Evaluation of a Higher Education Interpersonal Violence Safety Program

by

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A Dissertation Presented to the
FACULTY OF THE USC ROSSIER SCHOOL OF EDUCATION
UNIVERSITY OF SOUTHERN CALIFORNIA
In Partial Fulfillment of the
Requirements for the Degree
DOCTOR OF EDUCATION

December 2020

Acknowledgements

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Abstract

Interpersonal violence has been recognized as an international problem by the World Health

Organization (Krug, 2002; Rosenberg, 2006; WHO 2008, 2009, 2010), and by the U. S.

government as a national problem (National Center for Health Statistics, 2009; National Crime

Victimization Survey, 2010). Interpersonal violence has become such a widespread issue that the

U. S. Public Health Service (Koop, 1999; UCLA, 2009), the U. S. Congress (Clery, 2012) and

the White House (White House Task Force, 2014. 2016) have all taken actions to combat the

problem. Until recently, there has been very little academic work examining the issues of

interpersonal violence on the college campus (DeGue, 2014; Guttman 2006). This study used a

public health model to examine the college response to campus violence. In public health,

immunization programs have eradicated or minimized health threats (Cohen, 1993; DeGue,

2014). Driver education and motor vehicle laws have minimized motor vehicle injures and death

(Goldstein, 2014). Applying this model, this research project sought to discover what programs

were in place on the campus of one western U. S. college. Responses to physical assault, sexual

assault and weapon assault were examined (McCaughey, 2017; Norrell, 2013). Implications for

future research were included.

Chapter One: Overview of the Study

Interpersonal violence (IPV) can be defined as the threatened or actual use of physical force against a person or a group that either results in, or is likely to result in, injury or death. Interpersonal violence (and resulting injury and death) is a worldwide public health issue that has not been effectively addressed (Cohen & Swift, 1993). Globally, 1.6 million people suffer violence-related deaths each year and, of these, 86% are the result of IPV (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002; Corso, Mercy et al., 2007). For every death, due to IPV, there are numerous IPV-related hospital and emergency room admissions (Reza, Mercy & Krug, 2001). Annually, IPV is the cause of at least 16 million injuries severe enough to warrant medical attention (Brown, Butchart, Corso, Florquin, & Khanh, 2008; Butchart, 2008).

Interpersonal violence is a worldwide public health issue that affects global, national, and local communities (Benson, Leffert, Scales, & Blyth, 2012; White House, 2014; World Health Organization, 2008, 2009, 2010). On the national level, both Great Britain and the U.S. report similar numbers of IPV events every year. Great Britain annually reported an estimated two million cases of IPV (Boyle, Robinson, & Atkinson, 2004). The annual U.S. numbers of IPV cases are reported at around 2.1 million (Aday, 2002). Reported IPV incidents in Great Britain and the U.S. alone represent more than four million IPV incidents, annually. The consistently high number of worldwide IPV events was such an issue that it caught the attention of the World Health Assembly. In 1996, in order to address the issue of IPV at the global level, the World Health Assembly (via a Resolution) declared that violence was a leading worldwide public health issue (Krug, Mercy, Dahlberg, & Zwi, 2002; Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002a).

The IPV issue continued to be a worldwide problem to the point where another

worldwide organization, the World Health Organization (WHO), also felt that IPV needed to be

addressed. To follow up on the World Health Assembly Resolution, the WHO (2002) released

the first *World Report on Violence and Health*. The WHO World Report developed different

categories for (and analyzed) a variety of different types of violence including child abuse and

neglect, youth violence, intimate partner violence, sexual violence, elder abuse, self-directed

violence, and collective violence. The WHO report also explored the worldwide magnitude of

health and societal effects for the different categories of violence, the risk and protective factors

related to IPV, and the types of prevention efforts that have been initiated to try to decrease IPV

events (Krug, Mercy, Dahlberg, & Zwi, 2002).

Recognizing that Interpersonal Violence (IPV) was a global issue with related high

financial costs (as well as other costs) to society, the World Health Organization (WHO, 2008)

addressed IPV by developing a manual to describe methodologies and processes that should be

used to monitor and track financial costs related to IPV and to decrease the number of IPV

events. The World Health Organization Manual (2009) describes approaches to measure and

monitor direct medical costs (via hospitalization, outpatient visits, transport to hospital or

ambulance fees, physician fees, drugs and laboratory tests) that arise as a result of IPV-related

injuries. The manual also focused on costs that require actual payments by individuals or

institutions, and indirect costs (specifically productivity losses) arising as a result of IPV-related

injuries. In addition to monitoring costs related to IPV, WHO also created a plan to reduce IPV

by: a) developing stable, nurturing relationships between children and their parents, b)

developing life skills in children and adolescents, c) reducing the availability and harmful use of

alcohol, d) reducing access to knives, guns, and pesticides, e) promoting gender equality to

prevent violence against women, f) changing cultural and social norms that support violence, and

g) reducing violence through victim identification, care and support programs (Barter & Stanley,

2016; Brown, Finkelstein & Mercy, 2008; WHO, 2008, 2010b).

Effectively addressing IPV at the worldwide level requires that it be addressed on

multiple community levels (Clinton, 1992; Krug, Mercy, Dahlberg, & Zwi, 2002). One of the

main levels where IPV should be addressed is the national level. Effectively addressing IPV at

the national level would afford a large number of people protection, or minimal injuries, from

IPV events. For the purpose of this study, discussion of IPV events on the national level is

limited to IPV in the U.S. On average, 65 deaths and 6,000 injuries per day are attributed to IPV

in the U.S. (Aday, 2002). Converting these daily numbers to annual numbers results in averages

of more than 23,000 deaths and more than 2.1 million injuries in the U.S. Violence-related

injuries and death affect Americans via premature death, disability, medical costs, and lost

productivity (Brown Finkelstein & Mercy 2008; Corso, Mercy, Simon, Finkelstein & Miller,

2007; Reeves & O'Leary-Kelly, 2007; Rosenberg et. al., 2006). The financial costs related to

violence in the U.S. are steep. In the year 2000 alone, an estimated $5.6 billion was spent on

medical care due to interpersonal and self-directed violence (Corso, Mercy, Simon, Finkelstein,

& Miller, 2007).

