Active Shooters on Campus:
University of Mississippi Employees’ Perceptions and Preparedness

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Abstract

The objective of this study was to examine university employees’ perceptions, knowledge, and preparedness of active shooter situations on campus, and how gender influences these factors. This study collected data from a broader survey of faculty and staff that examined crime on a college campus, perceptions about crime on campus, and knowledge about crime on campus. This research also serves as a companion piece to the research conducted by Mulvey (2018), where similar research questions were posed to a large sample of undergraduate students. As in Mulvey’s study, it was hypothesized that participants would report generally low levels of confidence in their ability to respond to an active shooter event (i.e., self-efficacy), with males tending to report greater self-efficacy than females. It was also hypothesized that females would report a higher perceived likelihood and a greater fearfulness of an active shooter event occurring. A cross-sectional survey was administered to faculty and staff members at the University of Mississippi. The data support these hypotheses. In terms of self-efficacy, the difference between males and females was statistically significant, $t(247) = 3.19, p < .001$. In terms of perceived likelihood, the difference between males and females was statistically significant, $t(225) = -3.64, p < .001$. Finally, in terms of fearfulness, the difference between males and females was also statistically significant, $t(291) = -4.48, p < .001$. Women were reportedly more fearful and had a higher perceived likelihood of an active shooter event occurring, while men reported greater self-efficacy pertaining to the occurrence of an active shooter event. These data suggest that employees on campus could benefit from increased availability of information and targeted training.
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The Active Shooter Crisis in Schools

According to the Federal Bureau of Investigation (FBI), an active shooter is classified as one or more individuals actively engaged in killing or attempting to kill people in a populated area (FBI, 2018). The “active” aspect is the key element in what primarily discerns the situation, as it signifies that potential interference by both law enforcement personnel and citizens could change the course of the event. An FBI report released in 2018 documented seven active shooter situations that occurred in educational environments in 2016 and 2017 (U.S. Department of Justice, 2018). In 2018, there were two additional school shootings – the first on February 14th in Parkland, Florida (where an active shooter killed 17 and injured 17) and the second on May 18th in Santa Fe, Texas (where an active shooter killed 10 and injured 13; Follman, Aronsen, & Pan, 2018). Although the mass violence incident rate has declined in the past decade, some of the deadliest events have occurred more recently (Follman et al., 2018). Thus, mass school shootings appear to be decreasing in frequency but increasing in intensity. The Parkland shooting proved to be the deadliest active shooter incident at a high school in modern United States history, which serves as a compelling reminder that the active shooter crisis is ongoing in U.S. schools.

The most recent active shooter incident at an institution of higher education occurred in October of 2015 at Umpqua Community College in Roseburg, Oregon (Follman et al., 2018). A student who was enrolled at the school opened fire in a classroom, fatally wounding eight students as well as an assistant professor (Follman et al., 2018). This event demonstrates how students are not the only population at risk of
experiencing an active shooter incident. Even though there has not been an active shooter at any institutions of higher education since 2015, the likelihood of such an occurrence cannot be understated. Mulvey (2018) conducted a study of college undergraduate students at the University of Mississippi with respect to active shooter situations on campus. In her review of the active shooter literature, she established that active shooter incidents at schools are on the rise and that the actual and potential occurrence of an active shooter event carries negative consequences, such as increased feelings of fear as well as increased feelings of being at risk for experiencing an active shooter event (see Mulvey, 2018). Her research with the student population paved the way for the current study to focus on university employees. A significant portion of the population is either enrolled in or employed at an institution of higher education, which means that they are at risk for experiencing an active shooter incident. The National Center for Education statistics reported that, in the fall of 2016, the number of people employed by postsecondary institutions in the United States was almost 4 million. Examining the effects of active shooter situations for university employees is more pertinent now than ever before.

**Psychological Impacts**

There is a paucity of research examining the psychological effects of school shootings on faculty and staff members; however, researchers have studied the effects of school shootings on college students. In particular, the impact of school-related shootings on fearfulness and perceived likelihood of a violent crime occurring have been studied. Burruss, Shafer, and Giblin (2010) note that perceived likelihood is a cognitive evaluation of risk and fear of crime is an emotional response to that risk. Mulvey (2018)
assessed perceived likelihood and fearfulness of active shooter events among undergraduate students at the University of Mississippi, finding that women perceived active shooter events to be more likely. Student women were also more fearful of an active shooter event taking place (Mulvey, 2018). Fallahi, Austad, Fallon, and Leishman (2009) researched the psychological impact of the Virginia Tech shooting in 2007 on students at Central Connecticut State University. Following the shooting, students reported being more fearful and were more likely to believe a similar event would happen again (Fallahi et al., 2009). This highlights how the occurrence of mass school shootings seem to increase perceived likelihood and fearfulness of active shooter events.

Even when individuals have not directly experienced a mass school shooting, awareness of their occurrences seems to increase fearfulness. Kaminski, Koons-Witt, Thompson, and Weiss (2010) conducted the first systematic study on the effects of campus mass shootings on fearfulness and perceived risk of victimization. Students attending the University of South Carolina were administered surveys both prior to and following the mass shootings at both Virginia Tech (VT, where an active shooter killed 32 and injured 17) and Northern Illinois University (NIU, where an active shooter killed five and injured 16). Before the shootings took place, women and students of color showed fear levels that were significantly higher than those of men and White students. The researchers found that both shootings significantly increased fear of being a victim of crime on campus regardless of gender or race/ethnicity. This suggests that mass school shootings impact students at the national level. An active shooter incident affects students and likely personnel at the broader societal level, beyond its impact at the school where it occurs.
Although university employees have been overlooked in the research regarding university safety, a few studies do offer some insight into the gender differences in safety perceptions of this group. In particular, Fletcher and Brydeen (2007) had Canadian faculty and staff members complete a questionnaire regarding violence in their university’s setting. They found that women felt less safe on campus and were more likely to take personal safety precautions while on campus (e.g., carrying keys in a defensive manner, walking with another individual on campus, etc.). Another study done at the University of Mississippi with employees found that women reported higher perceived susceptibility to both natural hazards and incidents of mass violence than men did (i.e., active shooter situations) (Weber, Schulenberg, & Lair, 2018). More research is needed focusing primarily on the relationship between gender and perceived likelihood and fearfulness of active shooter situations from the faculty and staff perspective.

**University Employees’ Preparedness**

College administrators, faculty, and campus law enforcement personnel are not sufficiently prepared for preventing mass school shootings (Thompson et al., 2009). Much of the literature on preparedness of institutions of higher education suggests that it is crucial to establish comprehensive plans that address not only frequent problems but also rare crises such as school shootings (Borum, Cornell, Modzeleski, & Jimerson, 2010; Mitroff, Diamond, & Alpasian, 2006; Seo, Torabi, Sa, & Blair, 2012). Current best practices for mass violence prevention show that preparing school administrations for an active shooter is key to mitigating its impacts. Thus, faculty and staff must be trained to respond appropriately during an active shooter situation.
However, there appears to be a disparity between the consensus about the importance of active shooter preparation and the actual preparation training that is available. In a cross-sectional study with 161 U.S. colleges, Seo et al. (2012) asked faculty specifically about common preparedness actions and whether they were implementing them. Less than half of the respondents (44%) reported that their institutions trained employees for responding to violent disasters. Furthermore, 60% of respondents indicated that they held emergency drills less than once a year, and 19% reported that their universities had no emergency drills or plans to hold them (Seo et al., 2012). In a survey of campus police chiefs throughout the U.S., about half of them indicated that college faculty should play a major role in minimizing firearm violence on campus; however, less than one third reported that their faculty were regularly trained as to what steps to take during an active shooter situation (Thompson, Price, Dake, & Teeple, 2009). When surveying university presidents, more than 80% reported having an active shooter plan in place, but less than half indicated that their faculty were trained to respond to an active shooter situation (Price, Thompson, Khubchandani, Dake, Payton, & Teeple, 2014). These findings illustrate a disconnect between what is available from an administrative perspective and how to transmit that information to university personnel, specifically faculty and staff. Even when a university has an emergency plan in place, the plan often fails to reach faculty, staff, and students (Burruss, Shafer, & Giblin, 2010; Seo et al., 2012). Faculty and staff training must be implemented, mandated, and directed to the target audience.

