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Helping our Heroes: An evaluation of mental health and organizational policies surrounding suicide prevention and postvention strategies for Nebraska first responders

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Abstract

Suicide is ranked as one of the leading causes of death in the United States. Over 40,000 individuals die by suicide each year (Stanley, Hom, & Joiner, 2016; Vigil et al, 2021), and, in 2020, it was ranked in the top 9 causes of death for all ages (10-64), and second for those 10-14 and 25-34 years of age (Centers for Disease Control and Prevention, 2022). These statistics disproportionately reflect first responders (i.e., firefighters, dispatchers, law enforcement, EMS, paramedics, etc.), as they die by suicide more than the general public (National EMS Management Association, 2016). Within their line of work of saving lives, these individuals are prone to witness more traumatic events and encounter death more than other professions. As a result, first responders may not have the appropriate practices in place at their workplace that ensure that their mental health is improving as they encounter these events continuously. This qualitative study seeks to identify the formal policy(s), procedures, or regulations that have been established in Nebraska that assess the risks and challenges first responders encounter on the job that affects their mental health and well-being. Results uncovered five themes that address not only why first responders die by suicide at a higher rate than the general population, but how effective the current Nebraska policies are and what changes in state policies Nebraska first responders want to see happen: (1) horrific encounters tied to mental illness, (2) “suck it up” mentality, (3) organizational trust, (4) lack of mental health policy in Nebraska, and (5) prevention strategies and recommendations for policy.

Introduction

As one of the top leading cause of death in the United States and the second leading for those ages 10-14 and 25-34, suicide has taken over 47,000 American lives since 2017 (Vigil et al, 2021; Centers for Disease Control and Prevention, 2022). Globally, there are 800,000 suicides per year, making suicide prevention (and the recognition of suicidal factors) a crucial aspect within public health (Mayor, 2020). According to Vigil et al (2021), in response to this issue, the funding for suicide prevention, provided by the National Institute of Health, rose from $39 million in 2008 to $103 million in 2017. However, that has not stopped the rates of suicide from increasing by 38% over the last 20 years; 10.48 per 100,000 in 1999 to 14.48 per 100,000 in 2017. When it comes to common stressors related to suicide, such as job-related stress or any personal life disturbances, it is crucial to consider first responders and the various dangerous life-threatening and draining situations they experience day-by-day. These situations create great and increasing stress and trauma for first responders (Substance Abuse and Mental Health Services Administration, 2018), including mental illness. For instance, one mental illness related to these traumatic experiences is post-traumatic stress disorder (PTSD) (Oginska-Bulik & Kobylarczyk, 2015). Overall, it is imperative to observe mental health concerns of first responders and what causes some to die by suicide.

Background

Mental health and suicide in first responders

It is important to understand what types of public health workers are being described as first responders. For this study, “first responders” includes anyone, full-time or volunteer, whose job is to immediately respond to an incident, accident, and/or emergency and provide assistance, such as dispatchers, Emergency Medical Technicians (EMT), firefighters, rescue, law

enforcement, and paramedics (U.S. Homeland Security Presidential Directive, HSPD-8). As previously mentioned, first responders operate within areas that expose them to traumatic events which place them at a higher risk for developing suicidal behaviors and various mental illnesses/health disorders (Vigil et al, 2021). Some risk factors and mental health disorders include chronic and critical stress, alcohol use, fatigue, sleep disturbances, nightmares, PTSD, depression, and headaches (National EMS Management Association, 2016; Vigil et al, 2021). For the purpose of this research study, critical stress is defined as stress underwent due to a singular critical incident that impacted one's life, or accumulative stress built up over time (National EMS Management Association, 2016). This can occur with any first responder, no matter the length of service or type, including full-time workers or volunteers.

According to Oginska-Bulik & Kobylarczyk (2015), among those included in rescue teams, 72% have encountered at least one traumatic event, while 64% have encountered two or more. Other studies have looked at public health safety workers and their exposure to natural and human-caused disasters. Several types of indirect and direct exposure that can have a negative effect on these first responders include longer and more frequent shifts, threats to personal safety, loss, grief, witnessing deaths and traumas, pain, and physical hardships (Substance Abuse and Health Services Administration, 2018). One term related to metal illness and the work done by first responders is called occupational/operational stress injury (OSI). According to Antony et al (2020), OSI is a term used in reference to psychological difficulties and conditions that are a result of certain work duties (usually related to trauma) that overall can interfere with one's personal life. These include anxiety, depression, and PTSD, among others. Additionally, compared to 20% of the public, research studies have found that 30% of first responders develop

these behavioral health conditions (Substance Abuse and Mental Health Services Administration, 2018).

Additionally, some studies have found that first responder's work environment may not support or assist in dealing with the stressors caused by the nature of the job. In fact, first responders have adapted to behave a certain way – with "bravado" – and have tendencies to not show weakness and simply "suck it up" (National EMS Management Association, 2016, p. 7). This response from first responders as well as the lack of support, put them at a greater risk of mental health complications (including suicide), as well as at risk of making critical errors while on the job caused by a lack of concentration and impaired judgement (National EMS Management Association, 2016).

As stated previously, according to the Center for Disease Control and Prevention, approximately 40,000 individuals in the United States die by suicide each year, with first responders also at an increased risk compared to the public (Stanley, Hon, & Joiner, 2016; Vigil et al, 2021). In fact, with first responders, EMS personnel are ten times more likely to have suicidal thoughts than the public (National EMS Management Association, 2016). To be more specific, 37% of fire and EMS professionals have reported contemplating suicide while 6.6% have reported attempting suicide (Substance Abuse and Mental Health Services Administration, 2018). Research has suggested that the increases of suicides in first responders are related to the physical and psychological stressors developed while working (Vigil et al, 2019). Their work conditions are often categorized as high-risk situations filled with traumatic events that are experienced daily (Antony et al, 2020). These experiences produce chronic stress and are also linked to anxiety, substance abuse, fatigue, and suicide (Vigil et al, 2019).

Suicidal ideation, defined as thinking or planning of suicide, is also something first responders experience at a higher risk than the general population, which is also often associated with occupational exposures and hazards (Vigil et al, 2021). Vigil et al (2021) found that constant exposure to suicide can increase suicide ideation. This reiterates how at risk these professionals are to suicide, as these professionals are constantly being exposed to traumatic events including violence and death. For example, in a survey including 1,789 EMS workers, within the previous 12 months 69% of them reported experiencing violence directed toward them (Vigil et al, 2021). In a different study, when sampling U.S. firefighters, 46.8% reported experiencing suicide ideation, 19.2% with plans of suicide, and 15.5% with attempts; higher percentages compared to the general population (Stanley, Hom, & Joiner, 2016). PTSD symptoms in firefighters are also associated with 5.2% higher odds of suicidal attempts within their career (Substance Abuse and Mental Health Services Administration, 2018). This is also true with sleep disturbances in firefighters due to their inconsistent work shifts, which can lead to insomnia and nightmares. These increases not only lead to more suicide ideation, but also increased attempts and fatalities (Stanley, Hom, & Joiner, 2016). With police officers, for example, one study found a link between suicide ideation with depression and anger, as well as an association with burnout with suicide risk (Substance Abuse and Mental Health Services Administration, 2018). According to the same source, officers who reported experiencing burnout at work were at a 117% greater risk of suicide ideation. Research has also found that an estimation of 125 to 300 of law enforcement commit suicide each year (Substance Abuse and Mental Health Services Administration, 2018).

Stigma and self-disclosure

The stigma around suicide and those who have experienced suicide ideation is sometimes shown to hinder disclosure of suicidal behavior. This causes the individual to limit their disclosure to a few trusted people or to no one at all to avoid the stigma (Frey, Hans, & Cerel, 2016). Self-disclosure is defined as sharing information about the self that was previously unknown so that it becomes shared knowledge to others (Balani & de Choudhury, 2015). According to research, self-disclosure is a therapeutic factor that can help improve one's physical and psychological wellbeing, as well as their overall health (Balani & de Choudhury, 2015). Frey, Hans, & Cerel (2016) also states that self-disclosure of suicidal behavior can be seen as a coping mechanism that counteracts feelings or beliefs of being alone or isolated.

According to Mayer (2020) stigma around suicide and suicide ideation can limit one's willingness to self-disclose. Sigma is also very close to stereotypes (i.e., "Those who have a mental illness are weak"), which can lead to prejudice (i.e., "I cannot take those with mental illnesses seriously") and discrimination such as hostile behavior and/or avoidance from those around them. Mayer (2020) also states that based on research, mental illness and suicidal behavior is perceived as a sign of weakness, while suicidal behavior alone is also stereotyped as being immoral, selfish, or attention-seeking.

Postvention, social support, and resiliency

There are few policies that have been established to assist first responders' well-being within their organizations. There is also a lack of literature in Nebraska that outlines policies and procedures to address this issue at the departmental level. However, some literature discusses other postvention interventions known to decrease suicide ideation and suicide within first responders. Postvention is another prevention measure taken to reduce the chances of further suicides from happening. This can be a program, policy, or practice within an organization to

assist in the mental health of their workers (Aguirre & Slater, 2010). Another form of postvention includes therapy for family, survivors, and the community, where the focus is to alleviate the psychache, or psychological pain such as grief (Aguirre & Slater, 2010).