In the United States, IPV occurs with such frequency that it even results in costs within

healthcare facilities, where victims of IPV are often taken for treatment (U.S. Department of

Justice, Bureau of Justice Statistics, 1994). One of the costs related to IPV in the U.S. is the

result of IPV against U.S. health service staff, which leads to an estimated cost of $101,214,000

(Beech & Leather, 2006). The cost of IPV against U.S. health service staff factors into the

overall estimated loss of $40,485,600,000 towards economic, criminal justice, and social costs

(Beech, 2008). Interpersonal violence in the U.S. has maintained a steady frequency throughout the decades and has resulted in high costs, financial and otherwise. IPV must be effectively addressed to decrease the frequency of IPV incidents which will, in turn, decrease the overall negative effects of these events on society as a whole (Gibson & Leitenberg, 2000).

The U.S. Federal Government has, for more than 30 years, recognized the need to address Interpersonal Violence due to its high rate of frequency, negative effects, and costs to American citizens. The Federal Government initially addressed IPV via its highest-ranking Public Health Officer when, in October 1985, Surgeon General C. Everett Koop convened his workshop on Violence and Public Health. Dr. Koop called upon public health professionals to respond constructively to IPV, and thereby signaled public health's entry into the field of violence prevention (Koop & Lundberg, 1992).

In the years following Dr. Koop's call to address Interpersonal Violence, people in the highest levels of the U.S. government continued to address IPV as a national priority. In 1992, seven years after Dr. Koop first addressed IPV, President Clinton followed suit and introduced his health reform plan to Congress where he cited "the outrageous costs of violence in this country" as an area his administration was committed to addressing: "The problem of violence in America did not appear overnight, nor will it disappear suddenly. A sustained and coordinated effort . . . will be necessary at all levels of society to address this complex and deeply rooted problem" (Clinton, 1992). President Clinton's recognition (1992) that Interpersonal Violence needs to be addressed at all levels of society reinforces the need to address IPV at global, national, and local levels.

While there are a multitude of communities that could be addressed at the local level, for the purposes of this study the local community that was addressed was U.S. higher education

students, faculty, and staff. As with communities at the global and national levels, higher education students, faculty, and staff have had to deal with consistently high rates of Interpersonal Violence. The Federal Government tracks the number of IPV incidents at U.S. higher education organizations via annual reports from at least two federal sources. The federal Clery Act of 1990 (Clery Act 2013) requires that U.S. higher education institutions annually report the number of IPV events that occur on their campuses. In addition, the U.S. Department of Education (DOE) also annually reports higher education IPV occurrences at the national level. According to the U.S. DOE, between the years of 2010 and 2012 there were 117 murders, 15,321 robberies, 10,563 rapes, and 16,632 assaults (Coker, et al., 2016; Daigle, Fisher, & Cullen, 2008; DOE, 2012; Drysdale, Modzeleski, & Simons, 2010). The numbers of IPV incidents reported to the U.S. DOE remained fairly steady between the years of 2005 and 2012 (DOE, 2012).

As with incidents on the global and national levels, costs related to Interpersonal Violence incidents on U.S. college campuses are high, in more ways than one (Baum & Klaus, 2005; Duckworth & Iezzi, 2010; Katz, Polyak, Coughlan, Nichols, & Roche, 2009). For example, students, faculty, and staff involved in IPV events often have to delay returning to work and/or returning to school (Olweus & Limber, 2010; Twemlow, Fonagy, & Sacco, 2004). In some cases, students, faculty, and staff are forced to leave their jobs or academic programs due to physical and/or psychological injuries as a result of IPV (Duckworth & Iezzi, 2010; Katz, Polyak, Coughlan, Nichols, & Roche, 2009). Any interruption to higher education work and school schedules decreases academic and work productivity for students, faculty, and staff (Duckworth & Iezzi, 2010; Katz, Polyak, Coughlan, Nichols, & Roche, 2009).

Disruptions to higher education faculty or staff's work schedules or students' school schedules not only affects worker and student productivity (due to lost work and school hours),

but could also negatively affect students' abilities to complete their college degrees (Fisher, Sloan, Cullen, & Lu, 1998). Increasing the length of time it takes a student to complete a college degree could affect future earning potential, due to students having to work lower paying jobs since they don't have college degrees. Minimizing the number of IPV incidents in higher education settings is important in order to decrease the potential for negative effects on societal productivity, and future earning potential, for students, faculty, and staff (Lovitts, 2005). Assessing higher education safety programs for effectiveness would assist with decreasing IPV, since there is no standardized program for U.S. higher education safety programs for students, faculty, and staff.

Because the frequency of Interpersonal Violence has remained consistently high at global, national, and local levels for decades, a conceptual framework to effectively address the multi-layered complex issue should be used in an effort to decrease IPV rates. An appropriate conceptual framework, which has not been applied to the IPV issue, is a Public Health framework (Goldsteen, Goldsteen, & Dwelle, 2014). The current epidemic of violence threatens not only physical health but also the integrity of basic social institutions such as family, the community, and the health care system, all of which holistic Public Health concepts would take into account (Manotas, Martinez, & Brito, 2015). Public health concepts, which have been successfully implemented to address other public health concerns, would bring a new vision of how Americans can work together to prevent violence (Bourey, Williams, Bernstein, & Stephenson, 2015). The public health model will be elaborated upon more fully in Chapter 2.

The higher education Safety Program will be described and evaluated based on the concepts that are currently being taught or addressed to assist with individual responses to physical, sexual, and armed assault. The purpose of this study was to obtain a description of a

higher education Campus Safety Program and to evaluate and describe how one campus program provides safety for their students, faculty, and staff. Qualitative, semi-structured interviews were conducted with current Campus Safety subject matter experts. Participant interview data were evaluated with regard to an array of factors that should be a part of a comprehensive campus Safety Program.

Background of the Problem

Campus-Related Violence

Interpersonal violence on college campuses has historically been such an issue that more than two decades ago, in 1990, the U.S. government required some federal oversight in the form of reporting (Clery Act Compliance, 2013; CDC, 2013). The implementation of the Clery Act led to mandatory annual disclosures on the frequency of IPV in higher education institutions (Clery Act – 20 USC 1092f). Higher education organizations that receive federal funds are currently required to publish annual security reports and announce instances of campus violence (DOE, 2013; Lipka, 2008). Because IPV on college campuses has happened with such frequency, the U.S. Department of Education also tracks the number of IPV events on college campuses (DOE, 2008).

