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Active Shooters on Campus: Student Perceptions and Institutional Recommendations at the University of Mississippi

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A thesis submitted to the faculty of The University of Mississippi in partial fulfillment of the

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Abstract

This study was part of a larger survey that examined crime on a college campus, attitudes about crime on campus, and knowledge about crime on campus. The objective of this study in particular was to evaluate students' knowledge and perceptions about active shooters on campus, and how these factors are influenced by gender. A cross-sectional survey was conducted with current students at the Oxford Campus of the University of Mississippi ($N = 482$). We hypothesized that female participants would show lower confidence in their ability to respond to (self-efficacy), and higher perceived likelihood and fearfulness of an active shooter event. The data suggest that the difference in gender between all of these factors was significant. In terms of self-efficacy, the difference in genders was statistically significant, $t(479) = 6.71$, $p < 0.001$, $d = 0.66$. In terms of perceived likelihood, the difference between genders was statistically significant, $t(479) = -2.98$, $p < 0.05$, $d = -0.3$. Finally, in terms of fearfulness, the difference between genders was statistically significant, $t(479) = -5.28$, $p < 0.001$, $d = -0.52$. Active shooter situations are on a rise in the United States, and this study provides some recommendations on an institutional level. These data begin to suggest portions of the student population on campus who could benefit from increased availability of information and targeted training.

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Active Shooter Situations

The working definition for an active shooter situation, as agreed upon by multiple

government agencies, is a situation in which a person (or people) is/are making a deliberate

effort to injure or kill individuals in a certain space (Blair & Schweit, 2014). The term

"active" is important due to the implication that the event is still progressing, and it alludes to

the possibility of an intervention, both on the part of law enforcement or otherwise (Blair &

Schweit, 2014). A 2014 Federal Bureau of Investigation (FBI) report indicated that, in the

United States, there were 160 active shooter incidents between the years 2000 and 2013. The

study used police records and other sources to gather information about these 160 incidents

that occurred nationwide in a variety of locations, and did not include incidents that were

gang-related, drug-related, or accidental. In these 160 incidents, 486 people were killed, and

a further 557 were wounded (Blair & Schweit, 2014). Since that study, Follman, Arsonson,

and Pan (2018) documented an additional 31 mass shootings.

Following an active shooter event in 2015, former President Barack Obama said in his

statement such events have become "routine" "this [active shooter event] has become routine

(Korte, 2016). The data support his assertion that active shooter incidents are on the rise.

From 2006 to 2013, the annual average mass shootings doubled compared to the previous

seven years (Blair & Schweit, 2014). More recently, an analysis done at the Harvard School

of Public Health found that mass shootings have tripled in frequency since 2011 (Cohen,

Azrael, & Miller, 2014). Since the Blair and Schweit study was published, 273 people have

been killed and 756 people have been injured in active shooter events. In the first three

months of 2018, there were two mass shootings—a shooting at a carwash in Melcroft,

Pennsylvania (killing 4 and injuring 3), a shooting at Stoneman Douglas High School in

Parkland, Florida (killing 17 and injuring 14), and a shooting at a nursing home in

Yountville, California (killing 3) (Follman et al., 2018).

Active Shooter Situations in Schools

Places of business and educational institutions collectively account for about 40% of active

shooter incidents (Follman et al., 2018). The Blair and Schweit (2014) study recorded 39

incidents at schools, 12 of which occurred at institutions of higher education. A list of active

shooter events at schools after the year 2000, selected and adapted from a 2014 FBI report

and Follman et al. (2018), are presented in Tables 1 and 2. Tables are organized based on

whether incidents occurred at institutions of higher education or whether they occurred at

high schools, junior high schools, and elementary schools.

The first mass shooting at a school in modern United States history was perpetrated by

Charles Whitman at the University of Texas at Austin in 1966 (Austin Police Department,

1966). One of the most infamous school shootings, however, is the 1999 shooting at

Columbine High School in Columbine, Colorado. The shooting at Columbine opened the

door for discussion about shootings on school campuses. A 2014 report by the Police

Executive Research Forum suggested that the reason the Columbine shooting garnered such a

strong reaction from the American people is that (with the exception of the previously

mentioned shooting in 1966), the nation had not witnessed a shooting like this (Fischer &

Newman, 2014). By and large, the American people were shocked that such a thing could

happen in a school in a middle-class neighborhood (Fischer & Newman, 2014). The highest

casualty count in a campus-related shooting, however, was the Virginia Tech incident that occurred on April 16, 2007 (Grayson & Meilman, 2013; Greenberg, 2007; Kramen, Massey, & Timm, 2009). Since then, events like the 2008 shooting at Northern Illinois University, the 2012 shooting at Sandy Hook Elementary School, and the February 2018 shooting at Stoneman Douglas High School (see Table 1) have become alarmingly more commonplace (Blair & Schweit, 2014; Follman, et. al., 2018). It should be noted that while the Columbine shooting has historically been the most infamous school-related shooting, the recent Parkland shooting is reminiscent of Columbine in many ways—specifically the large number of casualties and the large amount of national media attention. Both the event itself and the surviving students have accrued media attention en masse (e.g., CNN and related political/news programs). It is too soon to know, however, what the lasting impact of the Parkland shooting will be.

School-related shootings are clearly a societal problem that demands being addressed. Some of the deadliest mass shootings in U.S. history have occurred on school campuses (Follman et al., 2018). The National Center for Education Statistics reported that, in the fall of 2017, more than 20 million people were enrolled in an institution of higher education. This number does not include those in elementary or secondary schools (a reported 50.7 million as of the fall of 2017). These numbers represent a significant portion of the U.S. population. Active shooter events at schools are on the rise. They garner large amounts of media coverage, generating fear and concern well beyond the regions where the respective events occurred. Simply stated, student populations are adversely affected by the actual and potential occurrence of these events. The literature suggests several ways to predict and prevent future active shooter situations on campuses (see Institutional Preparedness), which will be

discussed in a section following an examination of the psychological impact of school-related shootings.

The Psychological Impact of School-Related Shootings

The psychological and emotional effects of a traumatic event are experienced by the injured, by friends and families, and by witnesses; indeed, the effects extend to the community as a whole (O'Toole, 2012). Poland, in his 1999 book, *Coping with Crisis: Lessons Learned,* suggested that schools should aim to reopen as soon as is appropriate, in order to avoid glorifying the perpetrator of the violence and discourage "copycats" (in this case, those who would attempt their own active shooter event in search of attention or recognition). There seems to be a growing consensus on this strategy in the literature. For example, in coverage of the February 2018 Parkland shooting of February 2018, some media outlets neither named the shooter nor showed his picture. In a 2007 journal article, Poland further suggested that "crisis becomes the curriculum" (p. 38), which is to say that testing and new material should be discouraged and open discussion should be encouraged to aid survivors in the grieving process. According to Poland, a healthy approach in the wake of a school-related shooting is to continue to meet during school hours, but focus on healing emotionally as a community given the psychological toll of such an event can be great.

Kaminski, Koons-Witt, Thompson, and Weiss (2010) conducted a study of college students at the University of South Carolina with respect to the impact of school-related shootings on fear of violent crime. Before this study, the evidence that there was an increase in fear following such events was anecdotal. In this first systematic study of this topic, the authors reported that, in the wake of the Virginia Tech and Northern Illinois University (NIU) shootings, fear of being a victim of a violent crime increased significantly. The

surveys were administered to respondents at the University of South Carolina both prior to

and following the shootings at both Virginia Tech and NIU. Women and minority group

members already showed fear levels that were significantly elevated compared to men and

white individuals. After the study, fear of being a victim of a violent crime increased across

all groups. The study provided evidence that both school-related shootings (Virginia Tech

and NIU) increased fear of crime on campus in students at a university located in a different

region of the United States. Moreover, the study provided evidence that some individuals

may experience more fear that others. For instance, fear of walking alone after dark increased

significantly in women, older students, and students living on campus.

The Kaminski et al. (2010) study is important to note because it demonstrates that school-

related shootings affect students attending schools in other areas of the United States.

Furthermore, as the geographical distance from the event increases, fear levels tend to

decrease (Kaminski et al., 2010). Cavanaugh, Bouffard Wells, and Nobles (2012) suggested

that this is because students view their school as their home, and it makes students

uncomfortable to seriously consider that such an event could possibly occur in their home.

The sentiment among students seems to be that "it (an active shooter situation) can't happen

here". In a focus group study conducted among UM students, one student replied "There's

too much else to think about, like classes, social life; there's too much to think about [rather

than] something that may or may not happen (Davis, 2016, p. 20)." Another indicated that

students concerned about a disaster on campus were "paranoid (Davis, 2016, p. 21)." An

individual's failure (or refusal) to acknowledge that such an event could happen on their own

campus is problematic because it may detract from their motivation to engage in

preparedness behaviors.