In 2016 the National EMS Management Association conducted a survey called "What's Killing Our Medics," which was featured in their Mental Health and Stress in Emergency Medical Services report. In this survey, 4,021 first responders answered questions concerning organizational environments, suicide, and mental health self-disclosure. The results of the survey showed that 37% of the respondents contemplated suicide while 6.6% attempted. Additionally, 2,672 reported having assistance/resources provided to them through their employer, compared to 2,306 who did not – with over half stating they did not want their mental health information to become public and were afraid it would go on their employee record. The survey also resulted in 12% of the respondents stating that they had attempted suicide when working within an organization with management and peers that failed to support their mental wellness, and also were not prompted to utilize formal support institutions, such as therapy. The two known support programs for EMS professionals include peer support networks and debriefings done through Critical Incident Stress Management (CISM) interventions, or counseling through some Employee Assistance Programs (EAP). According to the same survey, 63% stated they used CISM resources and found them helpful.

According to Oginska-Bulik & Kobylarczyk (2015), resiliency is an important trained trait or characteristic that should be engrained within first responders to assist with coping with stress and other negative emotions. For the purpose of this study, resiliency is defined as the ability to overcome and recover from tough challenges and various hardships, whether mental or physical. Research also suggests that those with higher resiliency tend to have a more positive

outlook on life and living, along with having a higher self-efficacy and self-esteem. These individuals tend to be more emotionally stable, and tend to look at challenges and difficulties through a different lens. This helps prevent the often-negative side effects displayed after witnessing various tragic events, such as PTSD and nightmares. This relationship is described as the "post-traumatic growth" (PTG) theory (Oginska-Bulik & Kobylarczyk, 2015). This theory discusses a positive psychological change (including self-perception and other peer relationships) built following a life crisis that helps to shape development (Tedeschi & Calhoun, 2004). An example of this would be having a new appreciation of life after witnessing an accident or death. Developed by Dr. Richard Tedeschi and Dr. Lawrence Calhoun in the 1990s, this theory has five areas when evaluating levels of resiliency and outlook once a traumatic event occurs: (1) appreciation of life, (2) relationships with others, (3) new possibilities in life, (4), personal strength, and (5) spiritual change (Collier, 2016). Those who exhibit a low level of resiliency, or the ability to "bounce back," may endure more negative psychological struggles when compared to those of a higher level, who turn these experiences into positive growth Collier, 2016). According to Oginska-Bulik & Kobylarczyk (2015), 46.2% of the paramedic respondents who completed the "What's Killing Our Medics" survey showcased a high level of post-traumatic growth, which again, can assist with coping.

The National EMS Management Association (2016) discussed two strategic steps for organizations and first responder departments to develop a plan to ensure that the behavioral health, self-efficacy, and resiliency in first responders are well taken care of: preparedness and response. The following are the National EMS Management Association (2016) recommendations for leaders and responders:

1. *Preparedness (Leaders and Responders)*
    a. Leaders: Create/develop and structure teams within an Incident Command System

   b. Leaders: Develop a strategic plan for emergency mobilization, and create clear-cut procedures and protocols for emergency response action
   c. Responders: Prior to deployment, understand the signs of fatigue, burnout, and forms of psychological pain
   d. Responders: Establish a self-care plan for yourself prior to a disaster response
2. *Response (Leaders)*
   a. Ensure that communication lines are open and clear
   b. Be an effective leader - maintain and assess the mental health of all members (e.g., rotate assignments when needed) and be at the forefront when a conflict may ensue
   c. Establish a buddy system for constant follow-ups and support; ensure that it is working and is effective
   d. Provide and promote various mental health resources and programs such as resilience training, counseling, and debriefings.

Nebraska Legislation and Department of Health and Human Services

There is little to no literature on mental health of Nebraska first responders and only a few bills have been introduced in the Nebraska Legislature that address first responders in general. There are approximately six legislative bills (LBs) that address Nebraska first responders, but not all discuss mental health as a priority when it comes to job-related cumulative stress:

1. LB 717 - Change the amount of compensation under the In-the-Line-of-Duty Compensation Act *[passed 03/08/2022]*
2. LB51 - Change provisions relating to qualifications, training, certification, accreditation, powers, and duties *[enacted 05/26/2021]*
3. LB963 - Change workers' compensation provisions for injuries to first responders and frontline state employees and brutal expenses *[enacted 08/18/2020]*
4. LB407 - Include certain county correctional officers in provisions governing mental injuries and mental illnesses under Nebraska Workers' Compensation Act *[enacted 05/21/2021]*
5. LB760 - Appropriate federal funds to the Department of Health and Human Services for grants to licensed emergency medical services programs *[in committee 01/10/2022]*
6. LB222 - Change the Volunteer Emergency Responders Incentive Act *[enacted 05/01/2019]*

Legislative bills that discuss training (LB51) or funding (LB760) either lack emphasis on mental health training or are funds allocated to supplies needed to save the lives of the public.

Nebraska does have a state statute for the Critical Incident Stress Management Program under Nebraska Rev. Stat. §§ 71-7101 to 71-7113 (the Critical Incident Stress Management Act). This statute provides rationale for the program and its purpose for reducing critical incident stress (71-7103), what should be provided to emergency service personnel from the program (71-7104), what resources under the Nebraska CISM Act should be made available (71-7113), and the rules for stress management sessions, such as confidentiality and how one cannot be subpoenaed under its conditions (71-7112). This law is highly helpful, but only if it is publicized, used, and supported by first responder departments. Additionally, this policy is not widely known to the first responder community unless one of their department members is on the Nebraska CISM team.

As an intervention to combat work related stressor and introduce mental health support, a free confidential app CrewCare is designed for first responders to help them recognize triggers and factors associated with mental illness. It also allowed responders to engage in self-assessments to help with self-care. The app is not specifically owned by Nebraska CISM but is provided by the State of Nebraska EHS through a grant. Besides that, there are also Employee Assistance Programs (EAP), however there also is stigma associated with utilizing its services.

Specific Aim and Significance

First responders who die by suicide are proportionally greater than suicides from the general public (National EMS Management Association, 2016; Vigil et al, 2021). Since first responders are continually exposed to traumatic events in their work environment, they may not have access to the mental health assistance and services needed to properly respond to the stigma of mental health, suicide ideation, and related stressors. This qualitative study seeks to identify the formal policy(s), procedures, or regulations that have been established in Nebraska that

assesses the risks and challenges first responders encounter on the job that affects their mental health and well-being. If policies exist, to what extent do they focus on postvention strategies – practices and activities aimed to decrease future suicide after a suicide occurred – toward suicide prevention. If policies have not been established, this study also seeks to find what form of assistance Nebraska first responders desire to aid them in resiliency, coping, and their overall wellbeing. This study answered the following research questions:

RQ1: Why are first responders more likely to die by suicide than the general public, and what are the factors that have led to the stigma of mental health and suicide self-disclosure?

RQ2: What state or national policies have been established to ensure that Nebraska first responders receive appropriate health services before and after serving?

RQ3: What form of suicide postvention-focused policy would be appropriate for Nebraska first responders to ensure their mental health and wellbeing are being taken care of?

Methods

Data collection

Qualitative interviews were conducted from January 2022 to February 2022. The methodological focus of qualitative interview research is not sample size but focuses more on data saturation and/or repetition of themes (Coleman, 2007). In accordance with previously cited qualitative methodological research, data saturation for interviewing participants is usually between eight and 20 participants (McCracken, 1993). Therefore, interview participants for this study were set at 12-15, a stopping point to eliminate the possibility of repetitive responses. The criteria for the interview participants included being an active or retired Nebraska volunteer or

full-time first responder (including firefighters, police officers, and other emergency medical service professions) who are 19 years of age or older prior to the initial interview. The interview participants were initially identified by Debbie Kuhn who is the Nebraska Critical Incident Stress Management (CISM) Program manager in the Office of Emergency Medical Services in the Nebraska Department of Health and Human Services (DHHS).

Once participant eligibility was confirmed, and a written consent was obtained from each participant prior to the interview, the interview process began. Since interview participants were active and retired Nebraska first responders, they were not given pseudonyms so that their quotes hold credibility. The information that is publicized includes their name, location of occupation (e.g., Omaha), and general occupation (e.g., law enforcement). In total, 15 first responders were identified, representing 16 Nebraska cities: Ainsworth, Wayne, Papillion, Springfield, Lincoln, Elm Creek, Cambridge, Lexington, North Platte, Bellevue, Firth, Valley, Omaha, O'Neill, La Vista, and Plattsmouth. All 15 Nebraska first responders are classified as members of the Nebraska CISM team. These responders ranged from volunteer or fulltime law enforcement, emergency medical technicians (EMT), EMTA, and fire. Some responders worked for more than one of the mentioned occupations. Due to the spread of COVID-19 and the location difference between the researcher and participant, interviews were conducted via Zoom or email as needed. Interviews lasted approximately 30 minutes to 1 hour and were also recorded to capture audio and video for transcription. Recordings and transcripts were saved on the researcher's BitLocker encryption USB flash drive. Interviews were transcribed using Echo 360.

Data Analysis

After data collection, the transcriptions were evaluated using the constant-comparative method in order to develop a thematic analysis that can address the proposed research questions

(Glaser, 1965). In the initial phase of data analysis, Nebraska first responder interviews were re-read and transcribed by the primary investigator (PI) who later proceeded in open-coding (Charmaz, 2006) to compare literature of first responders in general to that of Nebraska's experience. After careful consideration, the PI then generated these codes (e.g., "mental health seen as a weakness") into themes (e.g., suck it up mentality), in order to fully answer the created research questions, resulting in five key themes: (a) horrific encounters tied to mental illness, (b) "suck it up" mentality, (c) organizational trust, (d) lack of mental health policy in Nebraska, and (e) prevention strategies and recommendations for policy.