A second reason to prioritize faculty and staff preparedness is that students turn to them for guidance during disasters, including campus violence. Tkachuck, Schulenberg,
and Lair (2018) found that on average, students reported being “fairly confident” in the university’s ability to prepare for a natural disaster. Furthermore, they found that 78% of students said they would turn to faculty and staff for guidance during an emergency on campus (Tkachuck et al., 2018). Another study of students in a hurricane-prone region found students are likely to look to their professors and other university personnel for guidance during campus emergency situations (Burruss et al., 2015; Lovekamp & McMahon, 2011). Thus, it is important to enhance preparedness plans for university employees so that they may better protect themselves and better guide the students.

After developing and putting an active shooter plan into effect, it is imperative to make sure the plan has its intended effect. The population the plan is aimed at need to be aware of and understand the planned strategies for preparing and responding to active shooters. It is critical that they know how to do what is expected of them and feel confident in doing so. Some studies have examined student perspectives regarding disaster preparedness and whether universities’ preparedness plans actually are effective. Mulvey (2018) surveyed university students about an active shooter training video designed by the University Police Department (UPD). This four-minute, UPD sponsored active shooter response video informs viewers of what to do in case of such an emergency. Most participants (63%) reported that they had not seen the video, even though it had been advertised by the university and was available on the front page of the university’s emergency website. Of the 34.4% of respondents that indicated that they had seen the video, 81.8% of them reported that they found it at least somewhat effective (Mulvey, 2018). Even though most of the students had not seen the video, the ones that did generally found it to be a beneficial training method. This exemplifies how intended
prevention efforts have little to no impact when messages fail to reach the target audience, even though preparedness initiatives may be in place.

**Self-Efficacy and Active Shooter Incidents**

Self-efficacy refers to how confident individuals feel in their ability to respond effectively to danger (Bandura, 1977; Schwarzer, 1992). For active shooter incidents, self-efficacy involves confidence that one can take action to reduce the threat of an active shooter. Self-efficacy has a direct effect on preparedness behaviors. For instance, Ablah, Konda, and Kelley (2009) found that perceived preparedness (i.e., self-efficacy for a disaster) significantly predicted being more prepared for natural disasters and incidents of mass violence. Furthermore, university students’ and university employees’ self-efficacy for tornadoes predicted greater engagement in preparedness actions (Weber, Pavlacic, Buchanan, & Schulenberg, 2017a, 2017b). At the same university, Mulvey (2018) surveyed undergraduate students in terms of self-efficacy in responding to an active shooter event. The majority of the sample reported being “somewhat” or “extremely” certain that they would know how to respond, with undergraduate men reporting greater confidence than women in their ability to protect themselves (Mulvey, 2018). Regarding active shooter incidents, undergraduate males reported greater confidence in their ability to protect themselves (Mulvey, 2018). Several other studies have demonstrated a relationship between women and lower perceptions of preparedness (DeBastiani, Strine, Vagi, & Kahn, 2015; Kohn, Eaton, Feroz, Bainbridge, Hoolachan, & Barnett, 2012; Simms, Kusenbach, & Tobin, 2013). Prior disaster research has suggested that these gender differences might be due to women’s lack of involvement in emergency management (Ashraf & Azad, 2015) or because they lack socioeconomic power
While the reason for the gender differences is unclear, a consistent finding in the literature is that women show greater risk perception than men, and report less self-efficacy.

University personnel are more likely to report lower levels of confidence in responding to and guiding students during incidents of mass violence (active shooter situations) as opposed to other kinds of disasters, such as tornadoes (Weber, Schulenberg, & Lair, 2018). Those who receive active shooter response training are more likely to believe that they could adequately prepare and/or respond in an emergency, i.e., they report greater self-efficacy with respect to preparing for an active shooter event (Jones, Kue, Mitchell, Eblan, & Dyer, 2014; Snyder, 2014). While there are some data available in the literature, as of this time research on faculty and staff preparedness for active shooter situations is lacking, even more so than institutional and student preparedness research. Research that examines university employees’ preparedness and perceived self-efficacy in responding to such an event is very much needed.

The Current Study

In summary, active shooter situations are increasing in intensity. According to Follman et al. (2018), some of the deadliest mass shootings in modern United States history have occurred on school campuses. Although safety concerns primarily involve the student population, university personnel should not be overlooked. The distinct dual role of university employees to protect themselves and help guide students puts this group at an even greater risk of harm. There is a significant need for more information about the relationship between university employees and active shooter situations. Moreover, there are likely differences in the attitudes, perceptions, and behaviors on the
basis of demographic factors, such as gender. The literature suggests that women are more fearful of experiencing a violent crime and are more likely to be prepared in anticipation of a potentially violent event. Previous findings of lower levels of confidence in responding to and guiding students during incidents of mass violence suggest that university employees would show lower levels of self-efficacy in their ability to respond to disasters on campus including active shooter situations. A review of the larger self-efficacy literature indicates that men will report higher levels of self-efficacy than women, although with respect to specifically preparing for and responding to an active shooter event on campus, reported self-efficacy will tend to be lower for both men and women (even more so for women). Additional research is needed specifically with regard to gender, because it can inform preparedness initiatives regarding subgroups of employees that may need tailored training and education for active shooter situations.

The current study involved a survey about campus crime, with a specific focus on knowledge and perceptions of active shooter situations. In particular, this investigation analyzed the relationship between gender and knowledge, perceptions, and preparedness of faculty and staff in response to active shooter events. The present study extended the research begun by Mulvey (2018), which examined the attitudes and experiences of students regarding campus crime and active shooter incidents. Focusing on faculty and staff, this study complements that research, as well as related research conducted at the same university by Tkachuck et al. (2018) and Weber et al. (2018) with regard to natural hazards. The present study aimed to broaden our understanding of the perceptions and knowledge of crime and active shooter incidents with implications for employees at institutions of higher learning across the U.S.
Hypotheses

The following hypotheses were examined:

H1: Women would report higher levels of fear of an active shooter event occurring.
H2: Women would perceive a greater likelihood of an active shooter event occurring.
H3: Participants would report lower levels of perceived self-efficacy in their ability to prepare for and/or respond to an active shooter event, with men tending to report greater self-efficacy than women.

Method

Participants

Current employees at the University of Mississippi (N = 410) responded to an online survey distributed university wide via electronic mail in the Spring semester of 2019. Participants were not identifiable based on their responses. The participants’ demographic data are provided in the Results section of this document.

Measures

This study was part of a broader investigation of campus crime, and the survey in its entirety can be found in Appendix A. These measures were previously used in Mulvey (2018), with minor adjustments made to account for population differences between students and faculty and staff.

Demographics. Participants were asked about their age, gender, ethnicity, military affiliation, employment length, and employment classification. If respondents indicated that they were an instructor or that they regularly taught classes, they received an additional question asking whether they engaged their students in preparedness behaviors for active shooter situations. Preparedness behaviors listed included providing
Fear of an Active Shooter on Campus. Participants were asked how fearful they were that a shooting would occur on campus in the next year. Response options were on a Likert-type scale ranging from 1 – Not at all fearful to 5 – Extremely fearful.

Perceived Likelihood of an Active Shooter on Campus. Next, participants were asked how likely they thought it was that a shooting would occur on campus in the next year. Response options were on a Likert-type scale ranging from 1 – Extremely unlikely to 5 – Extremely likely.