There are some predictors about the level to which a person who has experienced an incident of mass violence will be able to cope (Littleton, Axsom, & Grills-Taquechel, 2011). The impact of such an event is often traumatic, and many individuals find it difficult to continue their daily functioning (Keeling & Piercy, 2008). By way of examples, Vicary and Fraley (2010) and Lowe and Galea (2015) found that the average rate of Posttraumatic Stress Disorder (PTSD) in college students increased from 3.4 percent before the VT and NIU shootings to 64 percent two weeks after the shootings. Vicary and Fraley (2010) also found that women averaged almost 7 points higher than men on a measure of posttraumatic stress (the PTSD Symptom Scale – Self-Report; PSS-SR). Women had an average score of 20.24, while men had an average score of 13.93 (a score of 14 is considered to suggest severe PTSD symptoms). A study of women who attended NIU and were exposed to the campus shooting found significantly higher reports of posttraumatic stress symptoms than a baseline sample (Fergus, Rabenhorst, Orcutt, & Valentiner, 2011). A study at the National Institute for Health and Welfare in Finland found that the rate of PTSD symptoms in Finnish students following a mass shooting at their school was as high as 50 percent in women and 30 percent in men (Suomalainen, Haravuori, Berg, Kiviruusu, & Marttunen, 2011).

Institutional Preparedness

The literature surrounding preparedness for an active shooter event on campus is in consensus about two important things. The first, is that there is a "paucity of empirical evidence to guide school administrators in developing emergency preparedness and crisis response plans for school shootings" (Borum, Cornell, Modzelski, & Jimerson, 2010, p. 34). Other studies have corroborated this finding (Baer, Zarger, Ruiz, Noble, & Weller, 2014; Seo, Torabi, Sa, & Blair, 2012). The second conclusion that researchers corroborate is that it

is important for institutions to develop emergency plans that are comprehensive—they need to cover more commonplace hazards like floods or tornadoes (as is regionally appropriate) and less frequent events, like an active shooter (Baer et al., 2014; Borum et al., 2010; Seo et al., 2012; Weber, Schulenberg, & Lair, 2018). Walls (2013) demonstrated how preparedness for one disastrous event can mitigate the impact of an entirely different disaster using the example of the Boston Marathon bombing of 2013. Due to a heat wave the previous year, there was an increased presence of emergency medical responders. Because of this, when the bombs were detonated, transport of injured persons to nearby hospitals was easier to facilitate. In this way, preparedness for a more common hazard (heat wave) translated to preparedness for a less common one (incident of mass violence).

Schulenberg et al. (2008) made recommendations for natural disaster preparedness that makes a proactive and continuous effort to mitigate damage in anticipation of the next disaster, rather than retroactively attempting to alleviate it. This principle extends to violence prevention as well—damage control does little to prevent violence in the future or curtail an act of violence in progress. A study by Mitroff, Diamond, and Alpas (2006) found that universities tend to prepare for disasters based on previous experience, rather than by likelihood of the event. That is to say, that universities which have experienced a hurricane, for example, are more likely to prepare for a hurricane in the future, in comparison to a university that has not had this experience. In terms of this particular study, "disaster" refers to a range of events, including natural hazards, fire, and crime. On the basis of this finding, the optimal recommendation to be made for institutional preparedness would be to implement comprehensive and continuous emergency plans that include active shooter situations.

It is not enough, however, to have a plan in place in case of emergency. Part of preparedness at the institutional level is an ability to keep students and faculty informed. The 1990 Clery Act came into place following the murder of Jeanne Clery in her university dormitory (Fisher, Hartman, Cullen, & Turner, 2002). The Clery Act requires universities to disclose information about crimes occurring on or around campus so that students have the ability to make an informed decision about enrolling (Fisher et al., 2002). The Clery Act also mandated that universities implement some sort of emergency notification system (ENS) for a range of situations (Han, Ada, Sharman, & Rao, 2015). Han et al. (2015) found that students at a large public university self-reported they were 99% percent likely to comply with instructions in an ENS message. An earlier study, however, concluded that only 40% of students were subscribed to receive these messages (Kaminski et al., 2010). Compliance and preparedness behaviors can vary widely by institution. Baer et al. (2014) warned against the dangers of simply disseminating ENS messages at the time of an active shooting. They cited several problems with this approach. For example, there is the risk of false alarm messages and messages that lead people towards danger rather than away from it. Furthermore, many professors require students to turn off or silence their cell phones during class times. Baer et al. (2014), Burrus et al. (2010), Seo et al. (2012), and Weber et al. (2018) concurred that it is essential to develop and widely disseminate a comprehensive emergency plan well before the emergency occurs. The consensus in the literature is that having a plan for an active shooter must be coupled with training members of the campus community as to how to act to ensure their safety and the safety of those around them, should such a circumstance occur in the future.

The optimal emergency plan varies based on the education level of the institution. Fox and Savage (2009) found that measures that were effective at preventing or mitigating violence in high schools were less effective for institutions of higher education. This is due to fundamental differences between the respective characteristics of these two levels of education. For instance, high school campuses (as well as junior high school and elementary school campuses for that matter) tend to have fewer buildings that are closer together. When this is the case, a measure such as a lockdown drill can be quite effective. As Baer et al. (2014) pointed out, however, on more open campuses (e.g., institutions of higher education) a campus lockdown means potentially leaving innocent people moving between buildings with nowhere to seek shelter. There are, of course, other differences between educational levels, such as differences in age and maturity of students. Thus, as Fox and Savage (2009) posited, while a security measure such as a lockdown may be effective for the protection of children and adolescents in secondary school settings, for adults at the college level the more effective preparedness measure is to train students and conduct regular drills.

Individual Preparedness

Training faculty and staff to respond appropriately when an active shooter situation is in progress is an important way to mitigate its impact. Almost 40% percent of active shooter incidents take place in five minutes or less (Schweit, 2013). The short duration makes it clear that faculty, staff, and students have to be prepared to act quickly. In their 2014 study, Jones, Kue, Mitchell, Eblan, and Dyer found that those who received focused training to respond to active shooter situations indicated that they felt that they would be adequately prepared to respond in an emergency. Amongst emergency medical technicians (EMTs), active shooter response training increased self-efficacy by 40 percent (Jones et al., 2014).

It is crucial to build preparedness on the level of the individual. Institutional preparedness, as opposed to individual preparedness, has been well documented in the literature. For example, Seo et al. (2012) found that, out of 161 universities surveyed, 76% strongly agreed or agreed that they had "appropriate emergency procedures" to respond to campus violence like an active shooting, but only 25% responded that they strongly agreed or agreed that students understood the emergency procedures. Furthermore, only 57% felt that preventative training for violence prevention was regularly provided. Additionally, Snyder (2014) found that more than 97% of the sample of students at Liberty University agreed that they needed to receive training to prepare for a variety of emergencies, including active shooters. However, Thompson, Price, Mrdjenovich, & Khubchandani (2009) found that only 35% and 32% of a sample of 417 universities provided such a seminar to their students and faculty, respectively. This finding indicates a failure of supply and demand—students agree that they should learn, but are not being given access to the resources to do so. According to Stone and Spencer (2011), the effect on preparing the individual to react in an active shooter situation can be two-fold. That is to say that in addition to giving the individual the tools necessary to effectively respond to an active shooter situation, preparing the individual also provides increased confidence in the ability to react (Snyder, 2014).

Burruss, Schafer, and Giblin (2010) found that students generally feel prepared to protect themselves, and that they were "modestly confident" (p. vii) that faculty and staff could take appropriate action in the case of an active shooter. They also noted, however, that they could not definitively say whether or not these perceptions would prove themselves accurate in the case of an actual active shooting. Focus groups held at the University of Mississippi, however, found that students were underprepared for and unconcerned about emergency

situations (Davis, 2016). They also found that women were more likely to engage in preparedness behavior than men.

The literature surrounding preparedness for both disasters and small-scale crimes on college campuses has unequivocally established a difference in gender. Overwhelmingly, women are more concerned about the occurrence of a disaster, and are more likely to have made preparations in anticipation of these disasters occurring (Lovekamp & McMahon, 2011).