Results

The results of this research study have been organized into themes to answer all three research questions respectfully. Excerpts from the interviews are provided below to express the five themes and introduce key suggestions for future policy actions for prevention, with the application of resiliency and post-traumatic growth as the driving goal. To ensure credibility and plausibility, their names, location of occupation (e.g., Omaha), and general occupation (e.g., Fire) were mentioned.

Horrific encounters ties to mental illness

Though all 15 Nebraska first responders mentioned their service work as being, for the most part, enjoyable, many discussed the often-unpleasant side of the job through the witness of horrific events: "responders see, hear, feel, taste, experience things that no other people do" (Jodie Thompson, Wayne, EMT, February 2022). Sarah Williams (Omaha, Law Enforcement) also reported that compared to the general public, first responders often see a lot more than the public "whether that be the death of a baby, death of the child or… people that are involved in

critical incidents like accidents that lead to serious injuries, deaths. We see these on the regular and we're not supposed to see these things regularly" (February 2022).

These negative and traumatic experiences are often heightened in smaller towns where the responders personally know the people who need help: "But the difference is that in a rural community, we have very close ties with the people that we serve. So, most of the time it is our good friend, somebody that we know throughout the community, and we have that close attachment to it there, which makes it even more traumatizing for people" (Rachel Kohlman, O'Neill, Law Enforcement, February 2022).

This experience was also mirrored by many other first responders who discussed the trauma and negative aftermath of these experiences:

> I started when I was 18… I've had my ups and downs and seen my fair share of different things, and about my fifth or sixth year in I was [in] one of the events that kind of triggered the CISM team to be called, was after we had a tractor trailer that had run off the roadway and caught fire, and we had put the fire out with the two bodies inside. And then after it was out and everything and they got through with their investigation, we stayed on the scene, and we had to do a body recovery, and that one was, that was rough. (Nicholas Vocasek, Lincoln, Corrections Sergeant & Fire/Rescue, February 2022).

> He was a troubled teen then, in with the law a couple times…Good kid, otherwise just a broken life, and who hung himself…Didn't have to die, I mean… His feet were touching [the] ground. He could have stood up. That was mind bending for me. And I came away from that really jarred. So, for the next week, you know, nobody wanted a debriefing. There was four of us on that call. But, I thought about it a lot, I still think about it today. It's one of the worst calls [I've] ever been on. (Ann Fiala, Ainsworth, Fire & EMT, February 2022).

> It included an infant in a blizzard out on the interstate type deal, and I really struggled with that for a long time… it's still something that's very clear in my mind. And now that I'm on the critical incident stress management team, I know how I can help other guys and I know some of those signs through my training…. But we do have a couple guys on our department who have had those calls, and now it's two and three years later and they're still struggling with those, not able to sleep at night, having nightmares (Al Copper, Lexington, Fire & EMT, January 2022).

Though the first responders discussed the negative side effect of certain experiences, they also expressed their duty to their job and responsibility to show up to help and serve the public: "If not you, then who? Who is going to show up? We…already have a tough enough time getting people to show up, whether it's paid or volunteer" (Ann Fiala, Ainsworth, Fire & EMT, February 2022).

Many others had similar thoughts, also adding that the role itself is to serve and comfort the public in times of pain and suffering. Two Nebraska first responders stated that

> Because if it's not for us, who's going to be there to respond?...So just for an example, you know, you come up to a car accident and it's bad and you think, Okay, we're going to save everybody that comes out of a car accident. Well, that doesn't happen. It doesn't happen…Many times our role is not to be there to rescue the person. Our role is to be there to be respectful of the remains, to be respectful for the family, to honor that person and get them to where they need to be. And learning that for me was a game changer. (Jodie Thompson, Wayne, EMT, February 2022)

> I know in my mind I think that because of all the stress goes on with doing what we do. We see a lot of things that other people should never have to see. We do a lot of things that are always stressful situations in those critical things. We do take care of a lot of people. And it is very rewarding and a lot of times just giving them comfort and maybe reassuring them or reassure families. (Carol Jorgensen, Elm Creek, Fire & EMT, February 2022).

Jodie Thompson (Wayne, EMT) also believes that "preparing people and maybe being on the CISM team has helped [her] with thaout because [she's] seen so much tragedy and heard so much tragedy more than what [she's] even experienced" (February 2022). Many first responders also agreed that bad things happen and will be seen, but it's overall how it's address after that matters. Kurt Muhle (Valley, Law Enforcement & EMT) felt similar when he stated that for him, "rule number one is the people die. And rule number two is that no matter what you do, you can't always change rule number one. So that's kind of the way I look at things" (February 2022). Rachel Kohlman (O'Neill, Law Enforcement) felt the same:

> This is a very serious job and…You know, the big thing right now, too, is how do we make that balance between the warrior mindset and the guardian mindset and making sure that we are building the resiliency in our officers and first responders so that they still have the Guardian aspect, but in the back of their mind, that warrior is still there to face the things that we have. We want to be strong people. We want to do these things for the public. (February 2022)

This change of mindset helps offset the guilt often first responders feel when they feel that they couldn't save the day, but are doing the best they can do in the situation: "Things didn't go exactly right and they blame themselves" (Sarah Williams, Omaha, Law Enforcement, February 2022).

Karla Houfek (Firth, EMT Fire) also discussed the layered situation that happens when going on critical calls and having to work fast in the eyes of the public:

> And now I'm working a kid that is very, very critical… you've been called to a bad situation and you're doing the best you can. But it's sometimes just not enough…So, there's just a lot of range of things that happen. It's not just, Oh, I'm going to a call, I'm going to use my training and I'm going to go home and document… There's all this other stuff that's in the middle that interferes with what you're doing. With that, you don't necessarily have to second guess what you're doing. But the public is always second guessing you (February 2022).

When asked if the higher rate at which first responders die by suicide compared to the general public was surprising, all stated that it wasn't, mentioning cumulative stress as the main driving factor:

> That stressor on the body physically and physiologically can be a complete drain and can even alter the body physically, which can be discouraging to a person, and maybe they don't even realize why their body has changed. (Ann Fiala, Ainsworth, Fire & EMT, February 2022)

> I think we have several guys that suffer from PTSD, whether from calls on the department or we have several veterans. And so, they'll bring some of that from their previous engagements. And I think a lot of it has to do with just why, or the things that we see, the things that we encounter on a daily basis and the cumulative nature of the stress. (Rex Adams, Lexington, Fire & EMT, February 2022).

> I think it's because of cumulative stress. We get an incident, and then we don't have anything for a while and then we get another incident, but we never really got able to process the first one. Every officer will have an incident that sticks with them for their life, one or two. They just can't… They just never forget. And it just seemed like everything builds on top of that. (Randy Ruhge, La Vista, Law Enforcement & EMT Fire, February 2022)

Ann Fiala (Ainsworth, Fire & EMT) also mentioned the difficulty some first responders may feel when trying to find mental health resources in smaller towns:

> In these small towns, 'I don't want to go talk to the local therapist' because they know them, they see them at the grocery store, they see them at the post office, going down the street, at the school…but it's kind of at your own personal doctor. Maybe they go to college. They know me in and out. I don't want to be seen in public with them, same thing with a mental health therapist. They know my issues. I don't want to walk down the street and see them. But to get out of town, you're talking here, minimum of an hour, usually two-hour trip to go find a therapist that you don't know. (February 2022)

"Suck it up" mentality

Along with experiencing traumatic events that can affect their mental health, first responders also brought up the stigma associated with mental health and mental illness self-disclosure. The Nebraska first responders stated that it was often common for first responders to

feel like they needed to portray a strong look outside of calls in order to protect their image: "…when my father was a firefighter and my grandfather, you did just suck it up and you moved on. That was…what they were taught to do, and that's what they taught us to do" (Kirk Schuster, Bellevue, Fire, February 2022). Randy Ruhge (La Vista, Law Enforcement & EMT Fire) also added that back when he was getting into law enforcement "if you show any weakness, they told you to turn your badge in and walk away," and that "you had to keep it inside and you had to stay strong" and "couldn't show any vulnerabilities or any emotions" (February 2022).

Others agreed that the "macho" image or "suck-it-up" trend of first responders can have some negative effects later on:

> For so long…for me in this first responder role, law enforcement, you're…not really seen as human, you're just…seen as the people in the uniform that come to take care of things and…you're supposed to have that resilience and you're constantly supposed to be prepared to help others and deal with all that. So, because then…it's seen as a weakness. You know, you don't want to be seen as weak because you have to be this big, strong law enforcement officer, if you're going to be helping others, you can't look weak. (Carolyn O'Brien, North Platte, Law Enforcement, February 2022)

> And there's a lot of alpha personalities in the fire service, both male and female. We're all kind of alphas a little bit, so nobody wants to open up and talk about what's bothering them. You know, and so we just kind of bottle it up. (Bob Enberg, Springfield & Papillion, EMT Fire, February 2022)

> You know in the fire and EMS service for years; it was a lot more males that were part of it. And so that is their tendency to not show [weakness]…Women... felt like they need to be tough, just like the guys. (Carol Jorgensen, Elm Creek, Fire & EMT, February 2022)

Many also addressed the stigma of mental health self-disclosure, that is also often attached to this image, and it's negative side effects.

> My paid Fire Department experience leaves [me] no doubt of its stigmatizing effects, our department had one suicide I know of and at least one other I suspect; then there is the "rabbit hole" effect of drug issues, including alcohol, that are common "coping" (or suck it up) mechanism with their negative effects. (Jerry L. Stroud, North Platte Fire & EMTA & Cambridge Fire, January 2022).