Although the Clery Act requires annual reporting of IPV, there is some indication that crimes against higher education students and staff may be underreported. For example, the Uniform Crime Statistics for the Federal Bureau of Investigation have reported crimes which are distinguished by town, city, county and state, but not by individual higher education institutions (Federal Bureau of Investigation, 2012). When the FBI IPV numbers for the area, where the college campuses are located, are compared to the Clery Act numbers for the campuses the percentage of Clery Act reported IPV incidents are far higher than the percentage of FBI

reported IPV incidents. While the discrepancy between the Clery Act numbers and the FBI numbers are likely related to underreporting, the number of reported IPV events on college campuses still support the need for effective campus Safety Programs. Because IPV situations are being reported in far higher numbers on college campuses than in the general public communities where the campuses are located students, faculty, and staff at higher education institutions seem to be at higher risk of being involved in IPV situations than the general public (Baker & Smith, 2008; Saewyc et al., 2009).

To further address the number of IPV incidents that occur on college campuses, available university and college crime statistics indicate that approximately one in four college-aged students will be assaulted (Amar, & Genarra, 2005; Duma, Mekwa & Denny, 2007). Gidycz (2008) reported that between 17% and 25% of college-aged females report being assaulted. Tjaden (2002) estimated that 25% of female college students will be victims of a physical, sexual or armed assault. Based on the number of college students enrolled in U.S. higher education institution, estimates yield that approximately 5 million assaults will involve college students each year. The statistic indicating that one out of four college-aged students will be involved in IPV situations has remained stable throughout the years. The significant number of IPV events that continue to occur and the fact that the number of incidents has not decreased, despite colleges having Safety Programs in place, indicates the need for more effective Safety Programs.

In order to minimize cases of IPV, colleges often provide Safety Programs that focus on prevention and awareness as the preferred methods of dealing with IPV (Hepper, Gramzow, & Sedikides, 2010; Langhinrichsen-Rohling, 2010; Wolfe et al., 2009). Between prevention and awareness strategies that are taught at higher education institutions, prevention strategies are the preferred strategies for dealing with IPV (Miller, 2008; Yoshihama, Ramakrishnan, Hammock,

& Khaliq, 2012). Prevention techniques that are taught include awareness, pre-emptive strategies, and safety tips regarding dating and interpersonal behaviors (Banyard & Cross, 2008; Cornelius, & Resseguie, 2007; Murray, & Kardatzke, 2007). Despite these well-intentioned programs, prevention offers no beneficial results when students, faculty or staff are directly faced with IPV, despite being proactive about avoiding conflict (Berkowitz & Kaufman, 2010).

When prevention strategies fail, interventions become a valid means of conflict resolution to minimize injuries. Because of the frequency of victimization of college students, it is important to also include self-defense training on college campuses as a viable means of protection when prevention fails to stop IPV (FBI, 2012; Koss, Abbey, Campbell, Cook, Norris, Testa, et. al., 2007; Yang & Jun, 2011). Effective physical self-protection responses to assault are briefly addressed in order to provide information on minimizing injury when IPV occurs (David, Cotton, Simpson, & Weitlauf, 2004; Weitlauf, Ruzek, Westrup, Lee, & Keller, 2007; Yeater, McFall, & Viken, 2011).

Some interventions are recommended as strategies for dealing with IPV, since prevention and awareness strategies may not work in some situations (Orchowski, Gidycz, & Murphy, 2010; Sinclair, Sinclair, Otieno, Mulinge, Kapphahn, & Golden, 2013; Ullman, 2014). Injuries occurring as a result of IPV are best prevented or minimized by self-defense measures (Brecklin, 2008; Chen, 2010; Gidycz & Dardis, 2014; Hollander, 2014; Norrell, & Bradford, 2013; Orchowski, Gidycz, & Murphy, 2010; Orchowski, Gidycz, & Raffle, 2008; Sinclair, Sinclair, Otieno, Mulinge, Kapphahn, & Golden, 2013; Stalloch & Crandall, 2008; Ullman, 2014). Hollander (2010, 2014) asserts that self-defense is an effective means of countering IPV, particularly sexual violence, because it allows people to overcome their inherent fears of violence and, even without an IPV situation occurring, promotes empowerment by increasing

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sense of control and decreasing fear, anxiety, and distress (De Becker, 1997; Hollander &

Rogers, 2014; Yu, Liu, & Chen, 2012).

In the instances where self-defense courses are offered on college campuses as a means to

assist with IPV situations, students are typically taught various defensive techniques in a physical

education setting (Bart & O'Brien, 1985; Chen, 1998; Schwab, 2009). These techniques range

from skills taught within programs such as the Rape Aggression Defense systems (R.A.D.) and

Model Mugging, a course designed to accurately create—to a certain extent—an aggressive

assault scenario (Schwab, 2009). Within these courses students learn basic self-defense moves,

such as kicks, punches, and breaking from holds, as well as pre-emptive measures in an attempt

to avoid confrontations (Schwab, 2009). Students should have access to these types of programs

in order to learn both the physical intervention strategies as well as avoidance techniques

(Schwab, 2009).

Gidycz and Dardis (2004) noted that the various college self-defense programs, including

IMPACT Basics self-defense course, not only provided some self-defense strategies, but also

empowered participants through a range of techniques by allowing them to connect with their

bodies and see themselves as strong and powerful, thereby reducing the possibility of

victimization (IMPACT, 2018). The problem with these types of single semester self-defense

courses is that trying to obtain reliable outcome data on whether or not the physical interventions

taught in the courses will be effectively used by the students, in cases of IPV situations, would

cause ethical concerns. There is no safe, ethical way to test self-defense course participants' true

reactions to an actual IPV event without potentially causing harm to the participant.

While there is a paucity of research studies addressing physical intervention effectiveness

based on empirical data, measured outcomes on nonphysical interventions such as improved

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awareness and feeling confident or less fearful of assault have been studied (Brecklin, 2008; Chen, 1998; Hollander, 2004; McMahon, Banyard & McMahon, 2015). In cases where data was collected from participants who completed the courses, they reported having greater awareness of their surroundings and felt more confident than they did prior to taking the courses (Brecklin, 2008; Chen, 1998; Hollander, 2004; McMahon, Banyard & McMahon, 2015). However, outcomes of nonphysical interventions have been measured via self-reports provided by students and self-reported data tends to be a subjective measurement rather than an objective measurement (Gidycz, Rich, & Marioni, 2002; Macy, Nurius, & Norris, 2007a; Masters, Norris, Stoner & George, 2006; Rowe, Jouriles, McDonald, Platt, & Gomez, 2012).