Efficacy during an Active Shooter Event. Regarding their own self-efficacy, participants were asked “How certain are you that you know what to do if a shooting occurred while you were on the Oxford campus (i.e., an ‘active shooter’)?” A second self-efficacy question asked “When I am on the Oxford campus, my personal safety is my responsibility (in comparison to UPD/UM administration).” Efficacy question responses were given on a 5-point Likert-type scale. A self-efficacy sum score was computed, ranging from 2 to 10. Higher scores indicate greater self-efficacy in the ability to prepare for and/or respond to an active shooter event.

Active Shooter Knowledge. The seven knowledge-related questions asked employees, for example, about the duration of the “average” active shooter situation, the role of law enforcement officers first arriving on the scene, good safety practices in the event of an active shooter, the role of first responders, and what it means to “shelter in place.” Each item was followed by a screen with the correct information in response to the question, regardless of whether the respondent initially chose the correct or an
incorrect response (as a means to inform and affirm). Knowledge questions were multiple choice or True/False in format. Correct responses were scored 1 and incorrect response were scored 0. A sum score of Active Shooter Knowledge was computed, ranging from 0 to 7. Higher scores indicate a greater number of correct answers to the active shooter knowledge-based questions.

Individual Preparedness Actions. Participants were asked (1) if they had seen the University-sponsored active shooter video or (2) participated in the active shooter workshop provided by UPD. A follow-up question asked about the perceived effectiveness of each, utilizing a 5-point Likert-type response format. Next, they were asked (3) if they registered to receive RebAlert messages, (4) whether they had downloaded the LiveSafe app to their mobile phone, and (5) whether they had visited the university emergency webpage. For instructors, preparing students for an active shooter situation was included as a sixth preparedness action. Responses were scored 1 if the preparedness action was taken and 0 if it was not. Responses were summed for a total preparedness score ranging from 0 to 6. Higher scores indicate a greater number of preparedness actions taken by the individual.

Procedure

An online survey was developed with the Qualtrics software program. Participants were recruited through a mass electronic mail message delivered to employees at the University of Mississippi, containing a brief description and a link to the survey. Informed consent was delivered on the initial screen prior to administration of the actual survey. The study was approved by the University’s Institutional Review Board and it was also supported by the University’s Incident Response Team. Data were
collected in April of 2019. The survey took participants approximately 15 minutes to complete. There was no compensation provided for their participation in the study.

**Results**

**Data Cleaning**

Before cleaning the data set, the sample size was $N = 410$. Participants who completed less than 90% of the survey were removed from the subsequent analyses. Participants who identified as a student or who had indicated that they were not a current employee of UM were also removed from the analyses. The final sample size was $N = 355$.

**Demographics.**

Participants ranged in age from 18 to over 65 years old. The majority of participants were between the ages of 35 and 64 ($n = 264; 74.4\%$). Regarding gender, the majority of participants identified as female ($n = 223; 62.8\%$) or male ($n = 121; 34.1\%$). Four participants identified as “other” or “non-binary” (1.1%).

The sample identified as predominantly White/Non-Hispanic, $n = 306; 86.2\%$. Black/African-American participants comprised 5.9% of the sample, $n = 21$. The final 9.1% ($n = 24$) of participants identified as Asian ($n = 8$), Hispanic ($n = 6$), multiracial ($n = 3$), “other” ($n = 6$), or American/First Nations, Alaska, or Hawaii Native ($n = 1$).

**Descriptives**

**Fearfulness of an active shooter situation occurring.** Participants were asked how fearful they were of an active shooter event occurring on campus within the next year. Overall, participants reported moderate levels of fear in this respect ($M = 2.04$, $SD = 0.92$, see Table 1). Women, however, reported on average high levels of fear ($M = 2.14$,
SD = 0.96, see Table 2), whereas men reported low to moderate levels (M = 1.86, SD = 0.83, see Table 3). To test the hypothesis that women would be more fearful of an active shooter incident occurring than men, independent samples t-tests were calculated first comparing men and women. Participants identifying as “non-binary” or “other” were removed from these analyses due to the small sample size. Levene’s test was significant, meaning the variances for men and women were unequal. Because there are twice as many women as men in the sample (ratio approximately = 1:2), the t-test was not robust to violations of variance, so the Welch-Satterthwaite method was used. Employing this method, women reported significantly greater fear of an active shooter event occurring than did men, t(291) = -4.48, p < .001.

**Perceived likelihood of an active shooter situation occurring.** Considering the sample as a whole, participants reported moderate levels in terms of perceived likelihood of an active shooter event occurring (M = 2.59, SD = 1.08, see Table 1). Women reported high perceived likelihood (M = 2.75, SD = 1.05, see Table 2), whereas men reported low to moderate perceived likelihood (M = 2.30, SD = 1.08, see Table 3). Again utilizing the Welch-Satterthwaite method for an independent samples t-test, women perceived active shooter events as significantly more likely to occur in the next year than did men, t(225) = -3.64, p < .001.

**Efficacy for active shooter situations.** Participants altogether reported moderate levels of perceived self-efficacy in terms of their ability to capably respond in the event of an active shooter event occurring on campus (M = 7.66, SD = 1.67, see Table 1). Women reported low to moderate levels (M = 7.48, SD = 1.66, see Table 2), while men tended to report moderate to high levels of perceived self-efficacy (M = 8.07, SD = 1.55,
see Table 3). Once again using the Welch-Satterthwaite method for an independent samples $t$-test, men reported significantly greater self-efficacy than did women, $t(247) = 3.19, p < .001$.

**Discussion**

This study furthers the line of research being conducted at the University of Mississippi with regard to hazards to college campuses. Mulvey (2018) examined similar variables pertaining to active shooter-related situations on campus, but exclusively focused on the student population. Collecting data on the university’s faculty and staff serves to complement that research. This study also contributes to related research conducted at the UM campus by Tkachuck et al. (2018) and Weber et al. (2018) with regard to natural hazards. This study ultimately provided a more comprehensive understanding of the attitudes and knowledge of members of the UM community specifically, with broader implications for other institutions of higher learning. There is a gap in the active shooter literature focusing on university employees, as students have been the primary population of concern in the existing research. The current study sought to contribute to the currently available information about the relationship between university employees and campus active shooter-related situations. We followed the relationships established in the literature with respect to fearfulness, perceived likelihood, and perceived self-efficacy relating to mass shootings in schools, with attention for how gender influences each of these factors. It was hypothesized that participants would report low levels of confidence in their ability to respond to an active shooter event (i.e., self-efficacy), with men tending to report greater self-efficacy than women. It was also hypothesized that, in comparison to men, women would report a greater perceived
likelihood and greater fearfulness of an active shooter event occurring on campus in the next year. Overall, the data support the current study’s hypotheses.

Participants reported moderate self-efficacy with respect to responding to an active shooter event. This contradicted the first part of our original hypothesis, that participants would report low levels of perceived self-efficacy with regard to the ability to prepare for and/or respond to an active shooter event occurring on campus. Ostensibly, this may be a good thing, as it seems that university employees may perceive more confidence in their ability to protect themselves from an active shooter than we originally anticipated. When analyzed by gender, however, the latter half of the self-efficacy hypothesis was supported. Men reported significantly greater self-efficacy than women. One possible explanation for this gender difference could be attributed to women’s lack of involvement in emergency management (Ashraf & Azad, 2015). Moreover, it should be noted that the confidence in one’s ability to capably react to an active shooter event may not correspond with one’s actual ability. Such factors are important to take into consideration when interpreting these results.

