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UNDERSTANDING THE EFFECT OF NEWS MEDIA AND SOCIAL MEDIA ON FIRST RESPONDERS

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Abstract*: Over the last twenty years, technological advances have created the opportunity to disseminate information to millions of end users within seconds. Empirical studies have indicated that this engagement with technology (particularly through social networking sites) has an influence on individual stress. Terms such as "technostress" and "social networking stress" have been invented to describe these conditions. Most studies, however, have not taken into consideration the occupation of the user. The current study investigates the influence of media, news media and social media, on first responders (firefighters, emergency medical personnel, police officers, dispatchers) and their self-reported stress levels. Findings from completed surveys (n = 635) revealed that first responders who engaged in social media reported higher stress levels than those who did not. Additionally, emergency medical personnel reported the highest level of perceived stress (PSS Scale) and SNS stress (Social Networking Site stress) when compared to the other three first responder occupational groups. Police officers were more exclusive with contacts on social networking sites and were more likely to report unfavorable treatment by news media when compared to their counterparts. Implications for managing first responder stress related to exposure to social media (in particular) are discussed.*

Keywords: *first responder stress, social networking stress, media*

Introduction

Over the last twenty years, technological advances have changed the way we receive news and information. The advent and expansion of cellular technology allows for the average citizen to capture and transmit live events to an audience of millions, instantaneously. In addition, social media platforms (e.g., Facebook, Twitter, Instagram, etc.) permit sharing of news, "real" and "fake," with the touch of a finger. These technological advances have provided many benefits for the typical user. At the same time, however, there is concern about how current technology influences the origination, dissemination, and consumption of information (Brod, 1984; Cao & Sun, 2018; Lee et al., 2016; Tams et al., 2018; Zhang et al., 2016). Of particular salience in some communities is the far-reaching consequences that media exposure can have for individuals employed in positions where they are especially susceptible to public purview.

The current research focuses on the effect of social media and news media on first responders. First responders are defined as individuals in occupations involving primary response to emergency situations, and

includes police officers, firefighters, emergency medical technicians (EMTs), paramedics, and emergency dispatchers (911 call-takers) (Dawkins et al., 2018; Wilson, 2015). First responders are exposed to a multitude of events during the course of their work and may re-experience those events through positive and negative media coverage. The policing occupation is routinely featured in the nightly news and on social media with a number of incidents over the last decade "going viral," resulting in controversy, protests (rioting in some cities), and concerns about police legitimacy (Sela-Shayovitz, 2015). To this point, Ellis (2020) discusses the "social media test," through which social media becomes a legitimized measure of police performance. For example, it is noted how videos of police utilizing excessive force that are disseminated on social media represent an "uncontrolled police narrative that is increasingly in stark contrast to the controlled police narrative told through a range of proactive, police-generated media" (Ellis, 2020, p. 200). Moreover, the extent to which mass consumption of mainstream media may influence perceptions of police and policing in general has been a subject of examination in police legitimacy literature and findings have suggested varying effects depending on the type of media and personal audience characteristics (e.g., personal experience with police) (Gauthier & Graziano, 2018). When presented with mixed portrayals of police (positive and negative), research has indicated that public perceptions appear more easily influenced by negative portrayals (Choi, 2021).

The current study seeks to explore the effect of media and social media on first responders. We start by developing an understanding of the first responders' engagement with social media and social media platforms, including frequency of use, purpose for use, and reasons for discontinuance (if applicable). Further, we examine the effect of the use of Social Networking Services (SNS) on first responders. As indicated above, social media use by first responders may pose risks not only to their careers and integrity, but to perceptions of agency reputation and effectiveness (Goldsmith, 2015). This increases the complexity of the question regarding the effect of news and social media on first responders who may not only be affected by their exposure on social media and to news media, but also by their personal participation on social media platforms. Also examined are the views of first responders on the trustworthiness of news received through traditional media and social media, and perceptions of bias toward their emergency service role.

Review of the Literature

Studies suggest that the speed and convenience afforded by contemporary technology does not come without cost—particularly in terms of one's physical, psychological, and behavioral health (Brod, 1984; Bucher et al., 2013; Cao & Sun, 2018; Dhir et al., 2018; Lim & Choi, 2017). A review of the literature reveals several recently coined terms to describe the effect of technology on the human user, including: SNS stress (also burnout, fatigue, and exhaustion), technostress, technophobia, and nomophobia (Bucher et al, 2013; Chan, 2014; Lim & Choi, 2017; Luqman et al., 2017; Maier et al., 2015; Tams et al., 2018; Wang et al, 2008). While most of these terms refer to stress related to the use of technology and social networking sites (SNS), nomophobia refers to the fear of being without access to one's smartphone, also referred to as smartphone withdrawal (Sharma et al., 2021). This review of the literature begins with a brief summary of research findings on

the effect of technology and social networking on the end user. We then shift the focus to the area of news media and transmission of news and news events. Finally, we narrow the scope of the inquiry to review findings from studies on first responders and media coverage (both traditional and through SNS).

Technology and Social Networking: Effects on Users

According to Lim and Choi (2017), core values among Web societies include "interaction, participation, and sharing," all of which may lead to Social Network Site stress, or SNS stress (p. 17686). SNS stress (also referred to as SNS fatigue or SNS burnout) can involve mental and physical pain. Expectations of quick responses on social networking sites produce an obsession, and this requires users to pay continuous attention to their sites; as a result, individuals are exposed to increased demands which in turn lead to SNS fatigue (Lee et al., 2016). Research suggests SNS stress is caused by "lifestyle changes related to communication, media and technology, network externality, user self-exposure and privacy, and technology and social overloads" (Lim & Choi, 2017, p. 17686).

Technostress and SNS exhaustion are additional issues which arise when discussing social media stress. The former is described as "stress or psychosomatic illness caused by using technology" and the latter is "an individual's adverse, potentially harmful, and unconscious psychological reaction to stressful situations such as perceiving social overload when using SNS" (Luqman et al., 2017, p. 546). Technostress is caused by what are called technostressors, or technology-induced events, stimuli, or demands (Maier et al., 2015). Technostress and the constant, compulsive use of smartphones has been suggested to exhibit a positive relationship with multiple psychological traits of users, such as materialism, social interaction anxiety, loss of control, and the need for touch (Lee et al., 2014). Users may develop a technology dependence (Tams et al., 2018) that when interrupted by the inability to have information at their fingertips, may result in anxiety or stress. Dhir et al. (2018), likewise, found a significant relationship between compulsive social media use and social media fatigue, anxiety, and depression.

On the other side of the spectrum is technology overload. Overload is a primary factor that leads to negative experiences with the use of technology. Tarafdar et al. (2007) described overloaded individuals as those who have difficulty adapting to the changes social media has made to their daily routines. Although social networking sites and mobile apps tend to be relatively user-friendly, the abilities of the individual user and knowledge of technology will play a role in the perceived levels of overload attributed. With expanding technology, new forms of overload have begun to emerge, including rapid changes in the technologies associated with social networking sites, an influx of too much information at once, and involuntary extensions of social networking (Farhoomand & Drury, 2002; Himma, 2007; Lee et al., 2016).

To combat these negative consequences, some users utilize the functions afforded to them by the social networking sites or mobile apps; for example, deleting an unwanted communication, filtering the content allowed to show on their pages, or blocking and/or unfriending an individual. Others, as suggested by previous research, will turn to a more temporary or long-term discontinuance of the social networking sites (Zhang et al., 2016). To address feelings of overload, some individuals choose to discontinue their usage, either permanently or on a temporary basis. As reported by the Pew Research Center,

61% of its users have taken a break from Facebook for a time period of several weeks or more, and 20% have taken temporary leaves of absence due to an influx of gossip, spam, and frequent system updates (Rainie et al., 2013). Turel et al. (2018) found that following abstinence from social networking sites for several days, users exhibited a decrease in their perceived stress levels.