Although there is not an abundance of outcomes-based research to support the effectiveness of self-defense courses on college campuses, higher education institutions bear some responsibility for ensuring the safety of students, staff and faculty who are attending classes, living, and working within their area of responsibility (Lipka, 2008; Janosik & Gregory, 2009). Given that all colleges that receive federal funding must report the number of IPV incidents that occur on their campuses annually, in order to comply with the Clery Act (DOE, 2013), colleges must be aware of the high number of IPV situations that are occurring on their campuses. With the awareness of the frequency of the IPV incidents, institutions should go beyond simply raising awareness of IPV on campuses as a way of combating violence. In order to prevent IPV, comprehensive higher education Safety Programs should provide students, faculty, and staff with both prevention and intervention strategies. Because there is such a high frequency of IPV incidents on college campuses, students, faculty, and staff should be prepared to protect themselves in case they are faced with a potential assault.

On the prevention side, the programs should incorporate techniques like situational awareness scenarios, where students learn various ways they can avoid situations where assault may occur. However, physical skills (i.e. intervention strategies) should also have a predominant focus, with an acknowledgement that emotional readiness is always a component of a good defensive system (Rosenblum & Taska, 2014). The intervention aspect of the programs needs to provide an effective set of self-defense skills. Program evaluation for this study will include asking study participants what type of physical training was included in the college Safety Program and what access students had to appropriate training programs.

Statement of the Problem

There is currently no standardization for higher education Safety Programs for students, faculty, and staff in the U.S. (Brecklin, 2008; DOE 2012). The reported number of IPV events via the Clery Act, the U.S. DOE, and the FBI has not shown a decrease in IPV on college campuses in the past couple of decades (FBI, 1991, 2010). Current Campus Safety Programs do not appear to be effective in protecting students, faculty, and staff, since the number of IPV events has not decreased over the past couple of decades. Therefore, the purpose of this study was to obtain a description of one higher education campus safety program and to evaluate how the campus program provides for the safety of their students, faculty, and staff. An in-depth evaluation of one higher education Campus Safety Program may provide useful information that could help other higher education institutions to more effectively protect their students, faculty, and staff (Gidycz, Rich, Orchowski, King, & Miller, 2006).

Given that prevention should be one of the core parts of any campus safety program, prevention strategies were discussed as one part of a program evaluation for one U.S. University located in the Western Region. One reason that prevention strategies are important for campus

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safety is that perpetrators often strategically select their targets. Perpetrators are known for analyzing everything from the way a potential victim walks (Book, Costello, & Camilleri, 2013) to perceived vulnerability from minor movements like lack of eye contact and fidgeting of the hands and feet (Wise, 2010). Therefore, programs should be designed to highlight the types of behaviors that may attract the unwanted attention of a perpetrator.

While there is no doubt that the perpetrator of an IPV event is completely responsible for creating the situation, knowing the types of interventions that students, faculty, and staff can take to protect themselves will empower them (Jones, 2012). As such, the curriculum design of a Safety Program should revolve around how to avoid IPV situations. Students, faculty, and staff should be taught to do what is in their control and how to become a tough target by recognizing unnecessary risks, paying attention to and following their instincts, decreasing their exposure, and developing their responses in a manner that decreases vulnerability (Bellis et. al. 2012).

In addition to nonphysical strategies of prevention and physical interventions, there are physical tools (e.g. pepper spray, flashlights, and personal alarms) that students, faculty, and staff may use as a means of self-defense if prevention strategies fail (Farrell & Camou, 2005). In order to offer a comprehensive look at the Campus Safety Program, the use of various physical technologies will also be evaluated in this study. The Safety Program evaluation specifically assessed data with regard to student, faculty, and staff use of personal protective devices such as pepper spray, flashlights, and personal alarms. By evaluating use of personal defensive technologies, the researcher provided information on how to improve campus safety with this project.

When considering both nonphysical and physical strategies against IPV, consideration of what type of situation is being protected against should be assessed. Prevention strategies will

likely differ depending on the form of IPV that is occurring or that could occur (Farrell & Vulin-Reynolds, 2007). In order to understand the logic behind the interventions, understanding what type of situation that is being prevented or avoided is necessary. With regard to IPV on college campuses three broad categories emerge as the main categories, namely, physical assault, sexual assault, and armed assault. Discussion of the three main types of IPV, as well as on interventions related to the different types of IPV, is necessary to provide a comprehensive overview of IPV on college campuses.

Physical Assault

Physical assault has been tangentially studied in the professional literature. Multiple studies have categorized the types of physical injuries (Amar, & Genarro, 2005; Coker, et al., 2016; Cummings, Gonzalez-Guarda, & Sandoval, 2013). Prevention of physical injury to the intended victim, or companions, of the crime is not a focus of this paper. However, a significant gap in the literature exists between information regarding assault victims and information to describe the potential effective responses to assault that will limit or eliminate physical injury (Cummings, 1992; Jozkowski, 2015). The gap in research in this area of interpersonal violence (IPV) could provide an avenue for future research projects.

Gidycz, Van Wynsberghe, and Edwards (2008) addressed some possible responses to assault. In a 2008 paper, Gidycz investigated non-forceful verbal resistance of college-aged females such as quarrelling, pleading or reasoning with the aggressor. They examined active resistance involving running away and physically fighting. No details of "physically fighting" were noted. Freezing or passive resistance will escalate the probability of a completed rape or assault (p.572). Research suggests that active resistance is the most effective way to stop an assault and minimize injury to the survivor and companions (Balemba, Beauregard, &

Mieczkowski, 2013; Banks, 2003; Banks & Reed, 2010; Edwards et. al., 2014). Gidycz et. al. (2008; *Senn, Eliasziw, & Barata, 2015*) strongly state that "women need to be cognizant of the most effective ways to protect themselves" (p. 572).

Non-physical defensive strategies to resist assault were mentioned by Orchowski (2008) in an evaluation of a sexual assault risk reduction program and had 301 women as respondents. The risk reduction program featured such interventions as assertive body language (walking confidently), saying "no" as a verbal response, providing strong verbal responses even when anxious, trusting intuition, yelling and running, and it simply lists "self-defense" as a response. Unfortunately, Orchowski reported that the program was ineffective in reducing sexual victimization over a four-month survey period. The four-month follow-up did reveal that some of the women had used assertive body language, avoidance of displaying anxiety, and attention to intuition. Orchowski does mention that people need a plan for effective response, also advised by Gidycz, Rich, Orchowski, King, & Miller, 2006; and Ajzen, 1991.