The literature also establishes a relationship between gender and attitudes about crime. Fox, Nobles, and Piquero (2009) point out that women report more frequently that they are fearful of being the victim of a crime than men. Burruss et al. (2010) and Kaminski (2010) also report data that analyzes fear by gender. When analyzed by gender, the female samples show significantly higher fearfulness than their male counterparts. Kaminski (2010) also found that following the 2007 shooting at Virginia Tech, women reported being more afraid of walking alone in the dark, but the male samples did not report any increase in fearfulness. Suomalainen et al. (2010) found that females were at an increased risk of reporting PTSD symptoms following an active shooter event. The literature suggests that women are more concerned about their personal safety, and that they take measures (avoid walking alone at night, etc.) to assuage this concern.

Though the literature surrounding disaster preparedness as a whole in college students is vast, there is not a widespread availability of research about student perceptions about active shooter situations on their own campuses. The consensus in the literature surrounding a larger variety of disasters establishes that female students report higher levels of concern than do the males. The literature also demonstrates that females are more afraid of being the

victim of a violent crime as a whole, and that they are more likely to take protective measures. There is a need, however, for research that shows student perceptions about active shooters specifically—how likely they perceive such an event to be, and their self-efficacy in terms of responding to such a situation.

The Present Study

Active shooter situations and incidents of mass violence in the late 20th and early 21st centuries have brought to light a need to investigate concerns and behaviors at schools, According to Follman et al. (2018) places of business and education account for a large proportion of active shooter situations, and as the literature has established, such incidents are on the rise. Following incidents like the Virginia Tech and Northern Illinois University shootings, the field is inundated with literature concerning the aftermath of an active shooter situation or incident of mass violence. There is not, however, sufficient information about students' attitudes, perceptions, and knowledge of active shooter events. Furthermore, disaster preparedness literature demonstrates that there is a disparity in perceptions about disasters between genders. There is not a widespread availability of information surrounding student perceptions of active shooters specifically. The consensus in the literature is that women are reporting being more fearful and perceiving a higher likelihood of a disaster and/or being the victim of a violent crime. Further research is needed to examine the difference in perceptions between genders for many reasons. The most practical of these reasons is knowing which students are the most fearful/have the lowest self-efficacy in terms of responding to an active shooter situation gives the university helpful information with regards to what students to target with information about training programs/emergency protocol.

The present study pulls from a survey that contains items that encompass a wide variety of crimes. This paper in particular is concerned with the data that directly pertains to active shooter situations on the University of Mississippi campus. I seek to examine the attitudes held by students and the experiences of students at the University of Mississippi with respect to active shooter events. The intention of this paper is to examine the relationship between gender and awareness, knowledge, and perceptions about active shooter events. This line of research is necessary, and its benefits are two-fold. This paper aims to provide institution-specific recommendations, and to learn more about which members of the community could most benefit from additional information and training. The present study also seeks to fill some gaps in the existing literature about student perceptions about active shooter situations.

Hypotheses

Due to the relationship established in the literature between gender and fearfulness of crime, it was hypothesized that women would report elevated levels of fear, and higher perceived likelihood of an active shooter event. Self-efficacy in terms of responding to an active shooter event was also analyzed by gender in order to determine whether a certain group of students would benefit from targeted training.

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Method

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Participants

An online survey was distributed via electronic mail to students at the University of Mississippi ($N = 482$). Participants were undergraduate (freshmen-seniors, 75.7%, $n = 365$) and graduate students (21.4%, $n = 21.4$). The final portion of the sample identified as "other" (2.9%, $n = 14$). Participants were not identifiable based on their responses. Demographic data for participants are provided in the Results section.

Measures

The survey consisted of several items intended to examine a range of variables. The present study was part of a larger investigation, and the survey in its entirety can be found in Appendix A. The first portion of the survey was comprised of demographics questions (e.g., age, gender, ethnicity, socioeconomic status, academic classification, major, etc.). These questions were intended to provide a foundation for an understanding of the study's sample composition.

The second set of questions pertained to experience with crime on campus—both for the participant personally and for those close to the participant, fear of being the victim of a crime on campus, and the perceived likelihood of being a victim of crime on campus. These questions were followed by queries about the code blue poles (emergency telephones demarcated by a blue light, found at strategic locations on campus) and their locations. Participants were asked to evaluate their confidence in and perceived effectiveness of the police at preventing crimes on campus. The last set of questions prior to the active shooter-related queries pertained to self-efficacy. Following the active shooter-related questions, the survey concluded with items focusing on institutional preparedness (e.g., the best way for the university to contact students in case of an emergency; see Appendix A).

Concealed carry. One question asked participants whether they have carried a concealed weapon on campus, or whether they knew of anyone who has carried a concealed weapon on campus. If so, a follow-up question asked if they themselves have a permit to do so. Then they were asked whether they knew of the existence of a university policy prohibiting weapons on campus. They were directed to a screen with information about the existing policy upon answering.

Active shooter knowledge. The questions that pertained directly to an active shooter

situation on campus comprise three categories: facts about active shooter situations, both in

general and relating to the University of Mississippi (UM) campus specifically; perceptions

about active shooter situations on the UM campus, and emergency preparedness. The

knowledge-related questions inquired as to whether students were aware of any gun-related

crime on campus having taken place in the past year. In addition, students were asked about

the duration of the "average" active shooter situation, the nature of victim selection, 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 feedback and clarifying information

as to the correct answer (whether answered correctly or incorrectly).

Active shooter perceptions. The second category—perceptions about active shooter

situations on campus—included the likelihood of an active shooter situation on campus in the

next year, the degree to which the participant was fearful of an active shooter situation

occurring on campus in the next year, and the degree to which the participant was certain

they could respond effectively to an active shooter situation. These questions utilized a 5-

point Likert-type response format. For example, for the question "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')?" the answer choices ranged from "extremely uncertain" to "extremely

certain."

Individual preparedness for active shooter situations. The third group of questions

pertained to individual preparedness in terms of an active shooter situation. The first question

was the frequency with which the participant's instructors mentioned the possibility of an

active shooter situation, and what measures were to be taken in the event that one occurred

(for example, on the syllabus). The next questions were about the University-sponsored

active shooter video and active shooter training, including whether or not the participant had

seen the video or participated in the training, as well as their perceived effectiveness

(utilizing a 5-point Likert-type response format). In relevant cases participants were

prompted to offer suggestions for the improvement of either or both preparedness measures,

if any came to mind.

Procedure

The University of Mississippi communicates with members of its community with

daily "UMToday" emails, which all students receive. University of Mississippi students were

invited via email (first within the UMToday daily emails, and subsequently individually in a

series of separate emails) to participate in the survey. The survey was expected to take

approximately 15 minutes and was created using Qualtrics. Data were collected in April and

May of 2017. The survey was approved by UM's Institutional Review Board, as well as

UM's Incident Response Team. The Incident Response Team (IRT) is a standing committee

that consists of individuals from different departments, centers, or administrative units across

campus. A purpose of the IRT is to gather data about natural hazards, incidents of mass

violence, and pandemics, informing administration, faculty, staff, and students with respect

to emergency-related issues and procedures. The participants were provided with informed

consent before responding to survey questions.

The purpose of the survey was threefold (see Appendix A). The first goal was to collect data

about crime victimization and attitudes about crime on the UM campus. The second was to

provide additional information that would prove useful in the event of an active shooter

situation, correcting any inaccurate knowledge that participants may have held. The third was

to provide the institution with information about the best way to reach students in times of emergency.

Results

Data Cleaning

Before cleaning the data, the sample size was $N = 1,397$. For the sake of accuracy, participants who completed less than 90% of the survey were dropped from subsequent analyses. Also dropped from analyses were any participants who identified as faculty, alumni, or incoming students who had not yet started classes at the University of Mississippi. This is because the survey was intended for current UM students. After data cleaning the sample size was $N = 482$.

Demographics

Of the cases retained for the analysis, the majority were undergraduate students (freshman-seniors, 75.7%, $n = 365$). Freshmen represented 19.3% of the sample ($n = 93$), sophomores represented 15.1% ($n = 73$), juniors represented 23.9% ($n = 115$), and seniors represented 17.4% ($n = 84$). The rest of the sample was comprised of graduate students (21.4%, $n = 21.4$), and students identifying as "other" (2.9%, $n = 14$).

The sample identified as 30.5% male ($n = 147$) and 69.5% female ($n = 335$). Of male participants, 69.4% were undergraduate students ($n = 102$), 25.2% were graduate students ($n = 37$), and 5.4% identified as "other" ($n = 8$). Of the female participants, 78.5% were undergraduate students ($n = 265$), 19.1% were graduate students ($n = 64$), and 2.4% identified as "other" ($n = 8$).

The respondents identified as predominantly White/Non-Hispanic (83.6%, $n = 403$). Of these individuals, 69.2% were female ($n = 279$) and 30.8% were male ($n = 124$).