In terms of perceived likelihood of an active shooter event occurring on campus, the results once again proved to be statistically different by gender, \( t(225) = -3.64, p < .001 \). Women perceived a greater likelihood of an active shooter event occurring on campus in the next year. The majority of both female and male participants reported that an active shooter event occurring on the UM campus in the next year was “neither likely nor unlikely” \((n = 109; 30.7\%)\). Conversely, few males perceived that it was “likely” or “extremely likely” that a shooting would occur on the UM campus in the next year \((n = 79; 22.3\%)\). There is some support in the literature that men may underestimate
emergency likelihood while women may be more accurate in their perceptions (e.g., Mills, Mutafoglu, Adams, Archibald, Bell, & Leon, 2016). However, in the current study it remains unclear to what extent men and women are accurate in their perceptions of likelihood. Perception of likelihood has important implications for preparedness training and education because it may motivate individuals to engage in preparedness behaviors.

The final item analyzed by gender was fearfulness of an active shooter event taking place on the UM campus in the next year. As predicted, the difference between men and women was statistically significant, \( t(291) = -4.48, p < .001 \). Women reported higher levels of fear of an active shooter event occurring on the UM campus in the next year than did men.

These data support the relationship established by Mulvey (2018) regarding perceptions and preparedness of an active shooter event and how gender influences these factors. The data do not support a portion of our hypothesis, specifically that participants in general would report low levels of self-efficacy in their ability to respond to an active shooter event, as compared to previous findings of lower levels of confidence with UM employees in responding to and guiding students during incidents of mass violence (Weber et al., 2018). However, the latter portion of the hypothesis, that males would tend to report greater self-efficacy than females, was supported. The data also support the hypotheses that females would perceive an active shooter event to be more likely, and that they would be more fearful of an active shooter event taking place over the next year. While the current data add to the literature in this area, it also provides the basis for several institution-specific recommendations.
Strengths and Recommendations

This study has multiple strengths. For instance, the sample size was large enough to allow for appropriate and useful statistical analyses. Another strength is that the investigation focused on an important but often overlooked population in the available literature on active shooter preparedness in the educational setting, namely university employees. In the event of an active shooter on campus, university employees must not only protect themselves, but they must be aware and responsive to the fact that students often look to them in times of such emergency. For this reason, it is important to have an understanding of the perceptions, knowledge, and preparedness of university employees. Do they know what to do in the case of an active shooter occurrence on campus? Do they have confidence in their ability to respond effectively?

Another strength of the study is that, while it has implications for institutions of higher learning in the U.S., it also includes enough specificity to allow for institution-specific recommendations for the UM campus. One recommendation is that the UM campus could benefit from more education and training in terms of perceptions and preparedness relating to active shooter situations. This recommendation originally was offered by Mulvey (2018) in relation to the UM student population. Our data support this recommendation with respect to faculty and staff. For example, when surveying participants about the university’s resources, training, and communication available or provided to faculty and staff, we found that 72.1% ($n = 256$) of university employees had seen the active shooter video. Even more concerning, only 41.4% ($n = 147$) of faculty and staff indicated that they had participated in the active shooter workshop provided by
UPD. These results demonstrate the need for active shooter training to be further implemented and mandated with faculty staff on the UM campus.

While efforts to educate UM employees have been initiated over the last year, more should be done to enhance preparedness efforts on campus. For instance, the UM administration could make it a requirement for existing employees to complete the active shooter training workshop. This requirement could also be incorporated into the orientation of new employees, establishing an emphasis on the importance of preparedness as part of the campus culture. This would ensure that university employees would receive physical training (not just a basic education via a brief video) for responding to an active shooter incident on campus. Those who receive active shooter response training are more likely to believe that they could adequately prepare and/or respond in an emergency, i.e., they report greater self-efficacy with respect to preparing for an active shooter event (Jones et al., 2014; Snyder, 2014). Thus, education and training individuals for active shooter events on campus has many benefits.

Another recommendation made by Mulvey (2018), consistent with the findings of the current study, is the consideration of gender differences in preparedness research, training, and drills for active shooter events on campus. More research must be done to replicate these findings and to clarify why these gender differences occur. When and how should training programs be tailored to meet the respective needs of men and women? It could very well be the case that women may benefit from added focus on self-efficacy enhancement. However, it could also very well be the case that men may be overestimating their sense of confidence in their ability to respond to an active shooter event on campus. Or it could turn out that both men and women would benefit from
enhanced self-efficacy along these lines (i.e., both would benefit from self-efficacy but perhaps women even more so given the statistically significant difference). The practical implications of any gender differences need to be better understood in the context of active shooter incidents. Moreover, there may be differences in how people think they will respond to such an incident in relation to how that would actually respond under the stress of such an incident.

Once these findings are replicated and the implications better understood, preparedness initiatives may be tailored accordingly, assessed as they progress, and further tailored to meet the needs of the population over time. These recommendations have strong relevance beyond the UM campus, extending to other institutions of higher education throughout the U.S. Understanding gender differences among university employees is an important step in preparing them to respond in the event of an active shooter on campus. It is essential that postsecondary institutions throughout the U.S. prepare their employees accordingly for the occurrence of an active shooter incident on campus, so that they may better protect themselves as well as help guide students in such times of emergency.

**Study Limitations**

Like all studies, the current investigation was not without limitations. First, there were not enough participants identifying as “non-binary” to utilize this group in gender comparisons. Consequently, this group was excluded from the analyses. Second, the sample was predominantly White and female. Although there are a greater number of women employed by UM than there are men (The University of Mississippi Office of Institutional Research, Effectiveness, and Planning, 2016), the study sample was
compared to a disproportionate number of women. Third, this study did not offer an incentive for potential participants to complete the survey, so employees did not have outside motivation to participate, above and beyond the importance of the data for the safety of the campus community. Participants who did complete the survey could differ in appreciable ways from those participants who did not complete the survey. We can only speculate on potential differences between these individuals. Fourth, since the study was correlational, largely quantitative, with data collected at one point in time, we cannot speak with confidence as to the practical utility of the documented gender differences. We also cannot speak to the degree that the reports of men and women are accurate (i.e., under-reporting or over-reporting). These limitations warrant further empirical scrutiny.

Further Research Directions

There are several implications of this study for future research. The existing data could be analyzed to examine the relationship between active-shooter related perceptions, knowledge, and experiences with respect to several other factors, such as race/ethnicity, employee classification (e.g., academic staff, nonacademic staff), age, etc. Examining different variables would provide important information to the existing active shooter literature about university employee perceptions and knowledge. In turn, other campuses could use these data in studies of their own, corresponding populations. This approach is beneficial in several ways. Primarily, it would provide universities with a better understanding of their employees’ perceptions and preparedness of active shooter situations. In turn, this would allow them to target specific subgroups on their campuses that may need tailored training and education relative to active shooter situations. Each university has its own unique environment. If other universities conduct similar studies,
these institutions can tailor their data to meet the distinctive needs of their respective populations, climates, and cultures.

Another direction the UM campus specifically could take concerning this line of research would be to collect data using a similar questionnaire with only instructors and other personnel whose role includes teaching students. The main focal point of the study would be issues related to guiding students in the event of an active shooter. Such a study could parallel the current one, although examining variables such as knowledge, preparedness, and perceived self-efficacy with greater specificity with respect to capably guiding students in the event of an active shooter on campus. The data examined from this study would give the UM administration a better, more complete idea of how prepared the campus is in relation to an active shooter on campus. Thus, the UM community would gain a research-informed understanding of how to adequately improve campus preparedness efforts. These data could also be used by other universities to conduct similar studies, leading to a broader understanding of how institutions of higher education in the U.S. as a whole may improve campus preparedness, mitigation, and response.