Sexual Assault

Sexual assault is especially frequent on college campuses, among college aged women (Fisher, Cullen, & Turner, 2000; Gross, Winslett, Roberts, & Gohm, 2006; Krebs, Lindquist, Warner, Fisher, & Martin, 2009; Rader, May, & Goodrum, 2007; Schafer, Huebner & Bynum, 2006;). Sexual assault, which may also be categorized as physical assault, is the most frequent form of violent crime on college campuses (Sampson, 2011). Sexual assault responses will begin with awareness and pre-emptive strategies, well documented in the literature (Campbell, Sprague, Cottrill & Sullivan, 2011). Sexual assault may include acquaintance violence (Sampson, 2011), dating violence (Amar & Genarro, 2005), intimate partner violence (Farley & Barkhan, 1998; Felson, & Paré, 2005), and stranger assault (Esposito, 2005; Fisher, Cullen &

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Turner, 2000). Of the different categories of sexual assault, 75% percent (Sampson, 2011) are acquaintance rapes (Sampson, 2011; Sochting, Fairbrother, & Koch, 2004).

Armed Assault

In addition to other forms of on-campus violence, there have also been many instances of armed violence on campus. FBI reports publish that knives are nearly 4 times as likely to be used in college related assault as guns, but guns create more sensational news headlines (FBI, 2014). On campus and off campus incidents of gun violence, which led to dozens of student, faculty, and staff deaths and injuries, have occurred in Texas, California, South Carolina, Virginia, and Illinois (Anderson, 2011; Bass & Nelson, 2003; College Stats, 2012; Federal Bureau of Investigation, 2012; Fox & Savage, 2009; Smith, 2006; US DOE, 2012). It is clear from the overview of the three broad categories of IPV on college campuses that there is room for improvement with regard to higher education campus safety for their students, faculty, and staff.

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Purpose of the Study

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High rates of interpersonal violence (IPV) already present on college campuses nationwide require that higher education institutions have programs in place to protect students, faculty and staff (Gover, Tomsich, Jennings, & Higgins, 2011). By prioritizing self-protection on campus, there is a distinct possibility that IPV can be successfully diminished in higher learning institutions. The purpose of this study was to obtain a description of, and evaluate, a higher education campus safety program on how a campus program provides safety for their students, faculty and staff. Descriptive data will address how information for the Safety Program is disseminated and how program effectiveness was measured. Interviews were conducted with two current higher education campus safety officers and campus security personnel at one higher

education institution. In order to obtain study data, the researcher conducted anonymous interviews based on open-ended questions.

Organizational performance gaps may be important to understanding and addressing the issues with higher education safety programs. Higher education campus safety program data was analyzed based on the Public Health model. The researcher described effective ways IPV can be lessened, if not altogether stopped, on college campuses.

Research Questions

One research question and one research sub question guided this study:

1. What are the elements of an effective interpersonal violence prevention program?

   a. Using a public health approach, what programs appear to have the best chance of reducing Interpersonal Violence (IPV) in the college environment?

Significance of the Study

Exposure to interventions, prevention strategies, and prior planning will better insulate potential victims from interpersonal personal violence (Ajzen, 1991; Chen, 2010; Gidycz & Dardis, 2014; Orchowski, 2008; Ullman & Knight, 1992; Ullman & Siegel, 1993). Exploring and documenting the best strategies will prevent and/or insulate the potential victims/survivors from physical assault, sexual assault, and armed assault (Campbell, Sprague, Cottrill, & Sullivan, 2011). The purpose of this study was to obtain a detailed description of, and evaluate, one higher education campus safety program on how the program provides safety for their students, faculty, and staff. Therefore, this study is particularly significant in that it addresses prevention and readiness aspects that other studies do not. Information from this study may lead to the development of strategies to provide safety for individuals and reduce IPV on college campuses.

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Limitations and Delimitations

This study is ultimately focused on assisting with the prevention of interpersonal violence (IPV) with higher education students, faculty, and staff. This study investigated how to minimize IPV on college campuses by obtaining interview data from two current campus security staff from one higher education institution. Detailing one campus security program could provide useful information for other campus security programs. This study did not examine nonphysical attacks such as stalking, bullying, cyber-bullying, or sexual harassment. No assault victims were interviewed. Participant interviewees for this study included two current campus safety and security officers who are subject matter experts on campus safety programs. Respondents from other higher education professions may give different responses to the interview questions. This study only investigated safety programs whose target audiences are college aged persons, college faculty, and college staff. Therefore, other results may be found in people in other age categories or with people who are not college students, faculty, or staff. Lastly, one researcher conducted the research study and data analysis; other results could be possible with more than one researcher.

Methodology

The study relied on a purposive sample of higher education safety officers, not a random sample: participants' identities are confidential. Ten potential participants, from six different higher education organizations, were contacted to request their participation in this study. Only two current campus safety and security officers, from one higher education organization, agreed to participate in this project. Two current higher education campus safety and security officers were interviewed to understand how they approach the issue of IPV on their campuses. Data were aggregated to minimize the chances of identifying study participants or their schools.

The snowball sampling method was used for this study in that the first participant interviewed referred the researcher to the second participant (Heckathorn & Cameron, 2017). Participants were emailed the interview questions approximately one week prior to the interview. Emailing the interview questions prior to the interview allowed the participants to review the questions prior to answering the questions. Participants were told that they could skip any interview questions that they were not comfortable answering.

The participants chose the interview location. Once the interview date, time, and location were confirmed, the investigator met with the participants, one at a time. Participants were, individually, asked open-ended interview questions, and their responses were digitally recorded. Participants' permission was obtained to digitally record prior to using the digital recorder. The digital recordings were used to ensure accuracy of transcription. Once the transcripts were verified for accuracy, the digital recordings were deleted. The data collection was conducted over a two-month period at one U.S. Western Region university, and responses were dependent on information and conditions available at the time of the interviews.

Delimitations include the choice of objectives, research questions, variables, theoretical perspective, and the population investigated. The first delimitation is the problem itself. Other related problems could have been chosen. The purpose statement clearly identified the intended accomplishments, and identifies what the study did not examine. Participants were identified as current higher education campus safety authorities with expertise in the field of IPV.

Definition of Terms

Aggravated Assault: An attack or attempted attack with a weapon, regardless of whether an injury occurred, and an attack without a weapon when serious injury occurs. The term can

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further be examined in two separate categories: with injury and threatened with a weapon (Bureau of Justice Statistics, 2015).