Whilst the above information tends to focus on the negative influences of technology and social networking sites, some research suggests social networking sites may also offer some benefits to its users. Gerich (2014) found that social networks can afford individuals with a way to avoid potentially demanding situations by providing relevant information or support. By receiving social support via social networking sites, the user reaps the benefits of social engagement, stabilization of social identity, increased self-esteem, and crucial access to information and resources (Gerich, 2014). Studies have also suggested that membership on social networking platforms may serve to enhance self-esteem (Best et al., 2014), increase the feeling of social support (Bender et al., 2011), and operate as a buffer against stress (Rus & Tiemensma, 2018). It appears that the benefits related to membership in an SNS platform outweigh the detractors as the number of individuals who are actively involved in social networks has increased exponentially in the last decade.

News Media and Transmission of News Events

With regard to news media, end users are more frequently receiving news through hand-held devices and social networking sites. Digital media has been declared a new standard from which many individuals receive their news and corresponding viewpoints on certain issues (Zaleski et al., 2016). According to Jones et al. (2016), frequent exposure to media coverage of traumatic events has been shown to be associated with acute and posttraumatic stress symptoms. Additionally, those exposed to consistent depictions of disturbing images following a traumatic event, such as 9/11, showed higher likelihood of meeting the Diagnostic and Statistical Manual of Mental Disorders (DSM-5's) requirements for posttraumatic stress disorder (PTSD). Being exposed to disaster-related events through news and social media outlets could, as posited by past studies, evoke psychological reactions in users that greatly mimic the experiences had by individuals directly affected by trauma (Ahern et al., 2002; Cho et al, 2003; Hilton, 1997; Pinchevski, 2016; Shalev, 2004). Shalev (2004) found that in "distant trauma" (trauma witnessed over the television and not experienced firsthand), individuals might experience trauma related to "a threat to one's image of the world" (p. 175). Others have suggested that media exposure may simply exacerbate pre-existing symptoms of posttraumatic stress in individuals (Hilton, 1997; Hopwood & Schutte, 2017; Pfefferbaum et al., 2002). Conversely, Ramsden (2017) found that 20% of individuals with no prior history of trauma were significantly affected by traumatic events viewed on social media. Furthermore, findings show a "disaster designed with human intent" (e.g., a terrorist attack) may be associated with a "higher risk of subsequent psychopathology than a disaster of accidental or natural origin" (DiMaggio & Galea, 2006, p. 559). While these studies provide insight into the effect of the transmission of news on individuals, they were all conducted on civilian populations.

Effects of News Media and Social Media on First Responders

Few studies have been conducted to review the impact of media on first responders. Of those that have been published, findings tend to show that media attention after a traumatic situation often reflects poorly on first responders and adds to the overall stress of the situation (Regehr et al., 2003; Scott, 2004). Regehr et al. (2003) found that media coverage of a traumatic event was significantly associated with depression scores in a sample of firefighters and paramedics. In a qualitative study of police officers who faced public inquiry after a critical incident, researchers found that officers suffered "chronic" stressors (Regehr et al., 2003). In these cases, media coverage of the incident only served to make the already difficult matter worse. Likewise, Scott (2004) reported that perceived media criticism had a significant effect on police officer stress. Both the Regehr et al. (2003) and Scott (2004) studies mentioned the "stigmatization" that occurs when police officers are the subject of media attention. Even in cases where the police officer has been cleared, the stigma of the media attention may follow the officer and their family into the community.

There is ample anecdotal information which suggests that first responders (police in particular) have been portrayed poorly in media and social media accounts of events (Graziano & Gauthier, 2018; Guffey, 1992; Intravia et al., 2018; Schneider, 2018). In fact, the motivation behind the adoption of body-worn cameras was to provide accountability for police officers and police departments after several shootings of African American men (e.g., Walter Scott, Terrence Sterling, Alton Sterling, Philando Castile[1], etc.). In each of these cases, the shootings were caught on bystander cell phones which were then uploaded to social media. While most of this is happenstance, social media has provided a platform for countersurveillance of police (Walsh & O'Connor, 2019), increasing visibility and in turn, calls for accountability. Since 2016, many agencies have instituted the use of body-worn cameras to capture the police officer's view and provide accountability to the public they serve (Crow et al., 2017; Schneider, 2018). Law enforcement officers have mixed views on the use of body-worn cameras. However, it appears to be a new reality that they are living with. As a result, more and more body-camera videos are making it to the Internet for public viewing.

In addition to the increased visibility of first responders and traumatic incidents in the news media and through social media, first responders have more recently faced scrutiny for items they have posted on social media. During the summer of 2019, the Plain View Project published thousands of public social media posts from police officers containing racist, homophobic, Islamophobic, and violent content ("Plain View Project," 2019). As a result, hundreds of police officers across America have been investigated and suspended or fired because of their social media conduct. Likewise, other first responders (firefighters, dispatchers, EMTs, paramedics) have been suspended and fired over social media posts (Fosket, 2020; Hutchinson, 2019; LeBlanc, 2019; Whitcomb, 2019; Willing, 2019). In this way, social media requires more consideration by first responders about how to strike the correct balance between transparency (as

[1]In the case of Philando Castile, his girlfriend broadcast the immediate aftermath of the shooting live on Facebook.

they exercise special responsibilities in their jobs) and personal privacy.

The Present Study

The current study sought to develop a better understanding of the effect of media (both news media and social media) on first responders. The following research questions emerged from the literature, and guided the development of our study:

1. What is the nature and extent of media consumption by first responders?
2. How do first responders view news media, specifically regarding coverage of their role (e.g., firefighter, police officer, emergency medical professionals, dispatchers)?
3. Does media contribute to first responder stress?
4. Do the groups within the first responder occupations (e.g., firefighter, police officer, emergency medical professionals, dispatchers) vary regarding their views of media and social media?
5. Do the groups within the first responder occupations vary regarding stress related to media and their view of how it impacts their first responder role?
6. To what extent does occupational role, demographic characteristics, weekly hours on social media, perceptions of media bias, and trust of news sources contribute to SNS stress?

Data and Methods

Data for the current study were derived from online surveys distributed between December 2018 and May 2019. A research appeal email and link to the anonymous online survey were sent to first response agencies and personnel in Southeastern Pennsylvania. The survey contained questions regarding the use of technology, use of social media platforms, and frequency of such use. Respondents were also asked questions about their news consumption and views of both news media and social media. Some of these questions focused on their perception of how media portrays their first responder role (e.g., police officer, firefighter, etc.). Other questions aimed at obtaining information on the perceived need for "unplugging" or "taking a break" from social media platforms, as well as reasons for "unfriending/unfollowing" other platform users.

As the literature in the field indicates that technology consumers and social network users report stress related to use, the survey included several measures of stress. The Perceived Stress Scale (PSS) was included in the survey as a basic measure of survey respondent stress (Cohen et al., 1983). The survey also included the SNS Stress Scale used by Lim and Choi (2017) to measure stress related to use of social media.

The survey also elicited information about their first service role (police officer, firefighter, EMT, paramedic, etc.), years of service, paid/volunteer status, secondary service, shift length, shift rotation, and crisis intervention training. Respondents were also asked to provide their age, race/ethnicity, educational level, and marital status. At the end of the survey, respondents were asked to provide any further information they believed might be helpful to the researchers in understanding the effect of media and social media on first responders.