> Nobody wants to be visible about their struggles. And that's why I think a lot of times a lot of the agencies, including my own, don't use even the CISM debriefings. No one shows up because they don't want to be the person going. (Carolyn O'Brien, North Platte, Law Enforcement, February 2022)

Rachel Kohlman (O'Neill, Law Enforcement) also discussed the effects of bad leadership when no one understands the signs of mental illness while being in an environment where it's

stigmatized. She stated that her “alcohol went up” and that “there were many times where [she] could get off work and drink a case of beer, and it wasn't just a big deal” (February 2022). And when she chose to address the changed or get help, she was not received with proper guidance or assistance: “Here's how it was addressed with me. ‘You need an attitude adjustment. How you are interacting with people is affecting your job and you need to adjust your attitude accordingly, if you think that you are going to stay here’” (February 2022).

Along with that, Kurt Muhle (Valley, Law Enforcement & EMT) discussed the association of this stigma of self-disclosure with negative coping mechanisms, such as alcoholism:

> the actual way that people used to deal with crap was they would go get drunk, and alcohol was the answer to their problems. The problem with that is alcohol is a depressant and they are already depressed. So, it's kind of like a double whammy. (February 2022)

However, though the stigma is still prevalent within departments, many first responders believe that it is slowly changing: “there's that whole I don't need no help. I'm fine kind of attitude…And we're changing it. We're slowly changing” (Rex Adams, Lexington, Fire & EMT). One Nebraska first responder expressed a steady shift in perspective when it comes to openly seeking help and the positive side effects:

> I was involved in a triple fatality crash, which I knew everybody in the crash. Three out of the 4 people in the crash died Knew them all, and so went through my first debriefing after that crash. And that's where I learned that if you don't share your feelings, things are crappy. (Kurt Muhle, Valley, Law Enforcement & EMT, February 2022)

Additionally, though the “macho” image for first responders can cause negative side effects when associated with stigma, they are still required to have thick skin due to horrific events they will see and experiences they will go through. Which is why first responders now are trying to help others break this cycle. One way being through open communication, and the other leadership:

> But as, when we get leaders among the older group who are comfortable talking about it, like…old men who have been on SWAT or been in the military and they're okay with talking about mental health, all of a sudden you see a little bit more like less stigmatization on the department. (Sarah Williams, Omaha, Law Enforcement, February 2022)

> They were realizing that cops were actually humans and we needed to release emotions and they needed to be released in a secure special place. So, it could be done. And we could put that tough edge back on when we needed to go back out in the community if we needed to. So now they're starting to accept that more, they're starting to allow people to go and see therapists and psychologists. (Randy Ruhge, La Vista, Law Enforcement & EMT Fire, February 2022)

> if we take away that stigmatization of it and we can still put up a front that we're strong people, but we're strong people that know when enough is enough and we're going to openly talk about mental health because we need to…show that it's okay to talk about. (Rachel Kohlman, O'Neill, Law Enforcement, February 2022)

Organizational trust

One common theme that the Nebraska first responders spoke about was the lack of support and guidance from some departments and organizations when it came to finding and receiving mental health assistance. Sarah Williams (Omaha, Law Enforcement) spoke about her own experience in past departments and how it was hard for her to trust her organization: "They had a version of peer support that was…like a joke. Like, nobody kept anything confidential" (February 2022). Rachel Kohlman (O'Neill, Law Enforcement) also discussed her own past experience trying to seek help from management:

> If you have a department that understands what mental health is, being exposed to critical incidences are, and how to get your officer's help. When I asked what an EAP program was in my previous agency, they didn't know, and they didn't know what the EAP program was. They didn't know what was offered, and they said, Well, no, that's part of workman's comp. What? No. (February 2022)

Jerry L. Stroud (North Platte Fire & EMTA & Cambridge Fire) mentioned the Nebraska CISM program and how he feels like "to many Emergency Service provider managers give only 'lip service' to" it (January 2022), when it is actually a helpful program and resource. Kurt Muhle (Valley, Law Enforcement & EMT) also discussed the huge importance of mental health and the consequences of having leaders that do not support that or them:

> The problem is, most of the administrators and most of the agencies across the state of Nebraska are from the 'old school.' And so, they kind of have the philosophy that… so their officers just saw the most

> horrendous thing they're ever going to see in their life, and they just need to suck it up. You know, most administrators don't think that mental health is a big thing for their employees. (February 2022)

Much of this is seen because "so many departments have that mindset…that they will handle this within [themselves]" and that they "don't need anybody else to come in and do this for [them]…[they] don't need help," which isn't the case (Al Cooper, Lexington, Fire & EMT, January 2022). Rachel Kohlman (O'Neill, Law Enforcement) also discussed the financial issue management may think about when it comes to mental health assistance:

> But that stigma that goes behind it in the fear of losing our jobs and agencies because supervisors don't understand it, supervisors don't want to address it. And supervisors think that it's just going to cost them time and money. (February 2022)

Some also spoke about that if departmental programs are offered, but there is a lack of trust and support already established within the department, these resources are ineffective. Nebraska first responders stated that this makes programs like the Nebraska CISM seem more reliable:

> if you don't trust your department and you're leaning towards suicide, you're not going to trust in anything that comes out of the department. So, I think a program put up by like CISM or something similar would be viewed as more trustworthy because it's not coming from one individual department, but it's like statewide. (Sarah Williams, Omaha, Law Enforcement, February 2022)

> If we could get just more volunteers to help with CISM I think the philosophy is changing but yeah there's still the wall of suck it up, buttercup. (Kurt Muhle, Valley, Law Enforcement & EMT, February 2022)

Many others spoke about the benefit of having supervisors who understand mental illness and truly care for the well-being of their team: "the people that we have in higher ups are guys that have been firefighters with Lincoln Fire, and so they kind of understand what it takes and the importance of keeping people going because if you don't, they're not going to have anybody" (Nicholas Vocasek, Lincoln, Corrections Sergeant & Fire/Rescue, February 2022). Rachel Kohlman (O'Neill, Law Enforcement) also discussed the importance of gathering everyone together and establishing open communication:

> And once you get that the hierarchy of your departments, your chiefs, your assistant chiefs, your lieutenants, your captains, and those people in that room and they openly talk, that is what makes the biggest difference for other firefighters and other EMS and other law enforcement. (February 2022)

Ann Fiala (Ainsworth, Fire & EMT) also addressed her own position as a leader and the importance of showing up and following up with her team: “This mental health stuff is big. Yeah, it's up to us as leaders to buy into it, learn as much as we can about it so that we can pass it on down [in] training and keep supporting” (February 2022). Nicholas Vocasek (Lincoln, Corrections Sergeant & Fire/Rescue) agreed, mentioning that supervisors play a large role in the development and success of their team:

> And just kind of making sure that they understand that that's there is a big thing for the supervisors to kind of push them and make sure that you know that they know that they have places to turn, and they're not alone is huge. (February 2022)

Lack of mental health policy in Nebraska

When the Nebraska first responders were asked if they knew any policy or law in Nebraska that was in place to assist them in their mental health and well-being, the majority of them said “no” and that the only thing they can think of was the Nebraska CISM statute:

> So, there is no policy. (Karla Houfek, Firth, EMT Fire, February 2022)

> There is no policy in my organization. But I do know that they do have resources available. And. Like I said, they're getting better about giving more training and about it. (Carolyn O’Brien, North Platte, Law Enforcement, February 2022)

> The only policies that were in place at the time was "Fit-for-Duty" …we have the state statutes that protect them as long as they're doing it under CISM interventions that will help keep it confidential. It seems like those programs are really, really helping. They're just now getting started in our area. So, it's…good to see. (Randy Ruhge, La Vista, Law Enforcement & EMT Fire, February 2022)

But even though CISM was the only thing some could think of, it was also heavily praised for its resources and interventions geared to help with mental illness in Nebraska first responders. Kurk Muhle (Valley, Law Enforcement & EMT) reiterated that “CISM is a statewide activity” and “is made available to any agency, including dispatchers…that has a bad incident…I mean, it's totally up to the agency. If they feel like whatever the incident was rises to the need of

a CISM intervention, they can call, and we will do interventions for them" (February 2022). Al Copper (Lexington, Fire & EMT) agreed that the resources offered by CISM, especially the debriefings, should be utilized more because they are there to help: "And now we've kind of gotten to the point where it's like, Hey, let's offer it. And if nobody shows up, then great. But if there's even two people that show up or one person that shows up for a debriefing, then obviously somebody was struggling with it" (January 2022). This was mutual for Rachel Kohlman (O'Neill, Law Enforcement) who, also mentioned the passing of LB51 with its mental health aspects for law enforcement, not only praised the Nebraska program but recognized how others may not be aware if it:

> So critical incident stress management, we have a bang-up state team. Peer to peer, mental health, connections to mental health, debriefings, diffusions. But the problem was that some of these small departments didn't know about it or their…chiefs or higher-ups came from somewhere else and didn't know about these programs. (February 2022)

Bob Enberg (Springfield & Papillion, EMT Fire) also discussed his efforts in making sure that his team was able to participate in these debriefings if needed:

> We did just become a chapter of the First Responders Foundation, before Omaha Fire and Omaha Police were the only ones, even though they've…opened up their resources to anybody in the area. We are now an official chapter in Papillion…and we did just write procedure on like the CISM…We had one here in Papillion about a year ago that was just kind of a train wreck on how the guys went to it. They really weren't allowed to fully participate in it because they were still on call…if a call comes in, they would have to leave. So, I actually wrote the SOG [Standard Operating Guidelines] myself to ensure that doesn't happen, that they're able to go in and fully participate in a debriefing. (February 2022)

The Nebraska first responders were asked if they know of any postvention strategies, programs, or interventions that were created to assist them due to the lack of policy. Kirk Schuster (Bellevue, Fire) stated that they didn't "have anything structured that would…be any type of post activity…other than the CISM stuff," however in the event that "it needs to go further than that, then we turn that over any try to help them with a therapist" (February 2022). Some first responders stated that they had departmental created rules and programs/activities to assist with mental health:

> So, we've actually made a policy on our department now that if there is a call involving a child, because a lot of us are in my age group and we have kids at home or if there's a death or dismemberment, we will automatically hold a CISM briefing the next day or within two days. (Rex Adams, Lexington, Fire & EMT, February 2022)

> And having them come in and then also like for the jail, we have the Continuum, so we actually have a program that they can go and seek help if they need help with processing through some of this stuff, and they kind of get them started rolling in the right direction to make sure that you have that everything from, you know, counselors for mental health to counselors for relationships or substance abuse. (Nicholas Vocasek, Lincoln, Corrections Sergeant & Fire/Rescue, February 2022).