Black/African-American students comprised 8.5% of the sample, ($n = 41$). Of these respondents, 85.4% were female ($n = 35$) and 14.6% were male ($n = 6$). The final 7.9% ($n = 38$) of students identified as Asian ($n = 16$), Hispanic ($n = 10$), multiracial ($n = 7$), "other" ($n = 4$), or Native American Indian ($n = 1$). Of these participants, 55.3% were female ($n = 21$) and 44.7% were male ($n = 17$). The only racial/ethnic groups for whom there were more males than females were those who identified as Asian and "other" (see Table 3). Students ranged in age from 18 to 65 years old, with the vast majority of students falling in the 18-24 age demographic (80.3%, $n = 387$).

According to the University of Mississippi Office of Institutional Research website, as of Fall 2016, 22.9% of the student body was comprised of minorities. In the study, 16.7% of the population identified as minorities. As of the start of the 2017 academic year, the student body was 56% female and 44% male.

Concealed Carry Items

In terms of a gun presence on campus, 89.6% of participants ($n = 432$) reported that they do not have a concealed carry permit. Furthermore, 97% of participants ($n = 468$) reported that they had never carried a concealed firearm on campus. When asked if they knew of anyone who had carried a concealed firearm on campus, however, 17.4% ($n = 84$) responded that they did, with 22% ($n = 106$) responding that they were not sure. When asked whether the University has a policy that prohibits firearms on campus, 64.1% ($n = 309$) answered (correctly) that it does, 33.3% ($n = 159$) answered that they were not sure, and 2.9% ($n = 14$) answered (incorrectly) that it does not.

Factual Information Relating to Active Shooter Situations

The participants were asked a number of factually based questions relating to active shooter situations. When asked about the average duration of an active shooter incident, 36.7% ($n =$ 177) correctly answered "a few minutes." When asked whether there is any pattern or method to victim selection in an active shooter situation, 60.8% ($n = 293$) answered correctly that there is not. When asked if they knew what it meant to "shelter in place," 63.9% ($n =$ 308) answered that they did, 19.9% ($n = 96$) answered that they did not, and 16.2% ($n = 78$) answered that they were not sure.

Individual Preparedness

Included in the survey were a number of items that gauged individual preparedness. Participants were asked to identify good practices for responding during an active shooter situation, choosing from a list of five options with multiple selections allowed. Of the sample respondents, 98.8% ($n = 476$) selected "being aware of your environment and any possible dangers", 96.3% ($n = 464$) selected "taking note of the two nearest exits in any facility you visit", 92.7% ($n = 447$) selected "if you are in an office, staying there and securing the door", 95% ($n = 458$) selected "if you are in a hallway, getting into a room and securing the door, and 96.7% ($n = 466$) selected "calling 911 when it is safe to do so". While each individual answer was correct, the most accurate response would have been to select all five practices.

The next item was a checklist of behaviors identified as good practices during an active shooter situation, with specific regard for when the shooter is nearby. Once again, multiple selections were allowed: 99% ($n = 477$) selected "silence your cellphone", 96.5% ($n = 465$) selected "turn off any source of noise", 98.3% ($n = 474$) selected "hide behind large items", and 99% ($n = 477$) selected "remain quiet". Like the previous item, while each individual answer was correct, the most accurate response would have been to select all four

behaviors. Participants overwhelmingly responded correctly to these two items, which was expected, as an intended purpose was to use them in a teaching fashion.

Respondents were also asked if they had seen the university-made video designed to prepare students to capably respond during an active shooter event. The majority of survey respondents (63%, $n = 316$) reported that they had not (despite the video having been advertised by UM and being available on UM's emergency web site. Of the 34.4% ($n = 166$) of participants indicating that they had seen the video, 44% ($n = 73$) reported that they found it somewhat effective, 33% ($n = 55$) reported that they found it very effective, and 4.8% ($n = 8$) reported that they found it extremely effective. The remaining 18.1% ($n = 30$) indicated either that they found it "not at all effective" or "a little effective".

Perceptions about Active Shooter Situations

Participants were also asked to answer some questions about their perceptions of active shooter events specifically considering the UM campus. To examine the relationship established in the literature between gender and disaster preparedness, especially preparedness for an active shooter event, the items concerning perceptions about active shooter situations were analyzed by gender by frequency and using independent samples t-tests.

Certainty of ability to capably respond to an active shooter situation. When asked how certain they were that they would know what to do in the event of an active shooter situation, 31.1% ($n = 150$) indicated that they were "extremely uncertain" or "somewhat uncertain". Alternatively, 50.6% ($n = 244$) indicated that they were "somewhat certain" or "extremely certain". The results are presented in Table 4.

In responding to the item inquiring as to how certain they were that they would know what to do in the event of an active shooter situation, 38.2% ($n = 128$) of female participants indicated that they were "extremely uncertain" or "somewhat uncertain". On the other hand, 43.6% ($n = 146$) indicated that they were "somewhat certain" or "extremely certain". Of those 43.6%, only 9.3% ($n = 31$) indicated that they were "extremely certain". When male participant responses to this item were analyzed, responses were overwhelmingly skewed towards the more certain end of the scale, with 66.7% ($n = 98$) indicating that they were "somewhat certain" or "extremely certain" and 15% ($n = 43$) indicating that they were "extremely uncertain" or "somewhat uncertain". The percentage of male participants that indicated extreme certainty (34%, $n = 50$) is greatly skewed in comparison to the sample as a whole (16%). Only 9.3% ($n = 31$) of females indicated extreme certainty. In calculating independent samples t-test by gender using this item, female participants reported significantly lower certainty scores than males, $t(479) = 6.71$, $p < 0.001$, $d = 0.66$.

Perceived likelihood of an active shooter situation occurring. Participants were asked about the perceived likelihood of an active shooter situation occurring on the UM campus in the next year. The majority (55.1%) of participants responded with either "extremely unlikely" or "somewhat unlikely" ($n = 265$). Only 13.3% of participants responded with "somewhat likely" or "extremely likely" ($n = 64$). These results are presented in Table 5. With regard to gender, when asked about the perceived likelihood of an active shooter incident occurring on campus in the next year, the majority of female participants (55.2%, $n = 161$) responded either "extremely unlikely" or "somewhat unlikely", with 15% ($n = 50$) responding "somewhat likely" or "extremely likely". The data for male participants suggest that they tend to perceive such an event as less likely than the female participants do. The

majority of male participants (63.9%, *n* = 94) responded with either "extremely unlikely" or "somewhat unlikely". Only 9.5% (*n* = 14) of male participants responded "somewhat likely" or "extremely likely". In order to examine the difference between genders an independent samples t-test was conducted using this item, with females reported perceiving an active shooting as more likely to a degree that was significant, *t* (479) = -2.98, *p* < 0.05, *d* = -0.3.

Fearfulness of an active shooter situation occurring. When asked about the extent of perceived fearfulness of an active shooter event occurring on campus in the next year, the participants as a whole responded similarly to the perceived likelihood item. The majority of respondents (67.5%, *n* = 325) indicated that they were "not fearful at all" (29.7%, *n* = 143) or "slightly fearful" (37.8%, *n* = 182). Only 10.8% (*n* = 52) of participants indicated that they were either "very fearful" or "extremely fearful." These results are presented in Table 6. With regard to gender, the majority of female respondents (61%, *n* = 205) indicated that they were either "not fearful at all" or "slightly fearful", with 13.8% (*n* = 46) of participants indicating that they were either "very fearful" or "extremely fearful". The male participants' responses to this fearfulness item also tended to show a lower level of concern than their female counterparts. The vast majority of males (81.6%, *n* = 120) indicated being "not fearful at all" or "slightly fearful", with only 4.1% (*n* = 6) of male participants indicating that they were "very fearful" or "extremely fearful". Once again, the difference between males and females was statistically significant, with females reporting higher fearfulness, *t* (479) = -5.28, *p* < 0.001 *d* = -0.52.

Random Sampling of Female Participants

The difference in sample sizes between genders was large, so to account for this potential issue an additional round of analyses was conducted with a random sampling of female

participants selected to match the sample size of male participants. The difference between genders remained statistically significant for all items. Both the item of certainty (of ability to respond) and the item of fearfulness remained significant, $p < 0.001$, $t(293) = 5.54$ and -4.47, effect sizes $d = 0.65$ and -0.52, respectively. The difference in perceived likelihood also remained statistically significant, $p < 0.05$. $t(293) = -2.52$, $d = -0.29$.