Aggravated assault with injury is an attack without a weapon when serious injury occurs or an attack with a weapon involving any injury. Serious injury includes broken bones, lost teeth, internal injuries, loss of consciousness, and any unspecified injury requiring two or more days of hospitalization (Bureau of Justice Statistics, 2015).

Threatened with a weapon is defined as a threat or attempted attack by an offender armed with a gun, knife, or other object used as a weapon that does not result in victim injury (Bureau of Justice Statistics, 2015).

Armed assault: Presentation of a weapon of any type (FBI, 2012).

IMPACT: IMPACT is a personal safety, assertiveness and self-defense training program. It is part of a comprehensive effort to prevent sexual assault and other acts of interpersonal violence and boundary violations. Training is focused on assertiveness and decision making, with a minor emphasis on self-defense skills. This is a woman-only course and is not available in the state where Site B is located. The course is a four-hour, four session set, usually done over one weekend.

Interpersonal violence: Is defined by the Centers for Disease Control (CDC) as the threat or physical use of force against another person (US Department of Health and Human Services, 2012).

Model Mugging: Model Mugging is a woman-only training that uses padded instructors, known as "Model Muggers", to simulate assaults. Model Mugging attempts to turn the adrenaline reaction to an active response rather than a fear response through group talk sessions and simulated attacks. It is taught in four, five-hour sessions over a single weekend.

Physical assault: The threat of the use of force, such as using intimidation, forcefully hitting, pushing, grabbing or kicking the intended victim. The Bureau of Justice excludes rape, attempted rape, and sexual assaults from this category, as well as robbery and attempted robbery, but this paper claims that all sexual assaults are physical assaults (Duma, Mekwa, Denny, 2007). The severity of physical assaults ranges from minor threats to nearly fatal incidents. A fatal incident is a homicide, not merely a physical assault (Dutton, Hohnecker, Halle, & Burghardt, 1994).

Physical injury: Any bruising, lacerations, avulsions, tearing of the skin or tissues, bleeding, broken bones, or a completed rape. Any rape is a physical injury, even without physical signs such as skin tearing or bruising.

Physical violence: The intentional use of physical force with the potential for causing death, disability, injury, or harm. Physical violence includes, but is not limited to, scratching; pushing; shoving; throwing; grabbing; biting; choking; shaking; slapping; punching; burning; use of a weapon; and use of restraints or one's body, size, or strength against another person (CDC, 2015).

Rape Aggression Defense (RAD): The Rape Aggression Defense System is a women-only course that begins with awareness, prevention, risk reduction and risk avoidance, while progressing on to the basics of hands-on defense. The focus is on specifically preventing rape and does not address other forms of interpersonal violence. The RAD class is taught over a period of 12 hours that consist of four evening classes of 3 hours each. RAD is not available in the state where Site B is located.

Rape: Forced sexual intercourse including both psychological coercion as well as physical force. Forced sexual intercourse means vaginal, anal or oral penetration by the offender

(s). This category also includes digital penetration (fingers), or incidents where the penetration is from a foreign object such as a bottle. This includes attempted rapes, male as well as female victims, and both heterosexual and homosexual rape (Rentoul & Appleboom, 1997). Attempted rape includes verbal threats of rape (Anal hazing, 2013; Bureau of Justice Statistics, 2015).

Resistance: Actions that may protect the intended victim or companions from injury.

Self Defense Training System: STDS is a research-based, program with a military combat background. It is based on combat experiences of close quarters combat. It is a video course, in 12 modules, and is taught by a live instructor in blended on-line/traditional classroom form. Students review the video content, then practice the material in a live classroom setting. It has been formatted to fit a 12 to 15-week college P.E. course. It includes men and women.

Sexual violence is divided into three categories: 1) use of physical force to compel a person to engage in a sexual act against his or her will, whether or not the act is completed; 2) attempted or completed sex act involving a person who is unable to understand the nature or condition of the act, to decline participation, or to communicate unwillingness to engage in the sexual act, e.g., because of illness, disability, or the influence of alcohol or other drugs, or because of intimidation or pressure; and 3) abusive sexual contact (CDC, 2015).

Weapons: May be blunt trauma weapons (club, tonfa), penetrating weapons (ice pick, dirk, sai), bladed weapons (knife, ax, kama, sword), flexible weapons (chain, belt, nunchaku), pepper spray, or firearms.

Organization of the Study

This dissertation explored aspects of a higher education campus safety program as they relate to prevention of interpersonal violence (IPV) on students, faculty, and staff. Influencing factors included awareness, prevention programs, and institutional responsibility. Next, an

overview of the background of the problem and statement of the problem was discussed. This was followed by the purpose of the study, the research questions, and significance of the study. A brief description of the limitations, delimitations, and the definition of terms were also provided at the end of the chapter.

Chapter 2 is a review of the literature that is relevant to this study. The introduction provided a historical context of the previous literature related to higher education safety for students, faculty, and staff. The chapter specifically addresses evaluation of campus safety programs used on a U.S. college campus.

Chapter 3 provides the methodology that was used in this study, which includes the research design, the population and sampling measures, a discussion on the instrument selection and development process, a review of the validity and reliability aspects of the methods and the data collection and data analysis procedures.

Chapter 4 presents the results of the research. The results are organized by research questions followed by discussion on what the results indicate. The chapter concludes with findings based on the results.

Chapter 5 summarizes the findings introduced in chapter four. This provides a segue into implications for practice and discussion of future research recommendations.

Chapter Two: Literature Review

The purpose of this study was to obtain an in-depth description of, and to evaluate, a higher education campus safety program designed to provide safety students, faculty, and staff at that campus. There is no standardization for higher education safety programs in the United States (Jennings, Gover, & Pudrzynska, 2007), and the reported number of IPV events has not shown a decrease in IPV on college campuses in the past two of decades (DOE 2012). The lack of decrease in IPV on college campuses implies that current campus safety programs are not effective in protecting their students, faculty, and staff. Information collected from this study may lead to the development of more effective strategies to provide safety for individuals on college campuses and could, thereby, reduce IPV on college campuses.

Chapter 2 includes a comprehensive review of the conceptual framework as it relates to the study, IPV as a public health issue, the economic costs of IPV, and an overview of IPV prevention programs. As such the chapter essentially, provided a valuable review of the literature in a fashion that is accessible to both laymen and experts alike. The chapter addressed the gaps found within the existing body of literature, as well.