Others brought up the CrewCare app or other departmental health apps they know of that can assist in the mental health of first responders:

> I both have heard of "CrewCare" and distribute flyers for it at the debriefings I am part of; I consider it a helpful "first step" in the stress management process and it seems more openly received the younger members. (Jerry L. Stroud, North Platte Fire & EMTA & Cambridge Fire, January 2022)

> So, we actually have something really similar at the Omaha Police Department that's available for officers, and it's like an app centered on Officer Wellness and there's like a wellness toolkit and then it has a list of all of our peer support officers. (Sarah Williams, Omaha, Law Enforcement, February 2022)

Prevention strategies and recommendations for policy

Postvention is a form of prevention that can be used in different aspects to help with policy, activities, interventions, and programs. The majority of the Nebraska first responders reflected on these thoughts on what they would like to see from a policy and resource perspective moving forward in order to increase prevention strategies and reduce the rate at which first responders die by suicide. Some Nebraska first responders believed that publicizing this kind of information and strategies to stakeholders will help spread not only awareness but could start a movement of change and discussion:

> The Volunteer Fire Association… they do a fire school every year in Grand Island, and it's in May. All the volunteer departments come… together for a weekend, and we train and there are sessions for chiefs and leaders. I think if you can get into that session…, do a session on this, like get the chiefs in there and…we have guys who can't fight fires anymore, but they're still on the department, and they go and they do this session called like "happenings." And they just talk about all the stuff that happened around the state. That's their weekend. They sit around and talk and then they go drink. Get it into that or get it into like a chiefs' network or something. But I think if you could get this information out to chiefs and other leaders so that it's implemented across the state, I think that would go a long, long way. (Rex Adams, Lexington, Fire & EMT, February 2022)

> I think if you start with a big think tank, so let's take EMS, let's take fire. Let's take police. Let's have a group formulated from across the state. Let's meet. Let's make a task list….Let's bring these stakeholders

> from fire, law enforcement, EMS, let's bring these stakeholders together now. Let's talk about this together. In all three of our organizations, what did we see as a common thing that we need to see within our departments, for mental health, for people in order to make sure that they're OK? Now that we have that…let's make this program and let's do this training. OK, now that we've done that, we have people that can take and spread that out, right? …But in order to do that, we need to have people that are from our state that are truly on board with that…we need to be smart about it and we need to have a well thought out plan and ask for exactly what we want and know how to obtain those things. (Rachel Kohlman, O'Neill, Law Enforcement, February 2022)

Many others saw this change as an opportunity to introduce policy changes regarding training, resources, and mental health research related topics that are set solely to assist first responders with their mental health. Ann Fiala (Ainsworth, Fire & EMT) believed that the only way to "get it into each service's policy to train" was through regulation "and serve on that board," and once that is established, "through training and normalizing, we have got to work to break through that [stigma]" (February 2022). Almost every first responder agreed that training and education played a vital role in making a change:

> When I teach that and with stress management, would I love to add some more to stress management? Yes. And I'm going to work on that because I feel like if we can give them tools starting…here as brand-new hired officers before they're even certified, I would hope that they can remember it and carried it back into their department and remember for years to come. (Rachel Kohlman, O'Neill, Law Enforcement, February 2022)

> Education, education, education…Education also means that you're getting the word out there. It's not just…a word…it's not just saying it, it's actually out doing. It's being seen…So, when I say education, it's educating people that these resources are there. (Kirk Schuster, Bellevue, Fire, February 2022)

> In the training aspect… I think they touch just briefly…on it in their curriculum. Now, I don't know if they, if they do… But I think it does come down to the education part of it when people are training. …maybe through conferences or through continuing ed., maybe or through their initial training as well… I think also educating responders on the benefit of EMDR treatment because that, if they're really struggling…they're finding that is the best trauma care treatment to help… And there are some licensed EMDR therapists in our area. (Jodie Thompson, Wayne, EMT, February 2022)

> if you were to try to circumvent that barrier [of stigma], is to hit it in class when you're in training, whether it's in firefighter 1, EMT, EMR, whatever. If you hit it in class, a whole chapter could be done…There needs to be a at least a chapter. A couple days of training spent on self-care, including the mental health side of it, because you will confront death. You will see suicide. You will see overdose, you will see possible murder, you will see car wrecks, you see chainsaw accidents, I mean, gory, gross. Terrible. You know, everything from infant deaths that you feel so helpless about. To the aged who say, 'I just want to die.' (Ann Fiala, Ainsworth, Fire & EMT, February 2022)

Nicholas Vocasek (Lincoln, Corrections Sergeant & Fire/Rescue) agreed commenting on how important it was to get these training and education suggestions heard and implemented and

that it's important to make "sure that we're doing everything in our power to keep the people… around because it's hard enough to find them… we're fighting an uphill battle is what it comes down to. So just making sure that departments have the stuff out there and they kind of have some policies … and just make sure that they understand that… they're not alone and that they have people there to be able to help out here" (February 2022).

Others also chimed in with that idea, suggesting what they wanted to see funding and policy-wise. When asked about what she wanted to see, Carol Jorgensen (Elm Creek, Fire & EMT) suggested "maybe fund mental health or responders in the state of Nebraska" (February 2022). This was agreed upon by other Nebraska first responders who wanted to see similar things in policy and funding:

> I think if we made a policy, the policy should be like, it's mandatory that we do a debriefing, but it's not mandatory that you attend. I think it should be mandatory that you set it up. But the more and especially if you get command staff to go and people have an understanding of it, might, you know, that's my favorite thing about doing a debriefing is, you make it very clear when you do the opening of a debriefing. There is no rank in this room. It's not to judge what you did or did not do on a scene. It is simply for you and what you are feeling. (Rachel Kohlman, O'Neill, Law Enforcement, February 2022).

> And so, like Lincoln Fire and Omaha Fire have established those things [mental health as a priority], or they're in the baby phases of doing that through the First Responder Network and doing their own internal peers and mentoring and that type of stuff. And I think that as larger departments do it, the smaller ones will start to catch on. But they cost money, it costs budget money to do it. I think many of them are reserved because of the budget money. (Kirk Schuster, Bellevue, Fire, February 2022)

> So, I think we could get away with a policy stating that… mandating debriefing after every suicide and then. To go and kind of tear it out after that, a diffusing maybe after infant deaths or more dramatic deaths, those kind of things…Serious consideration given to these tough calls, you know, like I said, the infant calls, the child calls, the car wrecks and stuff, but I think that would be a good way to start introducing policy on debriefings in mental health following traumatic incidences. (Ann Fiala, Ainsworth, Fire & EMT, February 2022)

Additionally, Al Copper (Lexington, Fire & EMT) discussed what could be seen in the future to possibly help these policy endeavors or test ways to see how to assist departments:

> maybe doing a survey of their department or the guys or gals that have been on those calls and maybe just check some boxes….and then somehow use that information to follow up with those individuals or reach out individually to them…I would like to see a like a specific list of calls or types of calls that any fire department or any EMS rescue department might go through where it would be automatic, automatic debriefing, not even ask questions, you just automatically call and get the CISM team in there to do a debriefing. (January 2022)

The Nebraska first responders also briefly discussed current interventions that are established to assist first responders such as the CrewCare app and how it should be introduced in training as well:

> I don't know if that's through…Debbie or through some other entity, organization or whatever that would be able to come into our department and talk through that, go through the crew care app, how to log in, what kind of questions, what it you know, how it helps you and how it works. (Al Copper, Lexington, Fire & EMT, January 2022)

This app was also fairly praised by a portion of Nebraska first responders suggesting the "app [isn't] utilized near enough" and isn't "promoted near enough, as powerful as it actually is" because of the "lack of funding and lack of money to actually get the word out there" (Kirk Schuster, Bellevue, Fire, February 2022). Carolyn O'Brien (North Platte, Law Enforcement) also agreed, suggesting the CrewCare app to be "the first priority because… we go back to law enforcement [and] are hesitant to speak to anyone about these things," therefore "an app is a good place for at least one good resource to have available" (February 2022). And though the application is not owned by Nebraska, therefore making it difficult to conduct software changes, Nicholas Vocasek (Lincoln, Corrections Sergeant & Fire/Rescue) brought up the convenience, the power of anonymity, and the confidentiality that these kinds of apps have, as it's a tool too "anonymously reach out" and that within the app, to "chat with somebody would be good, because I think that [it's] still kind of a stigmatism for people…that people have a hard time with reaching out and asking for help" (February 2022).