Finally, the survey included items that encompassed a wider variety of campus-related crimes (see Appendix A). If the study participants indicated they experienced a campus-related crime, the survey concluded with an invitation to complete additional questions assessing various factors potentially resulting from their experience. These existing data could be examined in a subsequent study, in detail, to see which university employees have been impacted and specifically how they were affected by various campus-related crimes. It would be beneficial on an institutional level to examine a
broader spectrum of potential campus crimes. College campuses are typically thought to be a safe place (Thompson et al., 2009), and in many respects they may very well be. However, it only takes a single person to threaten the integrity, peace, and security of another, and potentially countless others. As active shooter events continue to occur in U.S. schools, actions must be taken to ensure the safety of campus communities nationwide.
References


Table 1. Descriptive statistics for the total sample of university faculty and staff.

<table>
<thead>
<tr>
<th>Scale</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Min.</th>
<th>Max.</th>
<th>Skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived likelihood of an active shooter on campus in next year</td>
<td>335</td>
<td>2.59</td>
<td>1.08</td>
<td>1</td>
<td>5</td>
<td>-0.122</td>
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<tr>
<td>Fear of an active shooter on campus in the next year</td>
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<td>2.04</td>
<td>0.92</td>
<td>1</td>
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<td>0.741</td>
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<tr>
<td>Self-efficacy</td>
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<td>7.66</td>
<td>1.67</td>
<td>2</td>
<td>10</td>
<td>-0.729</td>
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<tr>
<td>Knowledge of active shooter information</td>
<td>349</td>
<td>5.52</td>
<td>1.69</td>
<td>0</td>
<td>7</td>
<td>-1.835</td>
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<tr>
<td>Campus violence preparedness actions taken</td>
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<td>2.97</td>
<td>1.60</td>
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<td>6</td>
<td>-0.127</td>
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### Table 2.
*Descriptive statistics for female faculty and staff in the sample.*

<table>
<thead>
<tr>
<th>Scale</th>
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<th>M</th>
<th>SD</th>
<th>Min.</th>
<th>Max.</th>
<th>Skewness</th>
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<tbody>
<tr>
<td>Perceived likelihood of an active shooter on campus in next year</td>
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<td>1</td>
<td>5</td>
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<tr>
<td>Self-efficacy</td>
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<td>7.48</td>
<td>1.66</td>
<td>2</td>
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<td>-0.707</td>
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<td>Knowledge of active shooter information</td>
<td>223</td>
<td>5.62</td>
<td>1.54</td>
<td>0</td>
<td>7</td>
<td>-2.045</td>
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<td>Campus violence preparedness actions taken</td>
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<td>1.50</td>
<td>0</td>
<td>6</td>
<td>-0.047</td>
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Table 3.
*Descriptive statistics for male faculty and staff in the sample.*

<table>
<thead>
<tr>
<th>Scale</th>
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<th>M</th>
<th>SD</th>
<th>Min.</th>
<th>Max.</th>
<th>Skewness</th>
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</thead>
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<td>Perceived likelihood of an active shooter on campus in next year</td>
<td>114</td>
<td>2.30</td>
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<td>Knowledge of active shooter information</td>
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<td>Campus violence preparedness actions taken</td>
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<td>2.94</td>
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<td>0</td>
<td>6</td>
<td>-0.205</td>
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</table>
Appendix A

*University of Mississippi Faculty/Staff Preparedness Survey.* This brief questionnaire is part of a joint effort between the University of Mississippi’s Clinical-Disaster Research Center (UM-CDRC) and the University’s Incident Response Team (IRT). Your responses to this measure will help us learn more about your concerns and experiences relating to on-campus safety and different kinds of violence, such as an active shooter on campus. This information is essential in assisting the University with safety preparedness efforts on campus.

Please note that, while we will be asking about your thoughts and experiences in terms of the Oxford campus and your sense of safety, this measure is not intended to be an outlet to directly report a crime to campus officials. If you have specific information about a crime that occurred on campus, and you would like to make a report, please contact The University of Mississippi Police Department in Kinard Hall-Wing C, at (662) 915-7234.

Research studying on-campus issues affecting our University couldn’t be done without your help, so we really appreciate you taking the time to participate. To navigate through this study, please click the ‘>>’ button at the bottom of the screen. You will not be able to go back to a previous screen.

Consent

**Consent to Participate in this Survey**

**Description**

This brief questionnaire is part of a joint effort between the University of Mississippi’s Clinical-Disaster Research Center (UM-CDRC) and the University’s Incident Response Team (IRT). Our goal is to develop a program of research that will serve our campus and community in the event of an incident of mass violence. Your responses to this measure will help us learn more about your concerns and experiences relating to on-campus safety and different kinds of violence, such as an active shooter on campus. This information is essential in assisting the University with safety preparedness efforts on campus. If at any time you have questions or concerns relating to this survey, please contact Dr. Stefan Schulenberg (sschulen@olemiss.edu; 662-915-3518). Please note that, while we will be asking about your thoughts and experiences in terms of the Oxford campus and your sense of safety, this measure is not intended to be an outlet to directly report a crime to campus officials. If you have specific information about a crime that occurred on campus, and you would like to make a report, please contact The University of Mississippi Police Department in Kinard Hall-Wing C, at (662) 915-7234.

**Risks and Benefits**

There are no anticipated risks associated with participating in this project beyond those normally encountered in daily life. Benefits associated with your participation include increased understanding of attitudes towards safety preparedness.

**Costs and Payments**

The survey should take approximately 10 minutes. There are no other costs for helping us with this study.

**Confidentiality**

Your name will not be associated with the responses that you give. Therefore, unless you
self-identify we will not be able to identify you from the information that we collect, and all data collected will be reported in group summaries.

**Right to Withdraw**
Please understand that your participation is voluntary. You may choose to discontinue your participation at any time without penalty or loss of benefits.

**IRB Approval**
This study has been reviewed by The University of Mississippi’s Institutional Review Board (IRB). If you have any questions, concerns or reports regarding your rights as a research participant, please contact the IRB at (662) 915-3929.

**Statement of Consent** I have read the above information. By continuing to the next screen, I consent to participate in the study.

**DEMOGRAPHICS**

Please answer the following questions about yourself.

What is your age?
- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65+

What is your gender?
- Male
- Female
- Other __________________

With which ethnicity do you most identify?
- Black/African American
- White/non-Hispanic
- Hispanic/Latino
- Asian
- Pacific Islander
- Native American/First Nations, Alaska or Hawaii Native
- Multiracial
- Other ____________

How many years have you been working at the University of Mississippi?
- Less than 1 year
- 1-5 years
- 6-10 years
- 11-15 years
- 16-20 years
- 21-25 years
- Over 25 years
Have you or do you currently serve in the armed forces?
  o  Yes
  o  No

Display This Question:
If ArmedForces = Yes

Which of the following BEST describes your current status with the armed forces?
  o  Active duty
  o  National Guard/Reserves
  o  Veteran (more than 90 days of active duty)

Display This Question:
If ArmedForces = Yes

With which branch of the military were you affiliated?
  •  Army
  •  Navy
  •  Air Force
  •  Marines
  •  Coast Guard
  •  Other ___________________________

What is your PRIMARY role or job category at the University of Mississippi?