Conceptual Framework

Interpersonal Violence as a Public Health Issue

As previously stated, Interpersonal Violence (IPV) is defined as the threat or physical use of force against another person and can be classified into three main categories, namely, physical, sexual, and armed assault (US Department of Health and Human Services, 2012). Public health treats violence as a health issue, and consequently uses injuries—both fatal and nonfatal, psychological and physical—to quantify the impact of violence (Allender, Rector, & Warner 2014; Koop & Lundberg, 1992, 1999). Violence in the U.S. affects hundreds of

thousands of people every year and results in a multitude of negative outcomes for the victims (and often their loved ones) of violence. In the U.S. in the year 2000 alone, more than 215,000 people died and 20 million suffered nonfatal physical injuries from violence (Vyrostek, Annest, & Ryan, 2004).

Violence not only has physical impacts to people in the U.S, but also exacts a large economic toll on the country as a whole. Without effective interventions, the high financial costs of violence will continue to affect a large number of people in the U.S. Data regarding the financial costs of U.S. violence demonstrates the severity of the problem. For example, the annual financial costs of medical and mental health treatment, emergency services, productivity losses, and health insurance and disability payments for the victims of violence from 1987 to 1990 were estimated at $34 billion, with lost quality of life costing another $145 billion (Acierno, Resnick, & Kilpatrick, 1997; Segui-Gomez, & MacKenzie, 2003).

Physical effects of violence-related injuries affect the health and welfare, and finances, of many Americans via premature death, disability, medical costs, and lost productivity. The costs of fatal and non-fatal injuries in the U.S. in the year 2000 was $70 billion. $64.4 billion (or 92%) was due to lost productivity (Castillo, Cianfrocco, Cutlip, Jenkins, & Kisner, 1990). An estimated $5.6 billion was spent on medical care for the more than 2.5 million injuries due to interpersonal and self-directed violence (Corso, Mercy, Simon, Finkelstein, & Miller, 2007).

Violence also affects mortality and morbidity in the United States, which leads to lost productivity as well as other negative outcomes. With regard to mortality, violence in the U.S. results in approximately 50,000 deaths and 2.2 million injuries, annually, which require medical attention (Corso, Mercy, Simon, Finkelstein, & Miller, 2007). The United States also has one of the highest reported homicide rates in the industrialized world, a rate 16 times higher than that of

Greece and almost 10 times higher than England (Hammett, Powell, O'Carroll, & Clanton, 1992).

With regard to morbidities, attempted assault or completed assault will likely cause psychological trauma (Campbell, Patterson, & Lichty, 2005). Anxiety and fear are components of any assault (Barlow, Allen, & Choate, 2004; Lefkowitz, Prout, Bleiberg, Paharia & Debiak, 2005). In addition, epidemiologic and clinical studies consistently find that victims of violence, regardless of the type of violence, are more likely than non-victims to experience comorbidities such as post-traumatic stress disorder (PTSD), depression, anxiety, suicidal ideation, and substance abuse as well as a range of related physical and psychosocial problems (Kelly, 2010; Wood, Foy, Goguen, & Pynoos, 2002). Post-assault psychological injury may include depression, substance abuse, further family violence, PTSD, flashbacks, insomnia, eating disorders, sleep disorders, self-harm or suicide (Ozer, Best, Lipsey, & Weiss, 2008; McHugo et. al., 2005; Zatzick, et. al., 2007). The majority of these comorbid conditions will likely require medical treatment, which adds to the strain of an already overburdened medical system (Almeida, Cunha, Pires & Sá, 2013; Barter & Stanley, 2016; Elwood, Hahn, Olatunji & Williams, 2009; Schechter et al, 2008).

When considering different age groups, as related to Interpersonal Violence (IPV), youths and young adults within the school age and higher education age range are disproportionately represented among the perpetrators of violence (Borum, Cornell, Modzeleski, & Jimerson, 2010). Evidence of the disproportionate representation of the youth through young adult age range, with regard to IPV, are shown via statistics related to this group (Breakey, Wolf, & Nicholas, 2001). During the 1980s, more than 48,000 people were murdered by youth aged 12 to 24 (FBI, 1989; National Center for Health Statistics, 1990). Interviews with assault victims

indicate that offenders in this age range committed almost half of the estimated 6.4 million nonfatal violent crimes in 1991 (Mercy, Rosenberg, Powell, Broome, & Roper, 1993). From 2000 to 2010, 16,259 persons were murdered by youth aged 12 to 24 (National Center for Health Statistics, 2010). Offenders in this age range committed almost half of the estimated 6.4 million nonfatal, violent crimes in 1991 (DOJ, 1991); reflecting no improvement or change in the past 20 years: 52% of nonfatal crimes of violence in the U.S. in 2008 were committed by those in the 12 to 24-year-old age range, (Truman, 2011).

Additional statistics continue to support that the youth through young adult age range has a high number of violence events (Cohen, 1998). For example, this age group committed 8.4 million assaults for the 2000 – 2010 decade. Additionally, persons aged 12 to 24 face the highest risk of nonfatal assault of any age group in our society (National Center for Health Statistics, 2010). People in this age range often face perpetrators who use a weapon during the IPV event; 68% of these events involved use of a weapon during an assault.

The most commonly used weapon was a handgun, accounting for 27% of the assaults. Knives are also often used during IPV events and knife assaults accounted for 1.8% of all homicides, a rate that has remained stable since the 1990s (Centers for Disease Control and Prevention, 2010). As a possible result of the number of IPV events that involve use of a weapon, many of the IPV events that occur with the school age through higher education age range group end in homicide (Riedel, 1990). In fact, homicide is the second leading cause of death for Americans ages 15 to 34 (Associated Press, 2010; CDC, 2010; Mercy et al., 1993; Williams & Jackson, 2005).

When considering the higher education population alone, the frequency of IPV events against this particular group has also been consistently high over the past few decades. IPV

events involving college students are specifically tracked via the annual reporting as required by the Clery Act of 1990 and the Department of Education (DOE, 2008; DOE, 2013, Lipka, 2008). Both the Clery Act numbers and the DOE numbers have reflected consistently high numbers of IPV events regarding higher education organizations. Although both the Clery Act and the DOE require annual reporting of IPV, crimes against higher education students and staff may be underreported (Carr & Ward, 2006; Gover, Tomsich, Jennings, & Higgins, 2011; Langford, 2004; Tomsich, Gover, & Jennings, 2011; Wood, Sulley, Kammer-Kerwick, Follingstad & Busch-Armendariz, 2017). If IPV crimes are being underreported at higher education organizations, then the need for effective campus safety programs is more important than initially thought (Jackson & Terrell, 2007).