Surveys were distributed to a convenience sample of emergency service agencies in Southeastern Pennsylvania. Links were sent to known associates in the emergency service agencies with a request to distribute the survey to first responders (police officers, firefighters, dispatchers, EMTs, and paramedics). Among the agencies were three county-level emergency management departments, three county-level

Critical Incident Stress Management (CISM) teams and one multiple-county CISM team. In addition, the request to participate and the link were sent to two large Fraternal Order of Police (FOP) organizations in the region and seven police departments.

In each case, the agency was asked to provide the principal researcher with the total number of first responders that were sent the request to participate and the link to the survey. The survey link was distributed to approximately 2,012 first responders. A total of 635 surveys were sufficiently completed to be used in the study, yielding a response rate of 31%.[2]

Findings

Characteristics of Respondents

At the time of the study, survey respondents were employed in the following occupations: emergency medical personnel (EMTs/paramedics) (23.4%), emergency dispatchers (7.9%), firefighters (15.7%), police officers/law enforcement officers (52.9%), coroner (n = 1), and chaplain (n = 1). Four percent of survey respondents selected "other." There were a wide variety of reasons for this, most of which included respondents holding a specified emergency position (e.g., fire marshal, water rescuer) or their participation in more than one first responder position (e.g., law enforcement officer and firefighter). Most of the respondents were paid first responders (78.3%) while 12.3% served in a voluntary capacity. Half of the sample reported that they have no designated rank (47.2%), while the remainder of the sample was dispersed among many other ranks and designations. For purposes of statistical analyses, those who chose "other," "coroner," or "Chaplain" as their primary first responder role, were placed in one of the four major first responder groups associated with their primary role.

Nearly 40% of the sample indicated they had a secondary emergency service position (39.8%). One of the most frequent secondary positions held was firefighter (31%), while 27% reported a secondary first responder position as an EMT or paramedic. Other secondary positions included emergency dispatcher (6%), police officer/law enforcement officer (5%), coroner or medical examiner (2%), and Chaplain (1%). Twenty-eight percent of respondents selected "other" and qualitative (write-in) responses for this group were varied and included designations such as bomb technician, Critical Incident Stress Management (CISM) team member, search and recovery personnel, K-9 handler, and S.W.A.T. team member. The most frequent shift length for non-volunteers was a 12-hour shift (34%) followed by an 8-hour shift (33.2%), "other" (13.5%), and a 10-hour shift (5.4%). Over one-third of the paid first responders reported being assigned to a permanent shift (35.1%), 17.2% reported "other" rotation, and the remaining sample rotated either weekly (13.4%), bi-weekly (15.6%), or monthly (4.4%) (see Appendix, Table 1)

With respect to gender, the majority of respondents identified as male (82.68%). This is not surprising, as the demographic profile of first responders in the U.S. has traditionally been male (Haugen, et al., 2017). Likewise, most respondents identified as white (95.74%). Over half the sample indicated they were currently married (64.16%), while 21% were previously married, 8.35% divorced, 5.73% remarried after divorce/widowed, and less than 1% were widowers. Over one-third of the sample had obtained a bachelor's degree (34.48%)

[2]In a number of cases, it appears that individuals started the surveys and discontinued before filling out enough information to be included in the analyses.

and about 30% had some college education. The remaining third of the sample had either a high school diploma or GED (9.31%), an associate degree (14.71%), or a master's degree (9.97%). About 1% of respondents had earned a doctoral degree. The median age was 42.71 years (see Appendix, Table 2).

As exposure to specialized training related to crisis response may be an important variable to consider in this study, respondents were asked about previous exposure to crisis intervention training.[3] Approximately half of the respondents (49.67%) reported they had received some type of stress intervention training. Of those who did receive training, 48.42% indicated they had been trained in CISM. Thirty-five percent (35.13%) reported receiving training in Crisis Intervention Team (CIT), and 16.46% indicated "other." The qualitative responses to "other" contained a wide variety of responses including "hostage negotiation," "Mental Health First Aid," "suicide intervention," "update training,"[4] and "crime victim's services." At least eight individuals indicated in the comments that they were trained in both CIT and CISM. In summary, over half of the respondents in this study had some type of training in crisis intervention, as one might suspect due to the nature of their paid or voluntary emergency responder positions (see Appendix, Table 3).

First Responders and Use of Social Networking Sites

Survey respondents were asked several questions about their use of technology and participation in social networking sites (SNS). An overwhelming majority of the sample indicated that they had, at some point in their life, used a social networking site (90.38%, n = 665). This figure is consistent or slightly higher in comparison with national figures on social networking. According to a Pew Research Center study in 2021, 72% of Americans participate in some form of social media use (Pew Research Center, 2021).

From a list of nine of the most popular SNS platforms, respondents were asked to identify those that they had used. YouTube was the most frequently used platform, with 542 respondents indicating use. Facebook was a close second with 392 users.[5] Two hundred eighty survey respondents indicated they used Instagram, 248 used SnapChat, and 182 reported having used LinkedIn. The least frequently used SNS platforms were Twitter (159), Pinterest (148), WhatsApp (63), and Google Hangouts (27). At the time of the survey, 519 respondents indicated they were

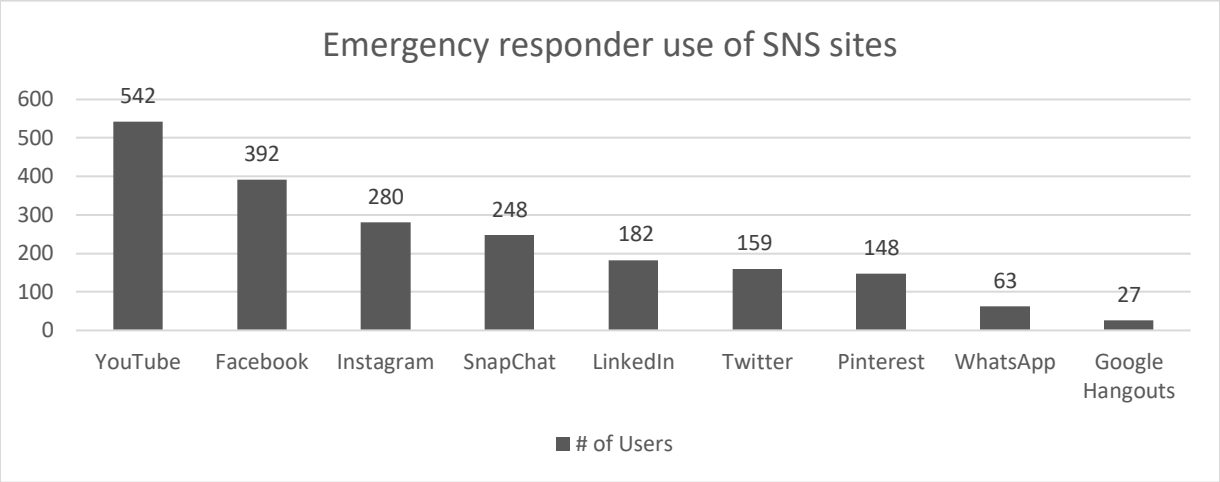
[3] Crisis intervention training has gained popularity over the last 20 years and is used in two contexts. Primarily, crisis intervention training is used to train the first responder to understand and diffuse the many mental health situations that they may come across in response to an emergency (e.g., See Bratina, 2017). The goal is to provide first responders with tools to de-escalate the situation and facilitate the mental health consumer to appropriate services. Two of the more popular programs that provide this type of training are Crisis Intervention Team (CIT) and Mental Health First Aid (MHFA) (Bratina, 2017). Secondarily, in many jurisdictions, there are crisis intervention services specifically geared toward first responders. The most well-known program to assist first responders in the aftermath of a critical incident is Critical Incident Stress Management (CISM).