Discussion and Conclusion

This study aimed to identify the formal policy(s), procedures, or regulations that have been established in Nebraska that assesses the risks and challenges first responders encounter on the job that affects their mental health and well-being. This was done through an evaluation of current Legislative bills and the CISM state statute, and asking Nebraska first responders what

they have experienced on the job and what efforts they want to see in the future. Even though there were only 15 stakeholders representing 16 cities, much of the information provided by these first responders was adequate to suggest recommendations for legislation. Though much was discussed, the Nebraska first responders focused on three key needs: (1) additional mental health training (for team members and individuals in leadership positions) along with organizational structure, (2) mental health and postvention program and resource related funding, and (3) information marketing and health related product marketing (such as the CrewCare app).

These needs were identified by focusing on the five themes and their significance in the development of resiliency and post-traumatic growth in Nebraska first responders. Additionally, these findings assisted in answering the three research questions proposed for this research study.

RQ1: Why are first responders more likely to die by suicide than the general public, and what are the factors that have led to the stigma of mental health and suicide self-disclosure?

Though all 15 Nebraska first responders mentioned their service work as being, for the most part, enjoyable, many discussed the often-unpleasant side of the job that includes witnessing horrific events. These responses helped answer the question why first responders are more likely to die by suicide compared to the general public (i.e., witnessing horrific events and the trauma proceeds) as well as the specific factors that played into the stigma ("suck it up" mentality and a lack of organizational trust). Though the first responders discussed the negative side effects of certain experiences, they also expressed their duty to their job and responsibility to show up to help and serve the public. Many others felt similar, also adding that the role itself is to serve and comfort the public in times of pain and suffering. Many first responders also agreed that bad things happen and will be seen, but it's overall how it's address after the events have

occurred that matters. This change of mindset helps offset the guilt first responders often experience when they feel that they couldn't save the day, but did their best given the situation.

First responders also spoke about stigma, self-image, and the need of self-disclosure within departments. Many addressed the idea of "sucking it up" or acting tough since, as a first responder you must have thick skin. However, this often translates to "sucking-it-up" when it comes to mental illness or not addressing experienced work traumas because one doesn't want to be seen as weak or judged, and how bottling emotions up can turn into unhealthy coping mechanisms, such as alcoholism. It was also discussed that though mental health can be promoted by the employees, unless the higher-ups who went through the generation of "suck-it-up" and may not have properly addressed their own traumas realize this, the cycle of suicide ideation may continue. First responders stated how it was important for workers to not only trust their organization when it comes to taking care of their workers, but also to have their back when it comes to mental health self-disclosure and resources. Many believed that if the higher-ups take this issue seriously and educate themselves on the topic, it will soon spread and lead to changes.

RQ2: What state or national policies have been established to ensure that Nebraska first responders receive appropriate health services before and after serving?

To address the second research question, this research study wanted to know of any form of policy or known laws that Nebraska first responders follow that were in place to assist in their mental health and well-being. However, in addition to a lack of research on first responder mental health, Nebraska first responders also did not know of many policies or postvention activities in the state or in their department that could assist them. Though few mentioned departmental resources or rules that they used, the only policy program many could think of was

the Critical Incident Stress Management Act and the CrewCare intervention app, which was also not highly publicized, marketed, or utilized.

RQ3: What form of suicide postvention-focused policy would be appropriate for Nebraska first responders to ensure their mental health and wellbeing are being taken care of?

Lastly, Nebraska first responders gave recommendations and proposals for postvention strategies as well as policy suggestions in order to protect Nebraska first responders. The responders were asked the questions, "In Nebraska, what would you like to see be done for fellow first responders to make sure that every organization has policies and procedures in place to properly assist their worker's mental health to avoid the thought of suicide?," in order to understand what they wanted to see happen in their department as well as for the state. This way, it would address the research question and give the responders a voice for future policy discussions and decisions concerning this topic. Many of the Nebraska first responders discussed training, extra resources on known interventions, program funding, conference meetings, surveys and evaluation of calls and debriefings, and utilizing defusing as a postvention strategy. These suggestions were created to not only reduce the rate at which first responders die by suicide in Nebraska, but also to strengthen the first responder community to promote resiliency and post-traumatic growth.

These voices not only help diminish the stigma of mental health self-disclosure, but also introduce the need for further departmental funding, marketing strategies, and training to improve resiliency and organizational structure. First responders are indeed heroes, so as civilians who look upon these few for help, policymakers should ensure that their overall mental health and well-being is a top priority.

Implications

This study can serve as a catalyst to explore further research regarding mental health and well-being of Nebraska first responders, including new policies and resources that are aimed at decreasing suicidality and suicide ideation. The intent of this study is to use the information presented as a starting point to understand how to assist and support Nebraska first responders and their mental health. This data may assist in policy development or mental illness prevention strategies aimed to increase resiliency, healthy coping skills, and pre-established self-care procedures in departments. It also may serve as a starting point for mental health self-disclosure conversations among Nebraska first responders.

Limitations

Though the 15 Nebraska first responders were able to disclose information concerning their own experience with mental health and policy regulations within this research study, this research does not aim to reflect the thoughts of all Nebraska first responders and their respective Nebraska cities of work. Additionally, since the Nebraska first responders mentioned represented only 16 cities in Nebraska, other studies should conduct an analysis of those departments outside those cities to see if the themes correlate. The focus of this study was predominantly Fire, EMS, and Law Enforcement in a general sense, therefore, to truly understand the experience of first responders, further research should investigate specific first responder roles to identify key themes and implications. Lastly, although a first responder can be as young as 18 years of age, this study was limited to those who were 19 years and older. Future studies should include those of all ages who identify themselves as a first responder.

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Appendix A: Interview Guide

Interview Questions for Nebraska First Responders

Introduction

1. Please introduce yourself with your name and your line of work.
2. How long have you been a (insert first responder's specific occupation and job).
3. On a day-today basis, tell me what you do or what happens in your line of work?
4. Do you (or did you – *retired*) enjoy your work?

Suicide and Mental Health

1. Many studies have found that first responders die by suicide at a higher rate than the general population. Is this surprising information? Based on your experience and knowledge within your field, why do you think that is?
2. Mental health self-disclosure is often stigmatized (seen as a disgrace or shamed; a taboo topic). Would you say it is stigmatized within your organization? Do you feel free to debrief or talk about what is happening at work after a traumatic event? Do you have social support or a place and time for this?
3. Because of the self-disclosure being so stigmatized when it comes to mental health topics, research has found that some first responders simply "suck it up" due to the nature of their job – and that they cannot show weakness. Do you have any thoughts on this?

Organization, Policy, and Postvention

1. Is there a policy at the organizational level (our organization) that is meant to ensure you mental health and wellbeing are being taken care of? If no, is there any form of debriefing, social support, or therapeutic resources at your disposal (due to the nature of our work)?
    a. There is a stress app for first responders called CrewCare, have you heard of it?
        i. ***If no:*** CrewCare, publicized by the Nebraska Critical Incident Stress Management Program at the Nebraska Department of Health and Human Services, is an app developed to assist first responders understand stress triggers and cope with traumatic events, due to the environment of their job. All data is confidential, and it is meant to help the wellbeing of first responders as well as their mental health self-awareness.
        ii. ***If yes & after "no":*** Do you think that this app is enough to help reduce stressors caused by traumatic events if everyone knew about it, or do you think that there is another intervention that should be introduced?
2. Postvention is defined as practices and activities aimed to decrease future suicide after a suicide occurred. These activities help with resiliency, coping, and one's overall well-being. Examples include therapy, health resources, or support groups. *I know I spoke about policy*, but is there any activities that is done at your organization that can be categorized as "postvention"?
3. In Nebraska, what would you like to see be done for fellow first responders to make sure that every organization has policies and procedures in place to properly assist their worker's mental health to avoid the thought of suicide?

Wrap up

1. Would you like to add tell us anything more about your experience working as a (insert first responder job) or what you would like the public to know about your line of work?
2. Do you know of other (specific first responder position) who might be interested to talk with me?
3. Could you share with us their contact information?

Ending the interview

Thank you again so much for your time and sharing your experiences with this. If I have any other questions or need clarifications, could I contact you again?

Appendix B: Application of Public Health Competencies

MPHF5 - Compare the organization, structure, and function of health care, public health, and regulatory systems across national and international settings

MPHF8 - Apply awareness of cultural values and practices to the design or implementation of public health policies or programs

Within this research, I chose to evaluate different organizational structures and their preparedness when it comes to mental health awareness and ensuring that their staff have adequate resources for their health. All information from first responder interviews is Nebraska based, therefore the literature review discusses mental illness and culture in a more national setting. Both national and local information can be compared to understand the seriousness of this topic. Along with information about organizational culture/norms and how the company or employees' function, I have also discussed company policies and rules that are set to enhance the health of the first responders. I chose to bring to light any known mental health programs (i.e., such as therapy sessions or debriefs) or policies that they follow and if not, what is the barrier? If these programs are in place, why is the suicide rate for first responders high? By cultural values, I see this as work culture or even an individual's belief that self-disclosure of mental illness is considered taboo or that their perception of the organization is more on the distrust side when it comes to the stigma of mental health.

HSRAMPH5 - Examine information about health policy issues and problems and evaluate alternative policy options for these issues.