Comparing the IPV numbers reported via the Clery Act against numbers reported via the Federal Bureau of Investigation (FBI) further highlights the need for effective campus safety programs. The numbers of IPV events reported via the Clery Act are significantly higher than the FBI reported IPV incidents in the same locations where the higher education campuses exist (Federal Bureau of Investigation, 2012). The difference between the higher education numbers vs. the general public numbers suggests that students, faculty, and staff at higher education institutions are at higher risk of being involved in IPV situations than the general public (Baker & Smith, 2008; Saewyc et als., 2009).

Estimates of IPV events involving people on higher education campuses show that, annually, approximately 25% of college-aged students will be assaulted (Amar, & Genarra, 2005; Duma, Mekwa & Denny, 2007). Two separate studies also reported similar numbers. Gidycz (2008) stated that 17% - 25% of college-aged females reported being assaulted. Tjaden (2002) estimated that, annually, 25% of female college students will be victims of a physical,

sexual or armed assault. Based on the previously reported percentage of IPV events involving college students (approximately 25%), and using the number of students enrolled in U.S. higher education institutions, annual estimates yield that about five million assaults will involve college students each year (Cohen, 1998). The statistic indicating that one out of four college-aged students will be involved in IPV situations has remained consistent over the past few decades (Cohen, 1998; Garcia-Moreno, Heise, Jansen, Ellsberg, & Watts, 2005). The high number of IPV events that continue to consistently occur, despite having higher education safety programs in place, indicates the need for more effective safety programs.

Public Health and Violence

A critical broad strategy to attempt to solve the Interpersonal Violence (IPV) problem has been to invest in primary prevention of interpersonal and self-directed violence to reduce the likelihood that injuries will occur in the first place. Effective prevention strategies to address IPV within the school age through the higher education age range are important, as evidenced by the consistently high number of IPV incidents within this age group (FBI, 1989; National Center for Health Statistics, 1990). Currently used IPV interventions, designed to decrease the number of IPV events, have not been effective since the frequency of events over the past few decades has remained consistent. A model that may be effective, which has not been used to address IPV in higher education, is the Public Health Model.

Using a public health approach to address IPV has support at the federal level, via the U.S. Public Health Department. U.S. Public health officials have identified IPV as a priority area that needs to be addressed (U.S. Department of Health, 2000; U.S. Department of Health and Human Services, & Office of Disease Prevention and Health Promotion, 2012).
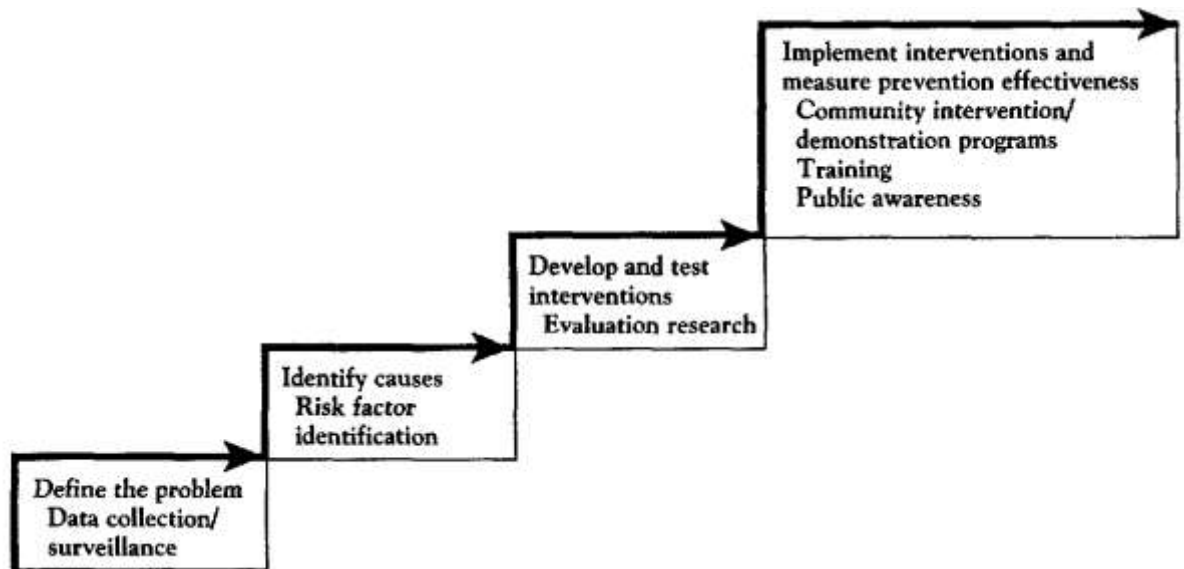
Public Health Model

The public health model brings an evidence-based approach with a strong emphasis and commitment to identifying policies and programs aimed at preventing violent behavior, injuries, and deaths. One of the issues with not using a public health approach with IPV is the potential lack of efficacy of implemented intervention strategies. Not using a public health model could waste organizational time and resources. By not using the public health model, organizations may implement interventions to address IPV that have not been evaluated for efficacy via scientific methodology. When a public health model is used to address an issue, assessing the efficacy of interventions is included as a part of the process. In addition, utilizing public health concepts to address IPV will bring another element that has been missing from campus safety programs, namely, a multidisciplinary scientific approach that is explicitly directed toward identifying effective approaches to prevention.

By using a public health lens, effective policies for preventing violence would be grounded in science while remaining attentive to community perceptions and conditions. Numerous studies currently identify a role for public health in violence prevention within a wide range of educational settings: all the way from preschool training, to learning social mores in college (Basile, 2015; Flack & Kimble, 2015; Hammond, Whitaker, Lutzker, Mercy, & Chin, 2006; Zinzow, 2009). A successful public health-based IPV program would provide data about which interventions are successful and would also include information on how to conduct effective prevention programs (Prinz, 2000). Public health IPV programs' data would include outcome measurements. The outcome data would be used to measure program effectiveness and to monitor and promote continuous process improvements (Anderson & Whiston, 2005; Leviton, Khan, Rog, Dawkins, & Cotton, 2010).

The Public Health Model is composed of four general steps. The first steps in public

health epidemiology are identification of the problem and data collection. The next step is to

identify the cause of