[4] Update training refers to ACT 180 training for police officers in Pennsylvania. Every year officers are required to undergo 16 hours of update training involving legal updates and a special topic for that calendar year.

[5] After collecting approximately 100 responses, it was discovered that Facebook was not among the available choices. The survey was edited accordingly. It is believed that had Facebook been a choice for the first 100 individuals surveyed, it would have been the most frequently used social media platform.

a current member or user of a social networking platform (see Figure 1).

Figure 1
First responder Use of SNS sites



Users were asked to identify the primary purpose of using specific SNS sites. Response choices were "*primarily business/job*," "*primarily related to social networking*," or "*mix of job and social networking*." LinkedIn was identified more often than any other platform as primarily related to business or job (23.65%), followed by YouTube (7.69%), and Twitter (5.59%). YouTube (49.26%) and Facebook (48.71%) were most frequently used in relation to social networking. Likewise, YouTube (26.19%) and Facebook (22.86%) were also identified as being used for both business and social networking purposes. This may be explained by the heavy presence of law enforcement officers in the sample who use popular SNS sites for routine investigative purposes (see Appendix, Table 4).

Individuals who reported using the above social networking sites were asked to rank their use of the platforms (*1 = never, 2 = seldom, 3 = sometimes, 4 = often, 5 = constant*). Respondents more frequently used Facebook (M = 2.77) and YouTube (M = 2.43). The mean score for all other platforms was less than 2.0 (*seldom*). In calculating estimated hours per week spent on social networking, one-third of the sample indicated they spend approximately 1–5 hours a week on social networking sites (33.9%), 22% indicated they spend 6–10 hours, and 12.3% admitted to spending more than 10 hours a week on social networking sites. In comparison, according to Statista, the average American spends just over two hours per day on social media platforms (Statista Research Department, 2021).

First Responders and News Media Consumption

Survey respondents were also asked about their news media consumption and preferences. Eighty-eight percent of the sample (88.11%) reported they obtained information on local, national, and international events via the Internet. Additionally, 76.71% indicated they watched local and national television news broadcasts. Only one-third (32.25%) indicated they

received their news from a printed newspaper. Devices used to obtain news were predominantly mobile devices, smartphones, desktop computers, or laptops. These results are not surprising as studies show Americans are increasingly consuming their daily news through the Internet and quite often through a social networking application (Greenwood et al., 2016; Twenge et al., 2019).

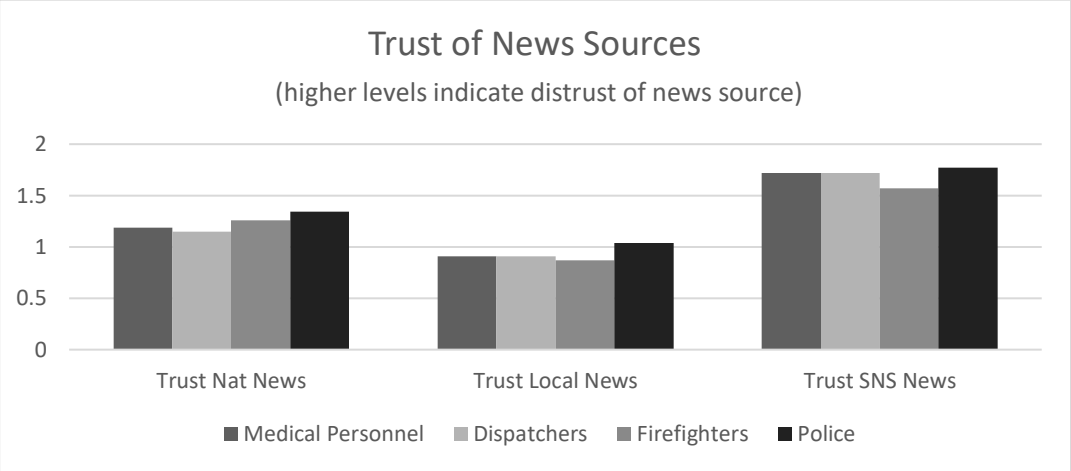
First responders were asked to rank their trust of news sources as such: *1 = a lot, 2 = some, 3 = not too much*. Sources of news included: National news organizations, local news, and news from social networking sites. Most respondents had some level of trust in their local news. News from social networking sources ranked as the least trustworthy with 62.54% choosing "*not too much*," followed by national news organizations (37.62%).

Respondents were also asked how *often* they believe the news media accurately and fairly reports news regarding their emergency service occupation or voluntary position. Answers were coded as *1 = always, 2 = very often, 3 = sometimes, 4 = rarely, and 5 = never*. An overwhelming majority of the sample reported that the news media "*sometimes*" (45.02%) or "*rarely*" (38.83%) accurately and fairly reports news regarding their emergency service occupation. The remaining responses were distributed between "*always*" (1.14%), "*never*" (4.73%) and "*very often*" (10.28%).

A one-way Analysis of Variance (ANOVA) was used to determine if there were differences between first responder occupational groups in their views of news media sources (e.g., trustworthiness and accurate and fairly reporting news regarding their emergency services position). Analysis revealed that there were statistically significant differences between first responder occupational groups with regard to their perceptions of the trustworthiness of the news source. In all cases, police had higher mean scores on all questions, indicating distrust of news sources in general. However, the difference in the means was only statistically significant in the case of trustworthiness of news from social media sources ($F(3, 578) = 4.275$, $p = < .005$). A Tukey post hoc test revealed that the means for police officers on this measure ($M = 1.77$) was higher than firefighters ($M = 1.57$) and this difference was statistically significant ($p = < .01$). Results are displayed in Figure 2.

Figure 2

Trust of News Sources by First Responder Occupational Group

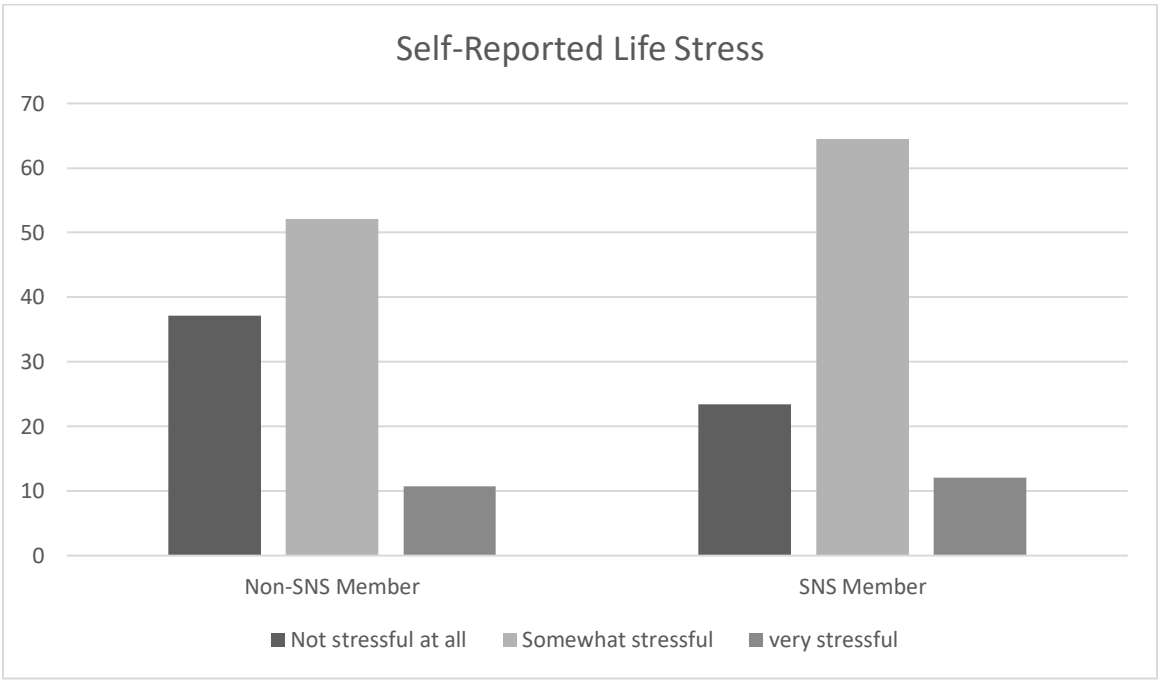


To assess whether there were differences between groups on whether the news media accurately and fairly reports news with reference to their occupation (or voluntary position), again a one-way ANOVA was used. The mean for police officers was the highest for all four occupational groups, signifying that they believe the news media "sometimes" or "rarely" reports news about their occupation accurately or fairly. The analyses signified statistically significant differences between groups ($F(3, 577) = 9.542$, $p = < .001$). Medical personnel ($M = 3.40$) had higher mean scores in comparison to firefighters ($M = 3.01$) ($p = < .001$). Additionally, the mean scores for police officers ($M = 3.47$) were significantly higher than for firefighters ($p = < .001$). There were no statistically significant differences between medical personnel, dispatchers, and police officers.

Self-reported Stress Related to Social Networking

The questionnaire included several measures of stress to attempt to quantify the impact of social networking on stress of first responders. One measure sought to compare and contrast self-reported stress levels by current membership on a social networking platform. SNS users and non-users were both asked to identify their life stress level with responses as follows: *1 = not at all stressful, 2 = somewhat stressful, 3 = very stressful.* Among individuals who indicated they were not a current member of an SNS platform, 37.19% found life "*not at all stressful,*" 52.07% reported life as "*somewhat stressful,*" and 10.74% chose "*very stressful.*" Among current SNS users, 23.39% reported life "*not at all stressful,*" 64.52% indicated that current life is "*somewhat stressful,*" and 12.09% reported life to be "*very stressful.*" Clearly, those who were currently users of social networking platforms self-reported higher levels of stress (see Figure 3).

Figure 3
Self-Reported Life Stress: SNS Non-Members v. SNS Members



Additional Measures of Stress

Included in the survey were questions from the Perceived Stress Scale (PSS) (Cohen et al., 1983). This 10-item index has been widely used and has been shown to correlate with stress and self-reported health (Cohen et al., 1983). In addition to the PSS, the Social Networking Stress (SNS) scale as used by Lim and Choi (2017) was employed as a measure of stress associated with membership and interaction with others via social media.[6] These measures allow the comparison of self-reported stress levels between users and non-users of social media and allow for comparison of SNS stress among the various occupations under the umbrella of first responders.

Perceived Stress Scale

Reliability analysis was completed to assess the internal consistency of the responses to the questions in the PSS. Analyses revealed strong internal consistency and reliability (Cronbach alpha = .892). Generally, a reliability coefficient of .70 is necessary for items to be included into a scale (Cronbach, 1951). An independent samples *t*-test between social media users and non-users revealed that users of social media scored higher on the Perceived Stress Scale (PSS) in comparison to those who are not users of social media. The mean score on the PSS was higher for SNS users (M = 14.864, SD 7.15) in comparison to individuals who are not users of social media (M =11.675, SD 6.81) t (117.23) = 3.78, p = < .001).

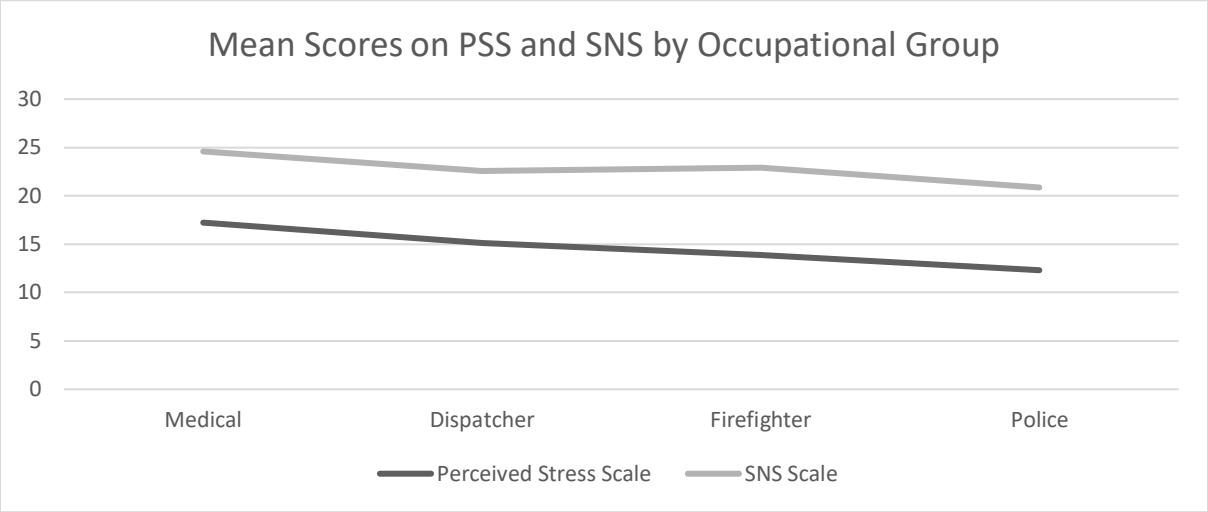
A one-way ANOVA revealed statistically significant differences between occupational groups (F*(*3, 484*)* = 14.689, p = < .001*)* on the Perceived Stress Scale (PSS). A Tukey post hoc test revealed that medical personnel scored higher on the Perceived Stress Scale in comparison to firefighters (17.23, p = < .005) and police officers (12.31, p = < .001). There were no statistically significant differences between dispatchers and any of the other occupational groups, nor between firefighters and law enforcement officers. In an interesting departure from assumptions about the policing occupation, police officers had the lowest mean scores on the Perceived Stress Scale.

Social Networking Stress Scale (SNS)

Likewise, reliability analysis was conducted on the 12 items included in the SNS Scale. Results demonstrated that these items were appropriate for inclusion in an index variable (Cronbach's alpha = .813). Statistically significant differences were discovered in a one-way ANOVA for comparison of mean scores on the SNS Stress Scale (F(3,424) = 6.685, p = < .001). Again, medical personnel scored highest on this stress measure, with higher scores indicating more social networking stress. A Tukey post hoc test showed statistically significant differences between the means of police officers (20.86, p = < .001) and medical personnel (24.59, p = < .001). There were no other statistically significant differences between groups on this measure. Again, medical personnel had higher mean scores on the SNS Scale in comparison to the other three occupational groups while police officers had the lowest mean scores of all groups. See Figure 4 for a visual comparison of means on both the PSS and SNS scales.

[6] The SNS scale as employed by Lim and Choi (2017) was the only published scale at the time the study began.

Figure 4
Mean Scores on the PSS and SNS by Occupational Group



Multiple Regression Analyses

The primary goal of this study is to explore the effect of social media and news media on first responders. For users of social networking sites, the SNS Stress Scale seemed the most plausible operationalization of stress related to social media use in this study. Multiple regression was used to attempt to identify the variables which predict social networking stress. Independent variables included demographic variables, such as gender (*1 = male, 0 = all else*), race/ethnicity (*1 = white/non-Hispanic, 0 = all others*), marital status (*1 = currently married, 0 = all else*), and education level (1 *= high school [GED] only, 2 = some college (less than 60 credits), 3 = Associates Degree, 4 = Bachelor's degree, 5 = Master's Degree*). Preliminary analyses found that years of service and age were too highly correlated in the first attempts at modeling the regression (based on Variance Inflation Factor [VIF] and tolerance values). Years of service appeared to have a stronger bivariate correlation with the dependent variable, therefore it was included in the regression analyses.

Over half the surveyed emergency responders reported having been trained in crisis intervention. Theoretically, training in crisis intervention may assist emergency responders in attending to their own stress and/or establishing resilience. For this reason, we included an independent variable to estimate the unique effect of crisis intervention training on SNS stress (*CI training yes = 1, no = 0*).

One of the potential contributors to SNS stress identified in the literature is social overload. Therefore, the analyses included the number of weekly hours spent in social networking platforms (*0 = none, 1 = less than 1 hour, 2 = 1–5 hours per week, 3 = 6–10 hours per week, 4 = more than 10 hours per week*). Additionally, according to Lim and Choi (2017), users report viewing biased opinions as a source of SNS stress. Therefore, a variable to represent trust of news viewed on social media was included (higher scores indicate distrust of news from social networking sites) and a variable representing the respondent's view of how often the media accurately and fairly covers news regarding their associated emergency services

occupation was entered into the model (higher scores indicate media rarely reports fairly, in short, media bias).

To assess any differences by occupational group, dummy variables were created to represent membership in one of the four first responder categories: medical (*1 = EMS, 0 = not EMS*), dispatcher (*1 = dispatcher, 0 = not a dispatcher*), firefighter (*1 = firefighter, 0 = not a firefighter*). As per multiple regression conventions, when dealing with categorial variables with more than two levels, the number of dummy variables entered into the regression model must be one less than the number of categories. Therefore, the resulting category (e.g., police) becomes the reference category to which all others are compared. Descriptive statistics are displayed in Appendix, Table 5).

Multiple Regression Models

Three models were calculated to attempt to predict the factors that influence social networking stress (SNS) in emergency responders. Total years of service, educational level, marital status, race, and gender were included in the first model. Only gender was a statistically significant predictor of SNS stress with the effect of being male associated with lower levels of SNS stress ($\beta = -2.568$ $p < .05$). The results of the regression indicated that the variables included in this model predicted only 2.9% of the variance in SNS stress ($R^2_{Adjusted} = .029$, $F(6,293) = 3.483$, $p < .05$).

The second model included SNS and media-related variables, including the weekly number of hours spent on social networking sites, trust of SNS news, and views of media bias. Additionally, a variable was added to represent crisis intervention training (1 = yes, 0 = all else). The overall model was statistically significant, and the explained variance increased to 4% ($R^2_{Adjusted} = .040$, $F(9,330) = 4.404$, $p < .05$). In this model, gender continued to be statistically significant ($\beta = -2.713$, $p < .01$). Media bias was the only other statistically significant predictor in the model. Individuals who believed the media only "sometimes" or "rarely" reported news about their emergency responder occupation fairly, and reported higher SNS stress ($\beta = .121$, $p < .05$).

In the final model, the dummy variables to represent the unique effect of first responder role were entered for dispatchers, firefighters, and medical personnel. The analyses showed the unique effect of the role of emergency medical (EMT/paramedic) was associated with higher SNS stress ($\beta = .288$, $p < .001$) as was the unique effect of the role of firefighter ($\beta = .181$, $p < .05$). Likewise, for the reference category, the unique effect of the role of police officer/law enforcement officer correlated with higher SNS stress values ($\beta = 14.801$, $p < .001$). These findings are consistent with previous analyses of SNS stress between the four occupational roles reported earlier in this paper. In this model, gender continued to be a statistically significant predictor of SNS stress ($\beta = -.137$, $p < .05$) with males self-reporting less SNS stress. Media bias also continued to be a predictor of SNS stress, with those who reported having media bias also self-reporting higher levels of SNS stress ($\beta = .138$, $p < .05$). The final model was statistically significant ($R^2_{Adjusted} = .101$, $F(12,288) = 4.404$, $p < .001$). The variables in the third model explained approximately 10.1% of the variance in SNS stress (see Appendix, Table 6).

It should be noted that after each model, post hoc tests were conducted to determine the fit of the model. The values for tolerance and VIF were well in line with accepted levels indicating that multicollinearity was not a problem. Additionally, a visual examination of the histogram of residuals in each model signified normal distribution. Likewise, a P-P

plot of the regression standardized residuals indicated normal and linear distribution after each model. Scatterplots of the standardized residuals against the standardized predictive values indicated the residuals were homoscedastic in each model.

Discussion

An objective of this study was to explore the effects of media and social media on first responders. This study fills in gaps of knowledge on first responders' use of social media, views of trustworthiness of news and social media content, views about the bias of news media (either received through traditional means or through social networks), and stress from social networking. Results indicate that like the rest of the world, first responders are wholly engaged in social networking with 90.38% of this sample actively participating in some type of social networking platform.

Further analyses suggest that emergency medical personnel in this study reported higher rates of overall stress (as measured by the Perceived Stress Scale) and SNS stress than their counterparts, followed by firefighters. At the outset of this investigation, the researchers would have predicted that police officers would report the highest stress levels on both indices. Police officers were, however, most distrustful of news sources and more likely to report that news media "rarely" or "never" accurately and fairly reports news regarding their first responder position. Analyses of the qualitative comments provided by respondents in the electronic survey demonstrated a bit of angst on the part of police officers toward media in general and news media in particular. Below are a few examples:

"The media is indirectly responsible for the 'war on police' and the officers that were killed as a result of their biased reporting."

"The 'media' is programming citizens to believe what the 'media' wants them to see and believe. The question is who is controlling the media?"

"Anti-police bias in media has done more to damage police/community relationships than anything else in the last 20 years."

It should be noted that of the 64 comments provided, 48 comments were from individuals who identified as police or law enforcement. While this was reflected in police officers' opinions of media bias toward their profession, it was not reflected in their scores on SNS. It may be that the officers were able to segregate social networking stress from stress caused by news media or that the SNS scale used in this study might not be appropriate for first responders, particularly police officers.

Police tend to have a unique culture, a culture that emphasizes strength and shuns weakness or inferiority of any type (Miller, 2005; Paoline, 2003; Paoline & Terrill, 2013; Tucker, 2012; Tucker, 2015). Therefore, questions framed in such a way that may take away from the warrior or rescuer mentality might not be answered with full veracity. For instance, one of the statements on the SNS scale is "*I feel poor when I compare myself to others in the social networking site.*" It may be that the helper/hero/rescuer nature of first responders, particularly police officers, may have had an impact on their answers. While this instrument has been tested in general populations, it has not been tested with first responder populations which often have a distinctive subculture.

In addition, police have been described as insular (Copes, 2005; Paoline, 2003; Tucker, 2012) and may be taking a more proactive step toward protecting themselves from exposure to negative comments on social media sites by being more selective about "friending" or "following." Police were

more likely than the other occupational groups to report that they know all or mostly all their friends or followers on social media. Additionally, police officers were more likely to report that they "unfriended" or "unfollowed" individuals.

As noted by Chermak and Weiss (2005), police are the most visible organization in the criminal justice system. As such, media tend to focus more highly on police than other professionals in the criminal justice system and hold them accountable for the control of crime and disorder (Chermak & Weiss, 2005; Ericsson, 1991). Certainly, viral cases of police abuse and excessive force, primarily spread through social networking, have caused decreases in public confidence in police and reduction in perceptions of legitimacy (Kelley et al., 2021; Ortiz 2020).

Focusing back on the medical first responders, theoretically, EMTs/paramedics may be more open about self-reporting stress as they are highly trained to recognize, assess, and triage both physical injury and mental health problems. Prior studies have indicated that EMS personnel self-report high rates of stress (Mitchell 1984) and higher levels of occupational stress than other non-emergency health care workers (Hammer et al., 1986). These studies predate social networking, however. There are few studies which examine the link between media and social media stress and EMS first responders. While this study finds that EMT/paramedics self-report higher stress in general and higher SNS stress, there is a lack of studies to confirm this link.

Most firefighters in Pennsylvania and indeed in the United States (approximately 69%) serve on a volunteer basis (Dowdall-Thomae et al., 2012). Studies have indicated that the pressures of holding down a job in addition to being a volunteer firefighter may contribute to firefighter stress and other behavioral health conditions (Stanley et al., 2017). The same study found that volunteer firefighters face more structural barriers to receiving assistance for mental health than career firefighters. It should also be considered that volunteer firefighters are not exposed to the stringent pre-service testing as career firefighters and police officers, therefore they may suffer from stress, anxiety, depression, and a host of other mental health or behavioral health issues prior to voluntary service.

The role of emergency dispatcher has often been overlooked in consideration of the first responder role (Gardett et al., 2020; Gurevich et al., 2009; Smith et al., 2019). They occupy a unique space among first responders as they do not "directly experience or witness events; their role is characterized by frequent telephone or media exposure to details of these incidents" (Klimley et al., 2018, p. 40). Further complications occur in studying emergency dispatchers as some jurisdictions divide their services into specialties (e.g., police dispatcher vs. fire dispatcher vs. medical dispatcher) while other jurisdictions task dispatchers with handling all 911 calls that come into their emergency console. Anecdotally, critical incidents, particularly those in which there is not a positive outcome, tend to take a toll on their emotional health (Gurevich et al., 2009; Miller, 2005; Miller et al, 2017; Pierce & Lilly, 2012). In the current study, the sample of emergency dispatchers was too small to have the power to find statistically significant differences between the first responder role and other roles. The effects of media and social media on this subgroup of first responders is unknown.

In short, this study gathered valuable information on first responders' use of social media, views of media and social media, and self-reported stress and social media stress; the effect of media and social media on first responders could not be empirically

established. Only 9.3% of first responder SNS stress could be predicted from 11 independent variables. There are clearly other factors that impact first responder SNS stress than were evaluated in this study.

Limitations

Most of the original recipients of the survey were individuals and agencies known to the primary researcher. As such, they were asked to distribute the survey appeal email and link to their organization and provide the researcher with an exact number of individuals included on the mass email. This allowed for an estimation of a response rate. However, this response rate should be viewed with caution as some respondents may have forwarded the appeal email and link to other first responders.

Emergency responder groups were broken into four major groups for the statistical analyses. There were several respondents that did not choose one of these four groups; however, their responses provide information to nest them in one of the four groups. For instance, a Chaplain who was working as a volunteer firefighter was placed in the firefighter occupational group. A coroner was placed in the emergency medical group, as they handle and respond to death investigations.

The geographic location targeted for this study was the Southeastern Pennsylvania region. As such, it may not be representative of all first responders around the country. Respondents were mostly white males. Future studies may want to draw on a larger national sample with more diversity. Additionally, firefighters and emergency medical personnel (EMTs/paramedics) often operate on a volunteer basis in the region (with the exception of the City of Philadelphia). Dispatchers and police, however, are paid first responders**.** In theory, a volunteer can choose which calls to respond to and/or when to be available for their voluntary role; a paid first responder cannot.

Skip logic in the survey caused individuals who reported they were *not* a current user of social networking applications to skip the SNS Stress Scale questions. Hence, the final analyses (multiple regression models) only included survey respondents who were current users of social networking applications and had provided all the necessary information for each variable included in the model.

It should be noted that this survey was distributed, and results returned, prior to the death of George Floyd at the hands of Minneapolis Police Officer Derek Chauvin on May 25, 2020. This incident was captured by cell phone and transmitted via social media to the entire world, inciting protests and riots throughout the summer of 2020. Data was also collected prior to the advent of a global pandemic. One might conclude that these incidents would create higher stress levels and possibly higher social media stress levels in first responders.

Implications

Data from this study and other studies indicate that the role of a first responder is inherently stressful. The goal of this study was to identify the effects of media and social media on first responders. Of the four responder groups, emergency medical responders (EMTs/paramedics) reported the highest amount of stress and social networking stress, and police officers reported the least in both categories. Conversely, police officers reported the highest levels of distrust of news media delivered through social media and were more likely than their first responder partners to report that media is biased toward their first responder group.

The findings would suggest that the effect of media and social media on first

responder stress bears further investigation. Because this connection is not firmly established in this study, nor is it widely understood, theoretical implications would be premature. We do know, however, that emergency responders are being publicly scrutinized for their social media posts. Barely a week goes by without media coverage of an incident of a first responder being fired or disciplined for a social media post (Goldsmith, 2015). Policing their own social media posts might induce some SNS stress. Practical implications are warranted. These are some of the common suggestions in trade publications and online forums for first responders. They are generally broken into two categories: adopting social media policies and encouraging first responders to engage all privacy controls supplied by the networking platform.

Social Media Policy Recommendations

First responder organizations are increasingly adopting social media policies for both employed first responders and volunteers. Those policies generally restrict employees from appearing in uniforms or discussing emergency service–related business in public social media posts. Some policies go further and prohibit social media use while on duty, which includes posting photos of accidents, medical patients, and arrestees. Municipalities who employ paid, full-time first responders are more apt to have social media policies that are enforceable.

The overriding principle in these policies is that the employees or volunteers are responsible for the content on their social media platforms and should be cognizant of how it reflects on the organizations and the communities they serve. A policy is the first step toward potentially preventing negative social media from the accounts of first responders.

Engaging in Privacy Controls

Many first responder publications recommend that first responders be wary about what they post on social media and engage privacy options provided by the social networking platform (Ayoob, 2015; Cruz, 2020; Frontline, 2017; Willing, 2019). This reduces the chance that individuals who they do not know will have the ability to monitor, critique, comment on, or otherwise "police" the content they decide to share on social media. As demonstrated in this study, police officers were more likely to know "all" or "most" of their "followers" or "friends." After the exposé of police officer social media activity in the Plain View Project ("Plain View Project", 2019) many police departments and police unions recommend that police officers either discontinue their presence on social media platforms or remove any reference to the occupation.

Conclusion

In conclusion, the current study sought to examine the impact of social media and news media on first responders. It is clear that first responders are active participants in social media and often receive news via social networking platforms. This study fills some gaps in knowledge about first responders' views of social media and news media, including measures of SNS stress. However, the factors included in this study were not strong predictors of SNS stress. Further investigation is needed to understand the impact of media and social media on first responders.

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Appendix

Table 1

Descriptive Statistics: First Responder Role and Pay Status

Variables	*n*	%	*M*	*SD*	*Min*	*Max*
Primary role (*n* = 633)			3.66	1.68	1	4
Dispatcher	50	7.90				
Firefighter	100	15.7				
Emergency Medical (EMT/Paramedic)	148	23.4				
Police/Law Enforcement	335	52.9				
Primary role pay status (*n* = 633)			1.30	.62	1	3
Paid position	497	78.5				
Volunteer	78	12.3				
Both	58	9.2				
Secondary first responder? (*n* = 635)			1.61	.49	1	2
Yes	289	38.8				
No	455	61.1				
Secondary role (*n* = 280)			3.98	2.30	1	7
Firefighter	88	31.4				
Other	78	27.8				
Medical [EMT/Paramedic/Nurse]	75	26.7				
Dispatcher/9-1-1 call taker	16	5.71				
Police officer/law enforcement	14	5.00				
Coroner/Medical Examiner	5	1.79				
Chaplain	4	1.43				
Secondary role pay status (*n* = 280)			1.62	.65	1	3
Paid position	132	47.3				
Volunteer	120	43.0				
Both	27	9.68				

Appendix

Table 2
Characteristics of Respondents

Variables	*n*	%	*M*	*SD*	*Min*	*Max*
Gender (*n* = 612)			1.17	.38	1	2
Man	506	82.68				
Woman	106	17.32				
Age (*n* = 576)			42.71		17	78
Military veteran (*n* = 610)			1.82	.38	1	2
Yes	110	18.03				
No	500	81.97				
Race / Ethnicity (*n* = 611)			1.13	.71	1	7
White or Caucasian	585	95.74				
Black or African American	8	1.31				
Asian or Asian American	6	.98%				
Other	5	.82%				
Hispanic or Latino	4	.65%				
American Indian or Alaskan Native	2	.33%				
Native Hawaiian or Pacific Islander	1	.16%				
Marital Status (*n* = 611)			2.01	.79	1	5
Married/Partnered	392	64.16				
Single	132	21.60				
Divorced	51	8.35				
Remarried after divorce/widowed	35	5.73				
Widowed	1	.16				
Highest level of education (*n* = 612)			3.09	1.23	1	6
Bachelor's degree	211	34.48				
Some college < 60 credits	186	30.39				
Associate Degree	90	14.71				
Master's Degree	61	9.97				
High school / GED	57	9.31				
Doctoral Degree	7	1.14				

Appendix

Table 3
Crisis Intervention Training and Type of Training

Variables	*n*	%	*M*	*SD*	*Min*	*Max*
Received training? (*n* = 608)			1.5	.50	1	2
Yes	302	49.67				
No	306	50.33				
Type of training received (*n* = 302)			1.81	.69	1	3
CIT	111	35.13				
CISM	153	48.42				
Other	52	16.46				

Appendix

Table 4
Purpose of Use of SNS Platforms

Purpose of use	Do not use	Use primary business related	Use primarily related to social networking	Use mix of business and social networking	*Total n*
SNS platforms % (n)					
Facebook	21.47 (108)	6.96 (35)	48.71(245)	22.86 (115)	503
Twitter	73.52 (447)	5.59 (34)	15.95 (97)	4.93 (30)	608
Instagram	55.34 (337)	2.79 (17)	36.12 (220)	5.75 (35)	609
LinkedIn	68.57 (421)	23.62 (145)	3.09 (19)	4.72 (29)	614
SnapChat	59.61 (363)	1.48 (9)	35.30 (215)	3.61 (22)	609
YouTube	16.86 (103)	7.69 (47)	49.26 (301)	26.19 (160)	611
WhatsApp	89.18 (544)	2.62 (16)	6.23 (38)	1.97 (12)	610
Google Hangouts	95.41 (582)	0.98 (6)	2.95 (18)	0.66 (4)	610
Pinterest	75.82 (461)	0.66 (4)	20.39 (124)	3.13 (19)	608

Appendix

Table 5
Descriptive statistics for regression models 1-3

	Model 1 (n =337)		***Model 2 (n = 303)***		***Model 3 (n = 301)***	
Variables	*M*	*SD*	*M*	*SD*	*M*	*SD*
SNS Stress (dependent variable)	22.741	7.37	21.719	2.56	22.727	7.453
Total years of service	19.970	12.162	19.531	11.962	19.475	7.453
Educational level	1.991	1.238	2.00	1.227	1.996	1.228
Gender (male =1, all else = 0)	.786	.410	.772	.420	.770	.421
Race/Ethnicity (WnH = 1, all else = 0)	.970	.169	.973	.160	.973	.161
Marital status (married = 1, all else = 0)	.614	.487	.600	.490	.601	.490
CI training (yes = 1, all else = 0)	.504	.500	.505	.500	.505	.500
Weekly hours on social media			2.610	.895	2.601	.890
Trust of SNS News			1.673	.490	1.674	.490
Media Bias			2.389	.723	2.385	.724
Dispatcher (yes = 1, all else = 0)					.116	.321
Medical (yes = 1, all else = 0)					.295	.457
Firefighter (yes = 1, all else = 0)					.209	.407

Appendix

Table 6.
Multiple regression models 1-3

	Model 1 (n =337)			***Model 2 (n = 303)***			***Model 3 (n = 301)***		
Variables	b *(SE)*	t-ratio	*p<*	b *(SE)*	t-ratio	*p<*	b *(SE)*	t-ratio	*p<*
Intercept (Social Networking Stress)	21.719*(2.560)*	8.483	*.001*	17.635*(4.004)*	4.404	*.000*	14.801*(4.009)*	3.692	*.001*
Total years of service	-.007*(.036)*	-.192	*ns*	.002*(.039)*	.057	*ns*	-.009*(.038)*	0.243	*ns*
Educational level	.224*(.324)*	.689	*ns*	.207*(.350)*	.591	*ns*	.408*(.355)*	1.151	*ns*
Gender (male =1, all else = 0)	-2.731*(1.064)*	-2.568	*.01*	-2.960*(1.091)*	-2.713	*.01*	-2.420*(1.143)*	-2.118	*.05*
Race/Ethnicity (WnH = 1, all else = 0)	3.243*(2.347)*	.074	*ns*	3.556*(2.651)*	1.341	*ns*	3.520*(2.579)*	1.365	*ns*
Marital status (married = 1, all else = 0)	-1.108*(.851)*	-1.302	*ns*	-1.145*(.895)*	-1.280	*ns*	-.808*(.884)*	-.914	*ns*
CI training (yes = 1, all else = 0)	.785*(.814)*	.965	*ns*	.705*(.871)*	.810	*ns*	1.053*(.948)*	1.240	*ns*
Weekly hours on social media				-.087*(.490)*	-.178	*ns*	-.377*(.485)*	-.776	*ns*
Trust of SNS News				.688*(.896)*	.768	*ns*	.878*(.874)*	1.005	*ns*
Media Bias				1.246*(.588)*	2.119	*.05*	1.418*(.585)*	2.425	*.01*
Dispatcher (yes = 1, all else = 0)							.929*(1.545)*	.602	*ns*
Medical (yes = 1, all else = 0)							4.694*(1.069)*	4.392	*.001*
Firefighter (yes = 1, all else = 0)							3.312*(1.201)*	2.759	*.01*

Model Statistics	R^2	Adj R^2	df	*p<*	R^2	Adj R^2	df	*p<*	R^2	Adj R^2	df	*p<*
	.046	.029	6	*.05*	.068	.040	9	*.05*	.137	.101	12	*.001*

Author Bios

Dr. Jane M. Tucker is a former police officer turned educator. In addition to teaching criminal justice courses at West Chester University, Dr. Tucker serves the first responder community by providing peer support and CISM (Critical Incident Stress Management) training to CISM teams in her home state of Pennsylvania.

Before entering academia, Dr. Michele P. Bratina was the Forensic and Children's Mental Health Coordinator for the Florida Department of Children and Families in the 19th Judicial Circuit. As a certified Crisis Intervention Team Coordinator (CIT International), Mental Health First Aid (MHFA) instructor, and SAMHSA-certified trainer for How Being Trauma-Informed Improves Criminal Justice System Responses, she endeavors to advance mental health awareness and advocacy in the criminal justice system, and in the community.

At the onset of this research project, Brianna Caprio (M.S.) was pursuing a graduate degree in criminal justice at West Chester University. As a graduate assistant, she was heavily involved in the study from the ground floor. Brianna is currently attending the John Jay College of Criminal Justice at the City University of New York in pursuit of a Ph.D. in Criminal Justice.