee</i>	Milwaukee	Off	Various	Civil <sup>(2)</sup>
<i>Hensley v. City of Shreveport</i>	Shreveport	Off	DWI <sup>(5)</sup>	Civil <sup>(6)</sup>
<i>Huffman v. County of Los Angeles</i>	Los Angeles Cnty.	Off	Shooting	Civil <sup>(2)</sup>
<i>Izzo v. City of New York</i>	New York	Both	Sexual Assault	Civil <sup>(2)</sup>
<i>Kangalee v. City of Baltimore P.D.</i>	Baltimore	Off	Shooting	Civil <sup>(2)</sup>
<i>Labo v. Borger</i>	Sicklerville, NJ	Off	Shooting	Civil <sup>(2)</sup>
<i>Latuszkin v. City of Chicago</i>	Chicago	Off	DWI/MVC/Fatal	Civil <sup>(2)</sup>
<i>Marrone v. City of Phil.</i>	Philadelphia	Off	Assault	Civil <sup>(2)</sup>
<i>MacShane v. City of New York</i>	New York	Off	Various	Civil <sup>(4)</sup>
<i>Matthews v. Connecticut</i>	Connecticut	Off	Retaliation	Civil <sup>(2)</sup>
<i>McCoig v. Jefferson City</i>	Jefferson City, TN	Off	DWI/Assault	Civil <sup>(2)</sup>
<i>McDonald v. Flake</i>	Memphis	Off	Assault	Civil <sup>(2)</sup>
<i>Nichols v. Grieshaber</i>	Crystal Lake	On	Shooting	Civil <sup>(2)</sup>
<i>Pena v. DePrisco</i>	New York	Off	DWI/Death	Civil <sup>(2)</sup>
<i>Pennington v. Metro Govt.</i>	Nashville	Off	Assault	Civil <sup>(2)</sup>
<i>Red Elk Ex. Rel. v. U.S.</i>	Pine Ridge S.D.	On	Sexual Assault	Civil <sup>(4)</sup>
<i>Robert v. City of Detroit</i>	Detroit	Off	DWI/MVC	Civil <sup>(2)</sup>
<i>Robinson v. County of LA</i>	Los Angeles Cty	On	Retaliation	Civil <sup>(2)</sup>

<i>Rodriguez v. City of Houston</i>	Houston	Off	Shooting	Civil <sup>(2)</sup>
<i>Turk v. McCarthy</i>	NYC	Off	Shooting	Civil <sup>(2)</sup>

---

(1) Kansas Tort Claims Act

(2) § 1983 action.

(3) Title VII

(4) ADA

(5) FMLA

(6) Fourth Amendment

## Table 2

### *Legal Basis of Claims*

<i>Statutes</i>	<i>No.</i>
§1983	27
ADA	2
FMLA	1
Title VII	1
Fourth Amendment	1
Kansas Tort Claims Act	1
Total	33

**Table 3**

***Problem Behavior***

<i>Behavior/Offense</i>	<i>No.</i>
Shooting	14
DWI	7
Assault	5
Sexual Assault	3
Numerous Offenses	2
Retaliation (by department)	2

**Table 4**

***Plaintiff's Theories of Liability<sup>1</sup>***

<i>Theory</i>	<i>No.</i>
Failure to Train	9
Failure to Supervise	8
Deliberate Indifference	7
Due Process	6
Excessive Force	4
Failure to Discipline	4
Failure to Investigate	4
False Arrest	1
Vicarious Liability	1

**Table 5**

***Case Dispositions***

---

<sup>1</sup> Some claims were based on more than one theory



<i>Disposition</i>	<i>No.</i>
Proceed to Trial/Settlement	8
Plaintiff Awarded Damages	1
Dismissed Lack of Evidence	6
Dismissed Not Under Color of Law	5
Dismissed Sovereign Immunity	3
Dismissed Policy/Custom Not Cause of Harm	3
Dismissed No Constitutional Violation	2
Dismissed Failure to State a Claim	2
Dismissed Qualified Immunity	1
Dismissed No Direct Injury	1
Dismissed Rationale not Specified	1

## **Author Biography**

Greg Walterhouse is an Assistant Teaching Professor in the Department of Political Science at Bowling Green State University. Greg holds a Bachelor of Science degree in Management from Oakland University, a Master's degree in Legal Studies from the University of Illinois, a Master's degree in Personnel Management from Central Michigan University and a Specialist Degree in Educational Leadership from Bowling Green State University. Prior to coming to BGSU Greg had over 35 years of experience in public safety holding various positions including Fire Marshal, Fire Investigator, Fire Chief, Manager of Emergency Services, Deputy Director of Public Safety and Emergency Management/Homeland Security Coordinator. Greg is Past President of the Michigan Chapter of the International Association of Arson Investigators.