Discussion

The larger questionnaire served a broad range of purposes for the University of Mississippi. Primarily among them is that it was helpful in informing the University's Incident Response Team (IRT) as to student perceptions about, and experiences with, a variety of campus-related crimes. The data gathered by the questionnaire were used to give a presentation to the IRT about crimes on campus. The questionnaire was also helpful in determining the best ways to reach the student body with information in the case of an emergency. The active shooter-related items in particular were also designed with multiple purposes in mind. In addition to gathering information and evaluating student attitudes towards active shooter situations, some of the items were designed to provide students with information about active shooter situations and how to capably react to them, even if this information simply served to refresh their memory.

The current study set out to investigate student attitudes and perceptions about active shooter situations specifically, and with particular regard for the UM campus. It also set out to evaluate the accuracy of the students' knowledge about active shooter situations, and as stated above, to correct inaccuracies or refresh the memories of those who had forgotten. There is a gap in the literature surrounding student attitudes about active shooter situations on their own campus, and we sought to fill that gap.

We followed the line of research established in the literature surrounding the relationships between disaster preparedness, fearfulness of being a victim of a crime, and gender. Fox, Nobles, and Piquero (2009), Burruss et al. (2010), and Kaminski (2010) all provided data in their studies to support the idea that female students are more fearful of being a victim of a crime. The literature led us to believe that there would be a disparity between our male and female participants in terms of fearfulness and perceived likelihood of an active shooter event on the UM campus. In the interpretation of these results, it is also important to note the difference (see Burruss et al., 2010) between perceived likelihood (a cognitive evaluation) and fearfulness (an emotional reaction). It was hypothesized that female participants would both perceive an active shooter situation to be more likely, and that they would report being more fearful of such an event occurring. In terms of self-efficacy in responding to an active shooter, no a priori hypotheses were offered as these items were exploratory.

Gender Differences in Perceptions about Active Shooters

When the items concerning perceptions about active shooter situations were examined in terms of the sample as a whole, the results varied widely from when they were examined by gender. In terms of self-efficacy, the majority of the sample (50.6%, $n = 244$) reported that they were "somewhat" or "extremely" certain that they would know how to respond in the event of an active shooter situation. Ostensibly, this result is a good thing—it seems that students are confident in their ability to protect themselves from an active shooter. There are two important things to consider, however, when interpreting this result. The first is that, as stated by Burruss et al. (2010), there is no way to empirically evaluate the relationship between confidence in one's ability to capably react to an active shooter and one's actual ability to capably react in a real active shooter situation. The second thing to consider is that

when these data were examined by gender, they tell a very different story. Only 43.6% (n =

146) of the female participants reported feeling "somewhat" or "extremely" certain that they

could effectively respond to an active shooter situation, with only 9.3% (n = 31) indicating

"extreme" certainty. In examining their male counterparts, it becomes clear how the sample

as a whole varies so drastically from the female samples—66.7% (n = 98) of male

participants indicated that they were "somewhat certain" or "extremely certain." Of those

66.7%, more than half (34%, n = 50) is accounted for by those who reported "extreme"

certainty. This statistic shows a massive disparity between male and female students on the

UM campus in terms of self-efficacy. When analyzed in SPSS, the gender difference was

statistically significant (p < 0.001, d = 0.66).

In terms of perceived likelihood, which—as stated above—is a cognitive evaluation of risk,

the results as a whole once again varied widely from the results as analyzed by gender. The

majority of female and male participants both reported that an active shooter on the UM

campus in the next year was "extremely unlikely" or "somewhat unlikely" (55.2%, n = 161,

and 63.9%, n = 94, respectively). In the sample as a whole and considering the females in the

sample, however, the single response that received the most endorsements was "neither likely

nor unlikely", which received 31.5%, n = 152, and 33.8%, n = 113 of the responses,

respectively. For the males in the sample, the most selected singular response was "extremely

unlikely", receiving 34% (n = 51) of the responses. Once again, this shows that gender

differences skew the data as a whole. The gender difference was statistically significant (p <

0.05, d = -0.3).

The third and final item that we analyzed by gender was fearfulness of an active shooter

event taking place on the UM campus in the next year. The sample as a whole responded

similarly as they did to perceived likelihood. The majority (67%) indicated that they were

either "not fearful at all" (29.7%, $n = 143$) or "slightly fearful" (37.8%, $n = 182$). Only 10.8%

($n = 52$) of participants indicated that they were either "very fearful" or "extremely fearful".

When analyzed by gender, the majority of female participants (61%, $n = 205$) indicated that

they were either "not fearful at all" or "slightly fearful." On the other side of the scale,

however, 13.8% ($n = 46$) of female participants reported that they were either "very fearful"

or "extremely fearful". In terms of the male participants, the results were dramatically

different. A much larger proportion of the male sample (81.6%, $n = 120$) reported either

being results of "not fearful at all" or "slightly fearful", while only 4.1% ($n = 6$) of male

participants responded as being "very fearful" or "extremely fearful". In terms of percentage,

the females in the sample responding as "extremely fearful" was nearly double the

percentage of males (5.1%, $n = 17$, and 2.7%, $n = 4$, respectively), and it more than triples

when including the "very fearful" response. In terms of statistical significance, the difference

between genders was statistically significant ($p < 0.001$, $d = -0.52$).

As stated in the results section, an additional round of analyses was conducted with a random

sample of female participants to make sure that the statistical significance shown in the

analysis was not due to a larger proportion of the sample being female. All three areas

assessed remained statistically significant, with the self-efficacy and fearfulness items

reporting p values < 0.001, and perceived likelihood reporting a p value < 0.05. This analysis

supports the idea that the original analysis is accurate and therefore may be a solid basis for

conclusions and recommendations.

These data support the relationship established in the literature concerning gender and

fearfulness of crime. It also supports 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. While no a priori hypotheses were made concerning gender differences in

self-efficacy, the data support a statistically significant gender difference. These data also

provide the basis for several institution-specific recommendations.

Strengths and Recommendations

This study has a number of strengths. For example, the sample size was large enough to

allow for a reasonably accurate statistical analysis. Furthermore, it was large enough to allow

for a truly random sample of female participants to compare to the male participants in the

sample. Another strength of this study is the three items being examined in depth (self-

efficacy, perceived likelihood, and fearfulness) are unlikely to suffer from self-report error,

because perceptions are subjective. An important strength of the study is that, since the items

were specific to the University of Mississippi, the recommendations made based on these

data are also specific to the University.

The first of these recommendations would be that the University of Mississippi student body

as a whole could benefit from active shooter training, and a wider availability of information

about active shooter-related situations. The University Police Department (UPD) has

produced an active shooter video, but only 34.4% ($n = 166$) of participants indicated that they

had seen it. This is not by any means UPD's fault, as they have broadcasted the link to this

video on many an occasion. It could, however, be beneficial to show the video to students at

orientation, in one of the sessions that is mandatory for incoming freshmen to attend before

they are allowed to register for classes. The participants who had seen the video largely

described it as being helpful, with 81.9% ($n = 136$) responding that they felt the video was

"somewhat", "very", or "extremely" effective in preparing them to respond to an active

shooter event. The benefits of training people to respond to an active shooter event are two-fold: training gives people the necessary resources to react to an active shooter, and also increases self-efficacy (Jones et al., 2014; Snyder, 2014). An orientation session could also alert students to the opportunity to attend an in-person active shooter training to further increase self-efficacy. It is important, however, that awareness of active shooter situations/active shooter training is not brought about in a way that gives students the idea that an active shooter event is somehow more likely at UM than it would be somewhere else, as this is not true and would have an adverse effect on recruitment. Rather, the purpose would be to create a culture of awareness and motivated action with respect to preparedness. Active shooter training for freshmen could also become a part of the EDHE curriculum—a class intended to aid first-year students as they get acquainted with transitioning to life at UM.

The results, however, demonstrated that there are certain groups of the population (in this case, female students) that show an increased need for targeted training and other resources. One way to target female students for training and education would be to encourage (or mandate) the Community Assistants in the women's dormitories to speak to their students about active shooter events, and remind them of the availability of active shooter training. Another way to target female students, though it only applies to students in the Greek system, would be to ask that the Panhellenic council require that National Panhellenic Chapters (NPC organizations) have a member of UPD speak to chapter members during one of their weekly meetings. Greek chapters are required to attend presentations about other potential perils of university life (for example, binge drinking and alcohol awareness), so this may be a relatively straightforward step to implement.