For example, if you are a graduate student that also teaches courses, your primary role is graduate student; if you are an undergraduate who works on campus then your primary role is whichever role came first, "I take classes here because I work here" vs "I work here because I take classes here (work-study)".
  o  Academic & Student Services
  o  Accounting & Finance
  o  Administrative & Clerical
  o  Arts, Communication, Marketing, & Media
  o  Athletics
  o  Coaches
  o  Development/Advancement
  o  Education & Training
  o  Executives & Deans
  o  Facilities Operations
  o  Faculty
  o  Healthcare
  o  Information Technology
  o  Legal & Audit Services
  o  Libraries & Museum
  o  Public & Environmental Safety
  o  Research & Grants Administration
  o  Retiree
  o  Science, Engineering, & Research (non-faculty)
  o  Student - Undergraduate
What is your SECONDARY role or job category at the University of Mississippi?
- I do not have a secondary role
- Academic & Student Services
- Accounting & Finance
- Administrative & Clerical
- Arts, Communication, Marketing, & Media
- Athletics
- Coaches
- Development/Advancement
- Education & Training
- Executives & Deans
- Facilities Operations
- Faculty
- Healthcare
- Information Technology
- Legal & Audit Services
- Libraries & Museum
- Public & Environmental Safety
- Research & Grants Administration
- Retiree
- Science, Engineering, & Research (non-faculty)
- Student - Undergraduate
- Student - Graduate
- Other (please describe briefly) __________________________

Do you lecture or teach at least one course regularly at the University of Mississippi?
- Yes, I teach primarily at the Oxford Campus
- Yes, I teach primarily at the non-Oxford branch campuses
- Yes, I teach primarily online courses
- No, I do not teach courses

Please note which of the following branch campuses where you teach at least one course on a regular basis. Check all that apply.
- DeSoto (Southaven)
- Tupelo
- Booneville
- Grenada
- University Medical Center in Jackson
- Other __________________________
Currently, what is your average class size? (The most common class size that you are teaching this semester.)

- 0-15
- 16-30
- 31-60
- 61-100
- 101-150
- 151-200
- 201+

Display This Question:

If Teach = Yes, I teach primarily at the Oxford Campus
Or Teach = Yes, I teach primarily at the non-Oxford branch campuses
Or Teach = Yes, I teach primarily online courses

In the courses you teach, do you orient students toward the topics below? Examples include providing information in your syllabus, discussing with students on the first day of class, and/or notifying students of safe areas in the building where the class is held.

- Yes, for disaster preparedness (broadly speaking)
- Yes, specifically for active shooter situations
- Yes, for other forms of campus violence (please describe):
  ________________

- ⊗ No, I do not orient students to any of these issues

CRIME EXPERIENCE & PERCEPTIONS (Mulvey, 2018)

Please answer the following questions about safety, crime, and the Oxford campus.

Have you ever personally experienced a crime while on the Oxford campus?

- Yes
- No

Display This Question:

If PersCrime = Yes

What type of crime(s) did you personally experience while on the Oxford campus? Check all that apply

- Property crime (e.g., theft, vandalism, robbery, burglary, arson)
- Violence directed at me without a weapon being used (e.g., robbery, sexual assault, or assault of a non-sexual nature)
- Violence directed at me with a weapon being used that was _not_ a gun, such as a knife, club, etc. (e.g., robbery, sexual assault, or assault of a non-sexual nature)
- Violence directed at me with a _gun_ being used (e.g., robbery, sexual assault, or assault of a non-sexual nature)
• Other _______________________________________________________

To what extent are you fearful of being robbed or mugged while on the Oxford campus?
  o Not at all fearful
  o Slightly fearful
  o Fearful
  o Very fearful
  o Extremely fearful

To what extent are you fearful of being attacked by someone with a weapon?
  o Not at all fearful
  o Slightly fearful
  o Fearful
  o Very fearful
  o Extremely fearful

To what extent are you fearful of being sexually assaulted?
  o Not at all fearful
  o Slightly fearful
  o Fearful
  o Very fearful
  o Extremely fearful

To what extent are you fearful of having your things stolen from you (e.g., laptop, backpack)?
  o Not at all fearful
  o Slightly fearful
  o Fearful
  o Very fearful
  o Extremely fearful

To what extent are you fearful of having your car stolen?
  o Not at all fearful
  o Slightly fearful
  o Fearful
  o Very fearful
  o Extremely fearful

To what extent are you fearful of being stalked?
  o Not at all fearful
  o Slightly fearful
  o Fearful
  o Very fearful
  o Extremely fearful

Do you avoid places on or around the Oxford campus out of concern for your safety?
  o Yes
  o No
What areas on or around the Oxford campus do you avoid out of concern for your safety?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

How confident are you that the police can prevent violent crime on the Oxford campus?

- Not confident at all
- Slightly confident
- Moderately confident
- Very confident
- Extremely confident

How effective is the University Police Department with respect to preventing crime?

- Not effective at all
- Slightly Effective
- Moderately effective
- Very effective
- Extremely effective

How effective is the University Police Department with respect to maintaining order on campus?

- Not effective at all
- Slightly effective
- Moderately effective
- Very effective
- Extremely effective

To what extent do you agree with the following statement?

When I am on the Oxford campus, my personal safety is my responsibility (in comparison to UPD/UM administration).

- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

CONCEALED CARRY (Mulvey, 2018)

Have you ever carried a concealed firearm on your person while on the Oxford campus?

- Yes
The University of Mississippi has a policy that prohibits firearms on campus.

- Yes
- No
- Not sure

The Oxford campus has a policy that prohibits firearms on campus. The policy is noted below (see also https://secure4.olemiss.edu/umpolicyopen/ShowDetails.jsp?istatPara=1&policyObjidPara=12092519).

University of Mississippi Weapons on Campus

SUMMARY: Except under the narrow circumstances outlined in this policy, the possession of firearms on campus is prohibited and constitutes a felony under Mississippi law.

PEOPLE AFFECTED: Faculty, staff, students, visitors and the employees of contractors.

In accordance with IHL policy and state law, it is a felony to possess a firearm, pistol, shotgun, rifle, or other deadly weapon (a “Firearm”) on the University of Mississippi campus or on any property owned by or controlled by the University (“the University Campus”) except as outlined in this policy.

Sworn law enforcement officers on the University Campus may carry a Firearm on their person or in their vehicle when authorized to do so by the University of Mississippi Chief of Police, or when authorized to do so by state or federal law.

Members of the Ole Miss Women’s Rifle Team may possess and use weapons sanctioned for their sport at the Ole Miss Rifle Center as may competing teams.

Visitors to the University Campus who have been issued an Enhanced Carry Permit according to the provisions of Mississippi Code Annotated § 97-37-7(2) may not carry a concealed Firearm in areas that have been designated as sensitive or non-public areas (“Sensitive Areas”). Sensitive Areas on the University Campus include:

1) Academic buildings, including any buildings with classrooms or laboratories
2) Administrative offices and buildings
3) Athletics facilities, including, but not limited to, Vaught-Hemingway Stadium, Oxford/University Stadium, the Pavilion, any playing field, any practice facility, and any area where an athletics event is being held.
4) Any residence hall
5) Fraternity and sorority houses
6) Turner Recreation Center and recreation areas under the control of Campus Recreation
7) The Oxford/University Airport
8) Any area where a ticketed event is being held
9) Any area where a University scheduled event is being held
10) Any area where a class or lab is being conducted

In accordance with state law and IHL policy, students, University employees and the employees of contractors on campus may not possess firearms on campus, regardless of whether the individual possesses an Enhanced Carry Permit.

Because of the density of crowds on campus during football game days, no individual may possess a Firearm anywhere on the University Campus on a football game day, regardless of whether the individual possesses an Enhanced Carry Permit. No individual may possess a Firearm anywhere on the University Campus during commencement day, or within 500 feet of any concert, parade, or rally in progress regardless of whether the individual possesses an Enhanced Carry Permit.

No one may possess a Firearm on campus while engaged in any type of criminal activity or while consuming or under the influence of alcohol or under the influence of any drug, including illegal drugs and prescription medication, regardless of whether the individual possesses an Enhanced Carry Permit. An individual with an Enhanced Carry Permit may not brandish his or her Firearm or use it to intimidate or threaten another individual. The discharge of any Firearm on campus is strictly prohibited.