This competency is the basis of the entire paper: to break down and understand health policy issues around mental health self-disclosure, mental illness stigma, suicide prevention and suicide

rates among first responders, etc. And how we can, at least at a state level address these issues and make improvements. My goal is to find a policy. I will not be making one, but I want to see if there is one and if there is not, what do first responders want? This is when the interviews take place to understand their needs and desires based on themes. These themes will then be used to suggest a possible effective model for a suicide prevention focused policy or program that could work.

University of Nebraska Medical Center
NEBRASKA'S HEALTH SCIENCE CENTER

Office of Regulatory Affairs (ORA)
Institutional Review Board (IRB)

January 25, 2022

Maria S. Mickles, B.S.
College of Public Health - Epidemiology
UNMC - 4395

IRB # 0922-21-EP

TITLE OF PROTOCOL: Helping our Heroes: An evaluation of mental health and organizational policies surrounding suicide prevention and postvention strategies for Nebraska first responders

DATE OF EXPEDITED REVIEW: December 27, 2021

DATE OF FINAL APPROVAL: January 25, 2022

CLASSIFICATION OF RISK: Minimal

SUBPART B CATEGORY OF REVIEW: 45 CFR 46.204

EXPEDITED CATEGORY OF REVIEW: 45 CFR 46.110; 21 CFR 56.110, Categories 5, 6, 7

The IRB has completed review of the above-titled research protocol. The IRB has determined you are in compliance with HHS Regulations (45 CFR 46), applicable FDA Regulations (21 CFR 50, 56) and the Organization's HRPP policies. Furthermore, the IRB is satisfied you have provided adequate safeguards for protecting the rights and welfare of the subjects to be involved in this study. This letter constitutes official notification of final approval and release of your project by the IRB. You are authorized to implement this study as of the above date of final approval. The following items were reviewed and approved by the IRB:

- IRB Application IRB Version 1
- Adult Consent Form IRB Version 1
- Resources: CISM and Suicide Hotlines (added: 01/10/2022)
- Interview Script, Questions and Recruitment Email 1/10/22 (added: 01/10/2022)

Please be advised that only the IRB approved and stamped consent form can be used to make copies to enroll subjects. Also, at the time of consent all subjects must be given a copy of *The Rights of Research Subjects* and "What Do I Need to Know" forms.

The IRB wishes to remind you that the principal investigator (PI) is ultimately responsible for ensuring that this research is conducted in full compliance with the protocol, applicable Federal Regulations, and Organizational policies.

Finally, under the provisions of this institution's Federal Wide Assurance (FWA00002939), the PI is directly responsible for submitting to the IRB any proposed change in the research or the consent form. In addition, any adverse events, unanticipated problems involving risk to the subject or others, noncompliance, and complaints must be promptly reported to the IRB in accordance with HRPP policies.

This project is subject to periodic review and surveillance by the IRB and, as part of the Board's surveillance, the IRB may request periodic progress reports.

Respectfully submitted on behalf of the IRB,

Signed on: 2022-01-25 11:32:13.130

Kevin J. Epperson, CIP
IRB Administrator III
Office of Regulatory Affairs

cc: Bruce G. Gordon M.D.
IRB Executive Chairman

CONSENT FORM
Adult Consent Form

Title of this Research Study

Helping our Heroes: An evaluation of mental health and organizational policies surrounding suicide prevention and postvention strategies for Nebraska first responders

Invitation and Summary

You are invited to be in this research study. Taking part in this research is voluntary. You do not have to take part. For the purposes of this document: "You" can refer to:

- Yourself
- The person for whom you are the Legally Authorized Representative (LAR)
- Your child under the age of 19.

"Organization" can refer to: University of Nebraska Medical Center (UNMC), Nebraska Medicine (NM), University of Nebraska at Omaha (UNO) or Children's Hospital & Medical Center (CH&MC).

Here is a summary of the purpose, methods, risks, benefits, and alternatives, to help you decide whether or not to take part in the research.

I am a student at UNMC in the College of Public Health. I am interested in the topics of mental health and suicide prevention. I am doing a research study on first responders and how they have a greater risk of dying by suicide than the public. I want to understand how Nebraska first responders are affected by this and what can be done at the state level.

Participants will be asked to be in a 30-minute to 1-hour interview on Zoom to talk about these topics. Your name and job title will be used for credibility. There is a risk for the potential loss of confidentiality including email and phone number, and the interview creating anxiety or emotional distress about mental health issues. You will not receive a direct benefit from being in this study. You do not have to be in this study.

Why are you being asked to be in this research study?

You are being asked to participate in this research study because you:
1) are 19 years of age or older,
2) are either an active or retired first responder in Nebraska,
3) can read, write, speak, and understand English, and

4) were approached by Debbie Kuhn, the Nebraska Critical Incident Stress Management Program manager in the office of Emergency Medical Services in the Nebraska DHHS, about this interview opportunity.

What is the reason for doing this research study?
In this study, we aim to understand:
1) Why are first responders more likely to die by suicide than the general public?
2) What state or national policies have been established to ensure that our Nebraska first responders receive appropriate health services before and after serving?
3) Given that first responders are likely to encounter significant stress in their work environment, what are the factors that have led to the stigma of mental health self-disclosure?

What will be done during this research study?
Consent form
If you decide you would like to participate in this study after reading the consent form and have had all your question answered, please sign this form and email it back to me within one week.

Scheduling the interview
After I receive your signed consent form and after I have answered any questions you may have about the study, I will schedule a Zoom interview with you.

Interview
The interview will last about 30 minutes to 1 hour. I would like to conduct the interview over Zoom. And I will record the conversation so we can make sure we get your story correct. Our interview notes and tapes will be stored in a secure place on campus. No identifying information will be linked back to you, besides your name and occupational credentials, if I present my study at a conference or publish it in an academic journal. You can decline to answer any question you don't want to answer and withdraw from the study.

Additionally, if you are interested, I would be glad to share with you a summary of what I found in our conversations with other Nebraska first responders at the end of this study.

Resources
This research includes Debra (Debbie) Kuhn who is the project manager of the Crisis Incident Stress Management (CISM) at the Nebraska Department of Health and Human Services. This crisis support program provides education, stress coping

techniques, and prevention assistance to serve hospital personal, dispatchers, firefighters, emergency medical personnel, correctional employees, and emergency medical services with stress and mental health support when one experiences recurring exposure to a certain event. If at any time you experience stress or emotional desires related to this topic or during the interview and would like to know how to manage one's mental health, we will prompt you to call this program for a debriefing: (402) 479-4921. More information can be found on their website: https://dhhs.ne.gov/Pages/EHS-Critical-Incident-Stress-Management.aspx. Other resources will be prevention hotlines at your request.

What are the possible risks of being in this research study?
There is a risk for the potential loss of confidentiality including email and phone number. There is also the possibility of the interview prompting anxiety or emotional distress about mental health issues. For this, the research question has been solely directed around organization policy rather than personal mental health experiences. However, if you answer questions in that direction, there are resources available to assist you if needed.

What are the possible benefits to you?
You are not expected to get any benefit from being in this research study.

What are the possible benefits to other people?
Findings may increase awareness of the need for more mental health and illness interventions aimed to assist Nebraska first responders.

What are the alternatives to being in this research study?
Instead of being in this research study, you can choose not to take part.

What will being in this research study cost you?
There is no cost to you to be in this research study.

Will you be paid for being in this research study?
You will not be paid to be in this research study.

Who is paying for this research?
There is no funding for this study.

What should you do if you are injured or have a medical problem during this research study?
Your health and safety is our main concern. If you are injured or have a medical

problem or some other kind of problem because of the study call someone listed at the end of this consent form.

How will information about you be protected?
In the course of this research, we may collect information about you. This can be things that could be used to find out who you are (like phone number, birthdate, address). We call this "identifiable private information". We will keep this information as confidential as possible. Your name and occupational credentials, however, will be used in the study.

Who can see information about you?
By signing this consent form, you are letting us (the researchers listed on this consent form and other people involved in this research at the Organization) to have access to your research data. Your research data will be used only for the purpose(s) described in the section "What is the reason for doing this research study?"

You can change your mind and tell us to stop collecting further research data for use in this research at any time by contacting the principal investigator or any of the study personnel listed at the end of the consent form. However, the information which is included in the research data obtained to date may still be used. If you cancel this authorization, you will no longer be able to take part in this research.

We may share your research data with other groups listed below:

- The UNMC Institutional Review Board (IRB)
- Institutional officials designated by the UNMC IRB
- The HHS Office for Human Research Protections (OHRP)

You are letting us use and share your research data for as long as the research is going on.

How will results of the research be made available to you during and after the study is finished?
In most cases, the results of the research can be made available to you when the study is completed, and all the results are analyzed by the investigator or the sponsor of the research. The information from this study may be published in scientific journals or presented at scientific meetings, but your identity will be kept strictly confidential.

If you want the results of the study, contact the Principal Investigator at the phone number given at the end of this form or by writing to the Principal Investigator at the

following address: *Maria S. Mickles, 40th and Dewey Ave., Omaha, NE 68198*

What will happen if you decide not to be in this research study?
You can decide not to be in this research study. Deciding not to be in this research will not affect your relationship with the investigator or the organization. You will not lose any benefits to which you are entitled.

What will happen if you decide to stop participating once you start?
You can stop being in this research (withdraw) at any time. Just call the researcher or any research staff. If you stop being in the research study it will not affect your care or your relationship with the investigator or the organization. You will not lose any benefits to which you are entitled. If you wish to withdraw from the research before completing the interview, any data collected will be removed.

Will you be given any important information during the study?
We will tell you right away if we get any new information that might make you change your mind about being in the study.