Another recommendation would be to examine the relationship between attitudes towards active shooter situations and other demographic factors among students, race/ethnicity for example. The goal of these lines of research, like the goal of the present study, is to identify the populations who are most concerned or fearful about an active shooter event and direct them towards programs to increase their self-efficacy. As seen in the results, the males in the sample greatly skewed the overall data in the direction of lower levels of fear and perceived likelihood, and higher levels of confidence in ability to respond. This study did not seek to examine other demographic factors that could possibly influence student perceptions, but that in no way means that other groups of the greater population are immune to increased levels of fear or reduced self-efficacy. Data concerning the groups who are more specifically in need of training would lend themselves to additional specific recommendations concerning how to encourage them to participate. For example, if the data suggest that those who live on-campus are more fearful of, have a higher perceived likelihood of, or are less certain in their ability to respond to an active shooter-related incident than those who live off campus, it would once again make sense to encourage CAs to speak to their students about active shooter training. If the data suggest that minority groups reported increased fear and perceived likelihood and lower self-efficacy, student groups like the Black Student Union or the NPHC (National Pan Hellenic Council) could be made aware of the availability of training. The point of these recommendations is that it would be reasonably simple to mandate active shooter training, at the very least watching UPD's active shooter video.

Limitations of the Study

Like all studies, this study faced certain limitations. The most obvious among them is that the sample was predominantly White and female. This survey did not offer course credit or extra

credit, like other studies on campus, so students did not have the motivation of extra credit to complete the survey. It did not offer any other incentive for potential participants to complete the survey. This means that it is likely that the participants that did complete the survey have stronger perceptions or attitudes about issues related to active shooter situations, which could lead to skews in the data. Furthermore, the number of items that could be put into the survey was limited by the amount of time that the survey could take. Making the survey longer would mean risking a reduced amount of participants that completed the survey in its entirety. The original purpose of the survey was to provide information for the IRT, so fewer complete responses would mean less helpful data for the original purposes. It is important to note that, since the study is quasi-experimental, it is impossible to say whether the relationship between gender and perceptions/attitudes towards active shooter situations is causal.

Further Research Directions

There are many directions in which this line of research could continue. Primarily, as mentioned above, the existing data could be analyzed to examine the relationship between active shooter-related perceptions, knowledge, and experiences with respect to a number of other factors, such as race/ethnicity, living on or off campus, and student nationality (i.e., international students). This information is useful beyond just the UM campus, because it serves to inform the literature about student perceptions towards active shooter situations, data which other campuses may consider and which may inform studies of their own, corresponding populations. Furthermore, the survey included items that encompassed a wider variety of crimes than active shooters (see Appendix A), and the existing data could be examined with respect to the other crimes that the earlier items accounted for. It would be

helpful on an institutional level to examine the relationships between the above-mentioned

demographic factors and attitudes about a broader spectrum of crimes. It could also be

interesting to examine the self-efficacy items and how self-efficacy may moderate

fearfulness of crime, both in general and of active shooter situations.

Another direction UM in particular could take concerning this research would be to collect

data using a similar questionnaire with faculty and staff. This would lend itself to a broader

understanding of the attitudes and knowledge of the UM community as a whole. The faculty

and staff study could parallel the current study, examining such variables as crime as a

whole, self-efficacy, and knowledge and attitudes about active shooter-related situations

specifically. The data from a study of faculty and staff could be examined similarly as was

the current study of students. Furthermore, it would be beneficial to hold focus groups for

both faculty and staff alike, as well as with students. In this manner, a more individualized

foundation of knowledge with specific regard for the UM community would be developed,

generating potentially useful, research-informed suggestions as to how to improve

preparedness on campus.

On a broader level, it makes sense that universities replicate this study on their own

campuses. This is beneficial in several ways. Primarily it would provide universities with a

more personalized idea of the groups on their campuses who could benefit from additional

training or resources, and provide the basis for institution-specific recommendations the way

this project has for the University of Mississippi. Every university is different from each

other in a myriad of ways, and each university has its own individual climate and culture. For

example, Han et al. (2015) found that students at a large public university self-reported they

were 99% percent likely to comply with instructions in an ENS message. An earlier study,

however, concluded that only 40% of students were subscribed to receive these messages in the event of an emergency (Kaminski et al., 2010). This may show a disparity in preparedness behaviors between institutions. Additionally, this line of research could contribute to and potentially support the existing literature about the relationship between gender (and other demographic factors) and attitudes about active shooter-related incidents on campus (and other campus-related crimes). Furthermore, this would open an additional line of research. If universities of different sizes, locations, et cetera, conducted similar studies, it would be possible to examine the data by region, university size, rural/urban campus, and other factors.

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Table 1

Major Active Shooter Events in Institutes of Lower Education, adapted from Blair & Pete (2014), and Follman, Aronsen, & Pan (2018).

Location (Elementary, Middle, and High Schools)	Date	Information
Columbine High School (Columbine, Colorado)	April 20, 1999	18-year-old Eric Harris and 17-year old Dylan Klebold opened fire on campus. The pair had originally intended to detonate bombs, but began shooting after the bombs failed to detonate. Thirteen were killed and 24 were injured before the pair died by suicide.
Santana High School (Santee, California)	March 5, 2001	15-year-old Charles Andrew Williams opened fire on campus, killing two and wounding 13 before being apprehended by an off-duty officer.
Red Lake High School (Red Lake, Minnesota)	March 21, 2005	16-year-old Jeffery James Weise shot and killed two people in his home before beginning to shoot at his school. Nine were killed, six were wounded. He died by suicide after the arrival of the police.
Sandy Hook Elementary School (Newtown, Connecticut)	December 14, 2012	20-year-old Adam Lanza killed his mother, then proceeded to open fire and kill 26 people and wound two. He died by suicide following the arrival of the police.
Stoneman Douglas High School (Parkland, Florida)	February 4, 2018	19-year-old Nikolas Cruz attacked his classmates at Stoneman Douglas using an assault rifle, killing 17 and injuring 14 people.

Table 2

Major Active Shooter Events in Institutes of Higher Education since 2000, adapted from Blair & Pete (2014), and Follman, Aronsen, & Pan (2018).

Location (Higher Education)	Date	**Information**
Appalachian School of Law (Grundy, Virginia)	January 16, 2002	43-year-old Peter Odighizuma opened fire with a handgun, killing three and wounding three, and was detained by off-duty police officers until law enforcement arrived.
Case Western Reserve University (Cleveland, Ohio)	May 9, 2003	62-year-old Biswanath Halder killed one and wounded two with a rifle and a handgun.
Virginia Polytechnic Institute and State University (Blacksburg, Virginia)	April 16, 2007	23-year-old Seung Hui Cho opened fire both in a dormitory and in a classroom building. He killed 32 people, and wounded 17. Not included in this number were six students who sustained injuries jumping out of a window to escape.
Louisiana Technical College (Baton Rouge, Louisiana)	February 8, 2008	23-year-old Latina Williams opened fire in a classroom. She killed two people and died by suicide.
Northern Illinois University (DeKalb, Illinois)	February 14, 2008	27-year-old Steven Kazierczak, armed with four firearms, opened fire in an auditorium. He killed five and wounded 16, then died by suicide.
Hampton University (Hampton, Virginia)	April 26, 2009	18-year-old Odane Maye opened fire in a dormitory. The dormitory manager pulled the fire alarm to empty the building, so there were no deaths, but there were two injuries.
University of Alabama (Huntsville, Alabama)	February 12, 2010	44-year-old Amy Bishop Anderson started shooting during a meeting, killing

		three and wounding three.
Ohio State University (Columbus, Ohio)	March 9, 2010	50-year-old Nathaniel Alvin Brown began shooting recently after being fired, killing one and wounding two before committing suicide.
University of Pittsburgh Medical Center (Pittsburgh, Pennsylvania)	March 8, 2012	30-year-old John Schick opened fire, killing one and wounding seven, before being killed by University police.
Oikos University (Oakland, California)	April 2, 2012	43-year-old One L. Goh opened fire on campus before killing a woman and stealing her car. In total, seven were killed and three were wounded.
New River Community College (Christiansberg, Virginia)	April 12, 2013	22-year-old Neil Alan MacInnis opened fire on campus. None were killed and two were injured.
Santa Monica College (Santa Monica, California)	June 7, 2013	23-year-old John Zawahri shot and killed two members of his family before carjacking and opening fire on campus. He killed five and wounded four before being killed by police.
Umpqua Community College (Roseburg, Oregon)	October 1, 2015	26-year-old Chris Harper Mercer started shooting on the community college campus before he shot himself to death following a shootout with law enforcement.