How likely is it that a shooting will occur on the Oxford campus in the next year (i.e., an "active shooter")?
- Extremely unlikely
- Somewhat unlikely
- Neither likely nor unlikely
- Somewhat likely
- Extremely likely

How fearful are you that a shooting will occur on the Oxford campus in the next year (i.e., "an active shooter")?
- Not fearful at all
- Slightly fearful
- Moderately fearful
- Very fearful
- Extremely fearful

How certain are you that you know what to do if a shooting occurred while you were on the Oxford campus (i.e., an "active shooter")?
- Extremely uncertain
Imagine that an active shooter situation occurred on the Oxford campus. How likely would you be to follow instructions provided by a faculty member?
- Very Unlikely
- Unlikely
- Somewhat Unlikely
- Somewhat Likely
- Likely
- Very Likely

Imagine that an active shooter situation occurred on the Oxford campus. How likely would you be to follow instructions provided by a non-academic staff member (e.g., a cafeteria worker, a groundskeeper)?
- Very Unlikely
- Unlikely
- Somewhat Unlikely
- Somewhat Likely
- Likely
- Very Likely

Imagine that an active shooter situation occurred on the Oxford campus. How likely would you be to follow instructions provided by an academic staff member (e.g., a departmental administrative secretary)?
- Very Unlikely
- Unlikely
- Somewhat Unlikely
- Somewhat Likely
- Likely
- Very Likely

Imagine that an active shooter situation occurred on the Oxford campus. How likely would you be to follow instructions provided by an officer from the University Police Department (UPD)?
- Very Unlikely
- Unlikely
- Somewhat Unlikely
- Somewhat Likely
- Likely
- Very Likely

Imagine that an active shooter situation occurred on the Oxford campus. How likely would you be to follow instructions provided by a student?
- Very Unlikely
ACTIVE SHOOTERS IN SCHOOLS

- Unlikely
- Somewhat Unlikely
- Somewhat Likely
- Likely
- Very Likely

ACTIVE SHOOTER KNOWLEDGE (Mulvey, 2018)

On average, how long does an active shooter incident last, from first shot to last shot?
- A few minutes
- 10 to 20 minutes
- 30 to 40 minutes
- Over an hour

Good practices for coping with an active shooter situation include (check all that apply)
- Being aware of your environment and any possible dangers
- Taking note of the two nearest exits in any facility you visit
- If you are in an office, staying there and securing the door
- If you are in a hallway, getting into a room and securing the door
- Calling 911 when it is safe to do so

The role of the first law enforcement officers who arrive at the scene of an active shooter is to help injured persons.
- True
- False

Do you know what it means to "shelter in place"?
- Yes
- No
- Not sure

Below is an explanation for the phrase, "shelter in place."
Lockdown for Intruder – Shelter in Place

Depending on the nature of an incident (intruder) the building administrator or emergency responder should advise instructions regarding a lockdown and/or shelter in place.

Seek shelter in the nearest office or classroom.

Lock or barricade office, classroom – DO NOT LOCK EXTERIOR DOORS.

Turn off lights, close windows and pull shades.

Remain quiet and do not enter hallways.
Be prepared to ignore any fire alarm activation - the school will not be evacuated using this method. An intruder may have set the alarm off on purpose. Should the fire alarm sound, do not evacuate the building unless:
1) You have first hand knowledge that there is a fire in the building.
2) You are in imminent danger, or
3) You have been advised by a public safety official to evacuate the building.

Crouch down in areas that are out of sight from doors and windows.

If movement is necessary, do so quietly and as quickly as possible.

Remain in building until told to evacuate by the building mayor or public safety official. DO NOT respond to anyone until ALL CLEAR is announced.

For more information see olemiss.edu/emergency/lockdown.html

Active Shooters fit a distinct profile.
- True
- False

Active Shooters do NOT fit a distinct profile. They can be of all races, ages, religious or political affiliations, and genders.

Active shooters only target people with whom they have a connection.
- True
- False

While about 55% of active shooters have a connection to their victims, about 45% have no connection to their victims.

THREE-ITEM WORRY INDEX (Kelly, 2004)

Please provide one answer that best describes your answer to each statement.

1. How often do you worry?
   - 1 - Never/Not at All
   - 2
   - 3
   - 4
   - 5
   - 6
   - 7
   - 8
   - 9
   - 10 - Continuously/Very Much

2. How much is worry a problem for you?
   - 1 - Not at All
   - 2
3. To what extent would you call yourself a worrier?
   o 1 - Never/Not at All
   o 2
   o 3
   o 4
   o 5
   o 6
   o 7
   o 8
   o 9
   o 10 - Continuously/Very Much

GENERAL SELF-EFFICACY SCALE (Schwarzer & Jerusalem, 1995)

Please take a few moments to complete the following brief measure. Your answers are important as they contribute to a better understanding of training and educational needs, further informing preparedness efforts on campus.

Use the following scale and mark one number for each statement to indicate how true each statement is for you.

I can always manage to solve difficult problems if I try hard enough
   o Not at all true
   o Hardly true
   o Moderately true
   o Exactly true

If someone opposes me, I can find the means and ways to get what I want
   o Not at all true
   o Hardly true
   o Moderately true
   o Exactly true

It is easy for me to stick to my aims and accomplish my goals
   o Not at all true
   o Hardly true
   o Moderately true
   o Exactly true
I am confident that I could deal efficiently with unexpected events
  o  Not at all true
  o  Hardly true
  o  Moderately true
  o  Exactly true

Thanks to my resourcefulness, I know how to handle unforeseen situations
  o  Not at all true
  o  Hardly true
  o  Moderately true
  o  Exactly true

I can solve most problems if I invest the necessary effort
  o  Not at all true
  o  Hardly true
  o  Moderately true
  o  Exactly true

I can remain calm when facing difficulties because I can rely on my coping abilities
  o  Not at all true
  o  Hardly true
  o  Moderately true
  o  Exactly true

When I am confronted with a problem, I can usually find several solutions
  o  Not at all true
  o  Hardly true
  o  Moderately true
  o  Exactly true

If I am in trouble, I can usually think of a solution
  o  Not at all true
  o  Hardly true
  o  Moderately true
  o  Exactly true

I can usually handle whatever comes my way
  o  Not at all true
  o  Hardly true
  o  Moderately true
  o  Exactly true

**UM RESOURCES, TRAINING, AND COMMUNICATION**

This next group of questions relate to resources, training, and communication available or provided to faculty and staff.

One of the University's resources is a video on how to respond in the case of an active shooter on campus. Have you seen this video?
  o  Yes, I've seen this
One of the University's resources is an active shooter workshop provided by UPD. Have you participated in this training?

- Yes, I've done this
- No, I have not done this

How effective do you think the active shooter video was in preparing you for an active shooter on campus?

- Not at all effective
- A little effective
- Somewhat effective
- Very effective
- Extremely effective

If you have any suggestions as to how the video could be improved, please note them below.

________________________________________________________________

How effective do you think the UPD active shooter training was in preparing you for an active shooter on campus?

- Not at all effective
- A little effective
- Somewhat effective
- Very effective
- Extremely effective

If you have any suggestions as to how the UPD active shooter training could be improved, please note them below.

________________________________________________________________

Have you registered to receive RebAlert text messages?

- Yes
- No

Have you downloaded the LiveSafe app to your phone, and have you registered so that the app is active?

- Yes
- No

The LiveSafe app allows you to share information with safety officials (anonymously if selected), request help in an emergency, access resources, and virtually walk with your friends to any destination through SafeWalk.

How do you PRIMARILY receive information about campus violence occurring on the Oxford campus (e.g., an assault, a shooting)?