What should you do if you have any questions about the study?
We gave you a copy of *"What Do I Need to Know Before Being in a Research Study?"* If you ever have any questions about this study, call the Principal Investigator or anyone else listed on this consent form.

What are your rights as a research participant?
You have rights as a research subject. These rights have been explained in this consent form and in The Rights of Research Subjects that you have been given. If you have any questions concerning your rights, or want to discuss problems, concerns, obtain information or offer input, or make a complaint about the research, you can contact any of the following:

- The investigator or other study personnel
- Institutional Review Board (IRB)
    - Telephone: (402) 559-6463
    - Email: IRBORA@unmc.edu
    - Mail: UNMC Institutional Review Board, 987830 Nebraska Medical Center, Omaha, NE 68198-7830
- Research Subject Advocate
    - Telephone: (402) 559-6941
    - Email: unmcrsa@unmc.edu

Documentation of informed consent

You are deciding whether to be in this research study. Signing means that:

- You have read and understood this consent form.
- You have had the consent form explained to you.
- You have been given a copy of The Rights of Research Subjects
- You have had your questions answered.
- You have decided to be in the research study.
- You have been told you can talk to one of the researchers listed below on this consent form if you have any questions during the study.
- You will be given a signed and dated copy of this consent form to keep.

Signature of Subject_____ Date_____

My signature certifies that all the elements of informed consent described on this consent form have been explained fully to the subject. In my judgment, the subject possesses the legal capacity to give informed consent to participate in this research and is voluntarily and knowingly giving informed consent to participate

Signature of Person Obtaining Consent_____ Date_____

Authorized Study Personnel

Principal

* Mickles, Maria
phone: 402-559-4248
alt #: 531-541-3080
degree: BS

Secondary

Lookadoo, Rachel
phone: 402-552-9649
alt #: 402-552-9649
degree: JD

Palm, David
phone: 402-559-8441
alt #: 402-559-8441
degree: PhD

Wang, Hongmei
phone: 402-559-9413
alt #: 402-559-9413
degree: PhD

Other Coordinator
Kuhn, Debra
phone: 402-326-0173
alt #: 402-326-0173
degree: n/a

What Do I Need To Know Before Being In A Research Study?

You have been invited to be in a **research study**. Research studies are also called "clinical trials" or "protocols." **Research** is an organized plan designed to get new knowledge about a disease or the normal function of the body. The people who are in the research are called **research subjects**. The **investigator** is the person who is running the research study. You will get information from the investigator and the research team, and then you will be asked to give your **consent** to be in the research.

This sheet will help you think of questions to ask the investigator or his/her staff. You should know all these answers before you decide about being in the research.

What is the **purpose** of the research? Why is the investigator doing the research?

What are the **risks** of the research? What bad things could happen?

What are the possible **benefits** of the research? How might this help me?

How is this research different than the care or treatment I would get if I wasn t in the research? Are there other treatments I could get?

Does **everyone** in this research study get the same treatment?

Will being in the research **cost** me anything extra?

Do I have to be in this research study? Will the doctor still take care of me if I say **no**?

Can I **stop** being in the research once I ve started? How?

Who will look at my **records**?

How do I reach the investigator if I have more **questions**?

Who do I call if I have questions about being a **research subject**?

Make sure all your questions are answered before you decide whether or not to be in this research.

THE RIGHTS OF RESEARCH SUBJECTS
AS A RESEARCH SUBJECT YOU HAVE THE RIGHT

to be told everything you need to know about the research before you are asked to decide whether or not to take part in the research study. The research will be explained to you in a way that assures you understand enough to decide whether or not to take part.

to freely decide whether or not to take part in the research.

to decide not to be in the research, or to stop participating in the research at any time. This will not affect your medical care or your relationship with the investigator or the Nebraska Medical Center. Your doctor will still take care of you.

to ask questions about the research at any time. The investigator will answer your questions honestly and completely.

to know that your safety and welfare will always come first. The investigator will display the highest possible degree of skill and care throughout this research. Any risks or discomforts will be minimized as much as possible.

to privacy and confidentiality. The investigator will treat information about you carefully, and will respect your privacy.

... to keep all the legal rights you have now. You are not giving up any of your legal rights by taking part in this research study.

to be treated with dignity and respect at all times

The Institutional Review Board is responsible for assuring that your rights and welfare are protected. If you have any questions about your rights, contact the Institutional Review Board at (402) 559-6463.

MARIA S MICKLES

University of Nebraska Medical Center • Omaha, NE • maria.mickles@unmc.edu

EDUCTION

University of Nebraska Medical Center, Omaha, NE May 2022
Master of Public Health (Cumulative GPA: 3.818)
Concentration: Public Health Administration and Policy

University of Nebraska at Omaha, Omaha, NE May 2020
Bachelor of Science in Communication, Fine Arts, and Media (Cumulative GPA: 3.778)
Honors: Magna cum laude, Susan T. Buffet Scholarship, Gates Millennium Scholarship (2016 Cohort), UNO Honors Program Alumni, CSCA 2019 Awardee (1st Place Poster Presentation)

PROFESSIONAL EXPERIENCE

University of Nebraska Medical Center, Omaha, NE
Graduate Research Assistantship November 2020 – Present

- Various research work (scoping review, literature reviews, IRB applications)
- Graphic and marketing for research (presentation posters, flyers, infographics)
- Assist BHP with mobile app health research, create app introduction guidelines for BHP, and contact patients for study when needed
- Develop and design behavioral health assessment for BHP on RedCap
- Work with BHP and develop content for mindLAMP app and LAMP platform (used for neuropsychiatric research and clinical care management)

Nebraska Department of Health and Human Services, Lincoln, NE
Public Health Communication and Marketing Summer Intern May 2021 – July 2021

- Assist the Office of Emergency Health Systems - EMS for Children (Debbie Kuhn) with advertisement and marketing material marketed toward EMS training
- Develop a suicide prevention guideline for schools for the Heartland EMS for Children Coalition (HECC)
- Attend Nebraska Critical Incident Stress Management (CISM) meetings when needed
- Attend HECC meetings

Wellcom (Currently, The Wellbeing Partners), Omaha, NE
Marketing and Communication Summer Intern May 2019 – Aug 2019

- Assist with event logistics, planning, and execution of day-to-day management
- Assist in marketing blitz and graphic work
- Development and distribution of promotional materials, correspondence, and event
- Network with Comm. Department and Wellness/HR supervisors of organizations such as SilverStone Group, First National Bank of Omaha, Nebraska Furniture Mart, and WoodmenLife.

TECHNICAL KNOWEDGE

- Proficient Microsoft Office Suite Software including Word, Excel, PowerPoint
- Survey Software including RedCap and Qualtrics XM
- Proficient in Articulate Storyline
- Zotero and Rayyan

ACADEMIC PROJECTS

Project 1: The continual existence of food deserts in urban environments and what communities are about it: A case study of an urban food desert in Omaha, Nebraska

Health Communication, University of Nebraska Omaha Jan 2019 – May 2019

Synopsis: This qualitative case study analyzes the issues surrounding food deserts in local urban Omaha areas, how and why they are mostly affecting communities where low-income minority groups are present, and the steps that have been or should be taken to combat the racial and financial issues deeper than just giving or temporarily selling fresh produce to these communities. Findings discovered a way for communities to address food deserts and how to address the segregation of Omaha.

Project 2: Our Pictures Are Worth a Thousand Words: A look at body positivity on Instagram in terms of mental health and social support

Senior Capstone, University of Nebraska Omaha Jan 2019 – May 2019

Synopsis: This study analyzes the discussion of body positivity, how mental health plays a role within that discussion, and how social support through media communication strengthens women within their online community. Results found that influencers project themselves to their followers in a humble, vulnerable, and open manner in order to create friendship bonds to encourage the discussions of body image, mental/physical health (such as depression, eating disorders, and body dysmorphia), stigma, and personal life experiences and struggles.

PUBLICATIONS

Emerson MR, Buckland S., Lawlor M., Dinkel D., Johnson, D., **Mickles, M.**, Fok, L., & Watanabe-Galloway S., (2022). Addressing and Evaluating Health Literacy in mHealth; A scoping review. *mHealth.* (in review).

Mickles, M. S., & Weare, A. M. (2020). Trying to save the game (r): Understanding the self-disclosure of YouTube subscribers surrounding mental health in video-game vlog comments. *Southern Communication Journal, 8*5(4), 231-243.

FORMAL POSTERS/PRESENTATIONS

Mickles, M.S. *Helping our Heroes: An evaluation of mental health and organizational policies surrounding suicide prevention and postvention strategies for Nebraska first responders.* 2022 UNMC COPH Student Research Conference. April 7, 2022. Omaha, NE.

Emerson, M. R., Watanabe-Galloway, S., Dinkel, D., Fok, L., Lawlor, M., **Mickles, M.S.** *Mobile Apps for Depression Self-Management: Tailoring and Training for Patients and Providers in Integrated Primary Care*. UNMC Digital Thinking Showcase. November 5, 2021. Omaha, NE.

Mickles, M. S., & Weare, A. M. *Trying to Save the Game(r): Understanding the meaning-making process of YouTube subscribers surrounding mental health and video game vlogging.* 2019 UNO Student Research and Creative Activity Fair. January 3, 2019. Omaha, NE.

Mickles, M. S., & Weare, A. M. *Trying to Save the Game(r): Understanding the meaning-making process of YouTube subscribers surrounding mental health and video game vlogging.* Central States Communication Association Conference. April 5, 2019. Omaha, NE.