Table 3

Participants' Ethnicity by Gender

Ethnicity		Frequency	Percent
White/Non Hispanic	Male	124	30.8
	Female	279	69.2
	Total	403	
Black/African American	Male	6	14.6
	Female	35	85.4
	Total	41	
Asian	Male	9	56.3
	Female	7	43.8
	Total	16	
Hispanic/Latino	Male	2	20.0
	Female	8	80.0
	Total	10	
Multiracial	Male	3	42.9
	Female	4	57.1
	Total	7	
Other	Male	3	75.0
	Female	1	25.0
	Total	4	
Native American Indian	Male	0	0.0
	Female	1	100.0
	Total	1	

Table 4

Participants' Certainty in their Ability to Capably Respond to an Active Shooter Situation

	Frequency	Percent
Extremely uncertain		
Total (*N* = 482)	45	9.3
Males (*n* = 147)	6	4.1
Females (*n* = 335)	39	11.6
Somewhat uncertain		
Total (*N* = 482)	105	21.8
Males (*n* = 147)	16	10.9
Females (*n* = 335)	89	26.6
Neither certain nor uncertain		
Total (*N* = 482)	88	18.3
Males (*n* = 147)	27	18.4
Females (*n* = 335)	61	18.2
Somewhat certain		
Total (*N* = 482)	163	33.8
Males (*n* = 147)	48	32.7
Females (*n* = 335)	115	34.3
Extremely certain		
Total (*N* = 482)	81	16.8
Males (*n* = 147)	50	34.0
Females (*n* = 335)	31	9.3

Table 5
Participants' Perceived Likelihood of an Active Shooter Situation Occurring on Campus in the Next Year

	Frequency	Percent
Extremely unlikely		
Total (*N* = 481)	127	26.3
Males (*n* = 147)	51	34.7
Females (*n* = 334)	76	22.8
Somewhat unlikely		
Total (*N* = 481)	138	28.6
Males (*n* = 147)	43	29.3
Females (*n* = 334)	95	28.4
Neither likely nor unlikely		
Total (*N* = 481)	152	31.5
Males (*n* = 147)	39	26.5
Females (*n* = 334)	113	33.8
Somewhat likely		
Total (*N* = 481)	62	12.9
Males (*n* = 147)	13	8.8
Females (*n* = 334)	49	14.7
Extremely likely		
Total (*N* = 481)	2	.4
Males (*n* = 147)	1	0.7
Females (*n* = 334)	1	0.3
Missing: 1 (Female)		

Table 6

Participants' Fearfulness of an Active Shooter Situation Occurring on Campus in the Next Year

	Frequency	Percent
Not fearful at all		
Total (*N* = 481)	143	29.7
Males (*n* = 147)	66	44.9
Females (*n* = 334)	77	23.1
Slightly fearful		
Total (*N* = 481)	182	37.8
Males (*n* = 147)	54	36.7
Females (*n* = 334)	128	38.3
Moderately fearful		
Total (*N* = 481)	104	21.6
Males (*n* = 147)	21	14.3
Females (*n* = 334)	83	24.9
Very fearful		
Total (*N* = 481)	31	6.4
Males (*n* = 147)	2	1.4
Females (*n* = 334)	29	8.7
Extremely fearful		
Total (*N* = 481)	21	4.4
Males (*n* = 147)	4	2.7
Females (*n* = 334)	17	5.1
Missing: 1 (Female)		

Appendix A

Informed Consent

University of Mississippi Student Preparedness Survey
This brief, 15 minute 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 to Participate in this Survey

Description
This brief, 15 minute 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 a disaster. 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. 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 to 15 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). The IRB has determined that this study meets the ethical obligations required by federal law and University policies. 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 as they are helpful in describing important aspects of the sample.

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

What is your sex?
- Male
- Female

With which ethnicity do you *most* identify?
- Black/African American
- White/Non-Hispanic
- Alaskan Native
- Hispanic/Latino
- Asian
- Pacific Islander
- Native American Indian
- Multiracial
- Other

How would you describe your socioeconomic status?
- Working poor
- Working class
- Lower middle class

○ Upper middle class

○ Upper class

Student Characteristics

In what academic year did you begin your education at the University of Mississippi (UM)?

○ 2012-2013 or before

○ 2013-2014

○ 2014-2015

○ 2015-2016

○ 2016-2017

○ Other

What is your academic classification?

○ Freshman

○ Sophomore

○ Junior

○ Senior

○ Graduate Student

○ Other

Are you currently a full-time student or a part-time student? (full-time = 12 hours at the undergraduate level or 9 hours at the graduate level)

○ Full-time

○ Part-time

Do you live on the Oxford campus?

○ Yes

○ No

Are you an international student?

○ Yes

○ No

In which state is your permanent residence? (If you are an international student please list your country of origin)

What is your major? (If you are a double major, please list your primary major)

Are you in a social fraternity or sorority?

○ Yes

○ No

Have you or do you currently serve in the armed forces?

○ Yes

○ No

Which of the following BEST describes your current status with the armed forces?

○ Active duty

○ National Guard/Reserves

○ Veteran (more than 90 days of active duty)

With which branch of the military were you affiliated?

○ Army

○ Navy

○ Air Force

○ Marines

○ Coast Guard

○ Other

Where do you take most of your classes?

○ Oxford campus

○ DeSoto (Southaven) campus

○ Tupelo campus

○ Booneville campus

○ Grenada campus

○ University Medical Center in Jackson

○ Other

While this questionnaire is designed for the Oxford campus, please take a few moments to list any crime/safety concerns associated with your campus.

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 your participation. Thank you for your efforts. If you have any questions or concerns about your participation, 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!

General Crime Questions - Brinker (2008)

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

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

As a result of this crime, which of the following did you personally experience? If you experienced more than one crime, please respond considering the crime that has impacted you the most. Check all that apply in this instance. If none of them apply please check "None of the above".

☐ Saw others injured or killed

☐ Got injured yourself

☐ Felt a direct threat to your life

☐ Provided first aid

☐ Lost a significant amount of material possessions

☐ Could not get in touch with other family members

☐ Was separated from members of your immediate family

☐ Had to leave home for three or more days

☐ Had to leave school for three or more days

☐ None of the above

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?

	Not at all	A little bit	Moderately	Quite a bit	Extremely
Other things kept making me think about it	○	○	○	○	○
I felt as if it hadn't happened or wasn't real	○	○	○	○	○
I was jumpy and easily startled	○	○	○	○	○
I tried not to think about it	○	○	○	○	○
My feelings about it were kind of numb	○	○	○	○	○
I had trouble falling asleep	○	○	○	○	○
I had waves of strong feelings about it	○	○	○	○	○
I tried not to talk about it	○	○	○	○	○

Indicate for each of the statements below the degree to which this change occurred in your life as a result of the crime you experienced. If you experienced more than one crime, please respond considering the crime that has impacted you the most, using the following scale.

	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 changed my priorities about what is important in life	○	○	○	○	○	○
I have a greater appreciation for the value of my own life	○	○	○	○	○	○
I have a better understanding of spiritual matters	○	○	○	○	○	○
I established a new path for my life	○	○	○	○	○	○
I have a greater sense of closeness with others	○	○	○	○	○	○

Indicate for each of the statements below the degree to which this change occurred in your life as a result of the crime you experienced. If you experienced more than one crime, please respond considering the crime that has impacted you the most, using the following scale.

	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 am able to do better things with my life	○	○	○	○	○	○
I have a stronger religious faith	○	○	○	○	○	○
I discovered that I'm stronger than I thought I was	○	○	○	○	○	○

4/4/2018   Qualtrics Survey Software

	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	○	○	○	○	○	○

Has someone close to you experienced a crime(s) while on the Oxford campus?

○ Yes

○ No

○ Not sure

Has this happened to one person or more than one person?

○ One person

○ More than one person

What type of crime did he or she experience? Check all that apply

☐ Property crime (e.g., theft, vandalism, robbery, burglary, arson)

☐ Violence directed at him/her without a weapon (e.g., robbery, sexual assault, or assault of a non-sexual nature)

☐ Violence directed at him/her 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 him/her with a gun (e.g., robbery, sexual assault, or assault of a non-sexual nature)

☐ Other
_____

☐ Not sure

What type of crime(s) did they experience? Check all that apply

☐ Property crime (e.g., theft, vandalism, robbery, burglary, arson)

☐ Violence directed at them without a weapon (e.g., robbery, sexual assault, or assault of a non-sexual nature)

☐ Violence directed at them 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 them with a gun (e.g., robbery, sexual assault, or assault of a non-sexual nature)

☐ Other
_____

☐ Not sure

To what extent are you *fearful* of experiencing the following crimes while on the Oxford campus?