- I rely on RebAlert text messages
- I rely on emergency alerts through the LiveSafe app
ACTIVE SHOOTERS IN SCHOOLS

- Radio/Television Alerts (e.g., Emergency Broadcast Service, Campus Cable TV Channel 69, Oxford Cable TV Channel 99)
- Facebook, Twitter, or other social media
- My friends or family alert me
- Other
- I don't automatically receive information about campus violence

Have you visited emergency.olemiss.edu to learn more about what you can do to prepare for threats to our campus?
- Yes
- No

SUPPLEMENTAL INVITATION

You indicated you had experienced a crime on campus. Would you be willing to aid our research by answering questions about what you've experienced as a result of this crime?
- Yes
- No

You indicated that you had experienced the following in the past year. Think about the event you consider the worst event, which means the event that currently bothers you the most. If only one event is shown below, please use that one as the worst event. Which event was that?

| PersType = 1 | Property crime (e.g., theft, vandalism, robbery, burglary, arson) (1) |
| PersType = 2 | Violence directed at me without a weapon being used (2) |
| PersType = 3 | Violence directed at me with a weapon being used that was not a gun, such as a knife, club, etc. (3) |
| PersType = 4 | Violence directed at me with a gun being used (4) |
| PersType = 5 | Another crime on campus (5) |

The worst or only experience you indicated from the last year was: {WorstEvent/ChoiceGroup/SelectedChoices}

PCL-5 (Weathers, Litz, Keane, Palmieri, Marx, & Schnurr, 2013).

Please answer the following questions about this event.

Below is a list of difficulties people sometimes have after stressful life events. Please read each item, and then indicate how distressing each difficulty has been for you DURING THE PAST SEVEN DAYS with respect to the crime that you experienced. If you experienced more than one crime, please respond considering the crime that has impacted you the most. How much were you distressed or bothered by these difficulties?
Other things kept making me think about it
  o  Not at all
  o  A little bit
  o  Moderately
  o  Quite a bit
  o  Extremely

I felt as if it hadn't happened or wasn't real
  o  Not at all
  o  A little bit
  o  Moderately
  o  Quite a bit
  o  Extremely

I was jumpy and easily startled
  o  Not at all
  o  A little bit
  o  Moderately
  o  Quite a bit
  o  Extremely

I tried not to think about it
  o  Not at all
  o  A little bit
  o  Moderately
  o  Quite a bit
  o  Extremely

My feelings about it were kind of numb
  o  Not at all
  o  A little bit
  o  Moderately
  o  Quite a bit
  o  Extremely

I had trouble falling asleep
  o  Not at all
  o  A little bit
  o  Moderately
  o  Quite a bit
  o  Extremely

I had waves of strong feelings about it
  o  Not at all
  o  A little bit
  o  Moderately
  o  Quite a bit
  o  Extremely

I tried not to talk about it
POST TRAUMATIC GROWTH INVENTORY (Tedeschi & Calhoun, 1996)

Indicate for each of the statements below the degree to which this change occurred in your life as a result of the worst crime you experienced:

I changed my priorities about what is important in life
- I did not experience this change
- I experienced this change to a very small degree
- I experienced this change to a small degree
- I experienced this change to a moderate degree
- I experienced this change to a great degree
- I experienced this change to a very great degree

I have a greater appreciation for the value of my own life
- I did not experience this change
- I experienced this change to a very small degree
- I experienced this change to a small degree
- I experienced this change to a moderate degree
- I experienced this change to a great degree
- I experienced this change to a very great degree

I have a better understanding of spiritual matters
- I did not experience this change
- I experienced this change to a very small degree
- I experienced this change to a small degree
- I experienced this change to a moderate degree
- I experienced this change to a great degree
- I experienced this change to a very great degree

I established a new path for my life
- I did not experience this change
- I experienced this change to a very small degree
- I experienced this change to a small degree
- I experienced this change to a moderate degree
- I experienced this change to a great degree
- I experienced this change to a very great degree

I have a greater sense of closeness with others
- I did not experience this change
- I experienced this change to a very small degree
- I experienced this change to a small degree
I experienced this change to a moderate degree
I experienced this change to a great degree
I experienced this change to a very great degree

I know better that I can handle difficulties
I did not experience this change
I experienced this change to a very small degree
I experienced this change to a small degree
I experienced this change to a moderate degree
I experienced this change to a great degree
I experienced this change to a very great degree

I am able to do better things with my life
I did not experience this change
I experienced this change to a very small degree
I experienced this change to a small degree
I experienced this change to a moderate degree
I experienced this change to a great degree
I experienced this change to a very great degree

I have a stronger religious faith
I did not experience this change
I experienced this change to a very small degree
I experienced this change to a small degree
I experienced this change to a moderate degree
I experienced this change to a great degree
I experienced this change to a very great degree

I discovered that I’m stronger than I thought I was
I did not experience this change
I experienced this change to a very small degree
I experienced this change to a small degree
I experienced this change to a moderate degree
I experienced this change to a great degree
I experienced this change to a very great degree

I learned a great deal about how wonderful people are
I did not experience this change
I experienced this change to a very small degree
I experienced this change to a small degree
I experienced this change to a moderate degree
I experienced this change to a great degree
I experienced this change to a very great degree

CLAREMONT PURPOSE SCALE (Bronk, Riches, & Mangan, 2018)

How clear is your sense of purpose in your life?
ACTIVE SHOOTERS IN SCHOOLS

- Not at all clear
- A little bit clear
- Somewhat clear
- Quite clear
- Extremely clear

How well do you understand what gives your life meaning?
- Do not understand at all
- Understand a little bit
- Understand somewhat
- Understand quite well
- Understand extremely well

How confident are you that you have discovered a satisfying purpose for your life?
- Not at all confident
- Slightly confident
- Somewhat confident
- Quite confident
- Extremely confident

How clearly do you understand what it is that makes your life feel worthwhile?
- Not at all clearly
- A little bit clearly
- Somewhat clearly
- Quite clearly
- Extremely clearly

How hard are you working to make your long-term aims a reality?
- Not at all hard
- Slightly hard
- Somewhat hard
- Quite hard
- Extremely hard

How much effort are you putting into making your goals a reality?
- Almost no effort
- A little bit of effort
- Some effort
- Quite a bit of effort
- A tremendous amount of effort

How engaged are you in carrying out the plans that you set for yourself?
- Not at all engaged
- Slightly engaged
- Somewhat engaged
- Quite engaged
- Extremely engaged

What portion of your daily activities move you closer to your long-term aims?
How often do you hope to leave the world better than you found it?
- Almost never
- Once in a while
- Sometimes
- Frequently
- Almost all the time

How often do you find yourself hoping that you will make a meaningful contribution to the broader world?
- Almost never
- Once in a while
- Sometimes
- Frequently
- Almost all the time

How important is it for you to make the world a better place in some way?
- Not at all important
- Slightly important
- Somewhat important
- Quite important
- Extremely important

How often do you hope that the work that you do positively influences others?
- Almost never
- Once in a while
- Sometimes
- Frequently
- Almost all the time

SURVEY CONCLUSION

Please use the space below to provide us with information related to your thoughts/feelings about campus violence that you were not able to express in the questions you were asked.

__________________________________________________________________________________________
__________________________________________________________________________________________

Please use the space below to provide us with information related to the questionnaire itself. Was it hard to understand? Were questions confusing? Was it too long?

__________________________________________________________________________________________
Please note that our survey is confidential and that we do not report any specific incidents that may have been disclosed in this study.

If you are currently experiencing any symptoms of distress as a result of these survey questions, we recommend that you seek services from a local provider, such as the Psychological Services Center (662) 915-7385 or the University Counseling Center (662) 915-3784, both available on campus.

To close this survey, please click the >> button at the bottom of the screen to finish this survey. The survey will then take you to the olemiss.edu/emergency web page and to the active shooter preparedness video, in the case that you may not have seen it previously and would like to.

This concludes the questionnaire. Thank you for your efforts. If you have any questions or concerns about your participation, please feel free to contact Dr. Stefan Schulenberg at sschulen@olemiss.edu or 662-915-3518. On behalf of the University of Mississippi's Clinical-Disaster Research Center and the University's Incident Response Team, we thank you for your help with this research. Your help will improve disaster preparedness efforts on campus. Your participation is greatly appreciated!