	Not at all fearful	Slightly fearful	Moderately fearful	Very fearful	Extremely fearful
Being robbed or mugged	○	○	○	○	○
Being attacked by someone with a weapon	○	○	○	○	○

	Not at all fearful	Slightly fearful	Moderately fearful	Very fearful	Extremely fearful
Being sexually assaulted	○	○	○	○	○
Having your things stolen from you (e.g., laptop, backpack)	○	○	○	○	○
Having your car stolen	○	○	○	○	○
Being stalked	○	○	○	○	○

How *likely* do you think it is that the following things will happen to you while on the Oxford campus *during the day*?

	Extremely unlikely	Somewhat unlikely	Neither likely nor unlikely	Somewhat likely	Extremely likely
Being robbed or mugged	○	○	○	○	○
Being attacked by someone with a weapon	○	○	○	○	○
Being sexually assaulted	○	○	○	○	○
Having your things stolen from you (e.g., laptop, backpack)	○	○	○	○	○
Having your car stolen	○	○	○	○	○
Being stalked	○	○	○	○	○

How *likely* do you think it is that the following things will happen to you while on the Oxford campus *during the night*?

	Extremely unlikely	Somewhat unlikely	Neither likely nor unlikely	Somewhat likely	Extremely likely
Being robbed or mugged	○	○	○	○	○
Being attacked by someone with a weapon	○	○	○	○	○
Being sexually assaulted	○	○	○	○	○
Having your things stolen from you (e.g., laptop, backpack)	○	○	○	○	○
Having your car stolen	○	○	○	○	○
Being stalked	○	○	○	○	○

Do you avoid places on or around the Oxford campus out of concern for your safety?

○ Yes

○ No

What areas on or around the Oxford campus do you avoid out of concern for your safety?

Are you aware of the Code Blue Emergency Telephones on the Oxford campus?

○ Yes

○

No

The University has an emergency telephone system referred to as "Code Blue" which involves the strategic location of emergency telephones on campus. By pressing the button on the emergency telephone unit pole, one will immediately be in contact with UPD for assistance with any emergency situation.

Do you know where the closest Code Blue Emergency Stations are in relation to the places you frequent on campus?

○ Yes

○ No

The locations of the Code Blue phone units are depicted on the campus parking map distributed by UPD (http://upd.olemiss.edu/crime-prevention/).

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 the below categories?

	Not effective at all	Slightly effective	Moderately effective	Very effective	Extremely effective
Preventing crime	○	○	○	○	○

	Not effective at all	Slightly effective	Moderately effective	Very effective	Extremely effective
Helping people out after they have been victims of crime	○	○	○	○	○
Keeping order on the campus	○	○	○	○	○

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
○	○	○	○	○

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.

	1 Not at all true	2 Hardly true	3 Moderately true	4 Exactly true
I can always manage to solve difficult problems if I try hard enough	○	○	○	○
If someone opposes me, I can find the means and ways to get what I want	○	○	○	○
It is easy for me to stick to my aims and accomplish my goals	○	○	○	○
I am confident that I could deal efficiently with unexpected events	○	○	○	○
Thanks to my resourcefulness, I know how to handle unforeseen situations	○	○	○	○

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

	1 Not at all true	2 Hardly true	3 Moderately true	4 Exactly true
I can solve most problems if I invest the necessary effort	○	○	○	○
I can remain calm when facing difficulties because I can rely on my coping abilities	○	○	○	○
When I am confronted with a problem, I can usually find several solutions	○	○	○	○
If I am in trouble, I can usually think of a solution	○	○	○	○
I can usually handle whatever comes my way	○	○	○	○

Active Shooter Questions - Thompson (2013)

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

○ Yes

○ No

Do you have a current concealed carry permit?

○ Yes

○ No

Do you know of anyone (a friend, for instance) who has carried a concealed firearm on their person while on the Oxford campus?

○ Yes

○ No

○ Not sure

The Oxford campus has a policy that prohibits firearms on campus.

○ Yes

○ No

○ Not sure

CORRECT. 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?statPara=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.

INCORRECT. 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.

In the past year, has there been a crime reported as having occurred on the Oxford campus where the perpetrator used a firearm?

○ Yes

○ No

○ Not sure

CORRECT. In the past year, there has not been a crime reported as having occurred on the Oxford campus where the perpetrator used a firearm.

For more information, see the ANNUAL SECURITY REPORT AND ANNUAL FIRE SAFETY REPORT available online on the website of the University of Mississippi Police Department at http://upd.olemiss.edu/annual-security-report/

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security-report/

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	Somewhat uncertain	Neither certain nor uncertain	Somewhat certain	Extremely certain
○	○	○	○	○

Imagine that an active shooter situation occurred on the Oxford campus. How likely would you be to follow instructions provided by the following people?

	Very Unlikely	Unlikely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely
One of your professors	○	○	○	○	○	○
A faculty member, but not one of your professors	○	○	○	○	○	○
A non-academic staff member (e.g., a cafeteria worker, a groundskeeper)	○	○	○	○	○	○
An academic staff member (e.g., a departmental administrative secretary)	○	○	○	○	○	○
An officer from the University Police Department (UPD)	○	○	○	○	○	○
Other students	○	○	○	○	○	○

Active Shooter Knowledge Questions

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

CORRECT. On average, an active shooter incident lasts a few minutes, from first shot to last shot.

INCORRECT. On average, an active shooter incident lasts a few minutes, from first shot to last shot.

In an active shooter incident, typically there is no pattern or method to the selection of victims.
- ○ True
- ○ False

CORRECT. In an active shooter incident, typically there is no pattern or method to the selection of victims.

INCORRECT. In an active shooter incident, typically there is no pattern or method to the selection of victims.

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

CORRECT. Good practices for coping with an active shooter situation include all of the following strategies:

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

Good practices for coping with an active shooter situation include all of the following strategies:

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

Check all of the following that apply if the active shooter is nearby.
- ☐ Lock the door
- ☐ Silence your cell phone
- ☐ Turn off any source of noise (i.e., laptops, televisions)
- ☐ Hide behind large items (i.e., cabinets, desks)
- ☐ Remain quiet

CORRECT. If the active shooter is nearby

Lock the door
Silence your cell phone

Turn off any source of noise (i.e., laptops, televisions)
Hide behind large items (i.e., cabinets, desks)
Remain quiet

If the active shooter is nearby

Lock the door
Silence your cell phone
Turn off any source of noise (i.e., laptops, televisions)
Hide behind large items (i.e., cabinets, desks)
Remain quiet

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

○ True

○ False

CORRECT. The role of the first law enforcement officers who arrive at the scene is to stop the active shooter.

INCORRECT. The role of the first law enforcement officers who arrive at the scene is to stop the active shooter.

Do you know what it means to "shelter in place"?

○ Yes

○ No

○ Not sure

Good deal! Shelter in place is an important phrase to know. For a refresher, here is how it is defined on the olemiss.edu/emergency web site.

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 http://www.olemiss.edu/emergency/lockdown.html)

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.

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(For more information see http://www.olemiss.edu/emergency/lockdown.html)

Methods of Communication (past CDRC questions)

This final grouping of questions relate to communication, active-shooter-related emergencies, and preparedness training efforts on campus.

How often has the possibility of an active shooter been raised in your classes by your instructor (for example, on the first day of class, as part of the syllabus)?

Never	Sometimes	About half the time	Most of the time	Always
○	○	○	○	○

The University has created a video designed to prepare students how to respond in the case of an active shooter on campus. Have you seen this video?

○ Yes

○ No

How effective do you think this 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.

Have you attended the active shooter training offered by the University Police Department (UPD)?

○ Yes

○ No

How effective do you think the 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 active shooter training could be improved, please note them below.

Have you registered to receive RebAlert text messages?

○ Yes

○ No

Do you follow RebAlert on Twitter?

○ Yes

○ No

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

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

○ Yes

○ No

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

○ Radio/Television Alerts (e.g., Emergency Broadcast Service, Campus Cable TV Channel 69, Oxford Cable TV Channel 99)

○

- Facebook/Twitter
- My parents alert me
- My friends alert me
- Other

_____

- I don't automatically receive information about campus violence

What would you suggest is the BEST way for campus-violence emergency messages to reach you?

- Television news (e.g., Campus Cable TV Channel 89, Oxford Cable TV Channel 99)
- Email
- RebAlert text messages
- LiveSafe app emergency alerts
- Ole Miss emergency web page
- Radio station
- Emergency alert on campus (e.g., sirens)
- Facebook message
- Twitter message
- Other

_____

Have you visited emergency.olemiss.edu to learn more about threats to our campus and what you can do to prepare?

- Yes
- No

Study Conclusion

Please use the space below to provide us with information related to your thoughts/feelings about UM and emergency preparedness 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 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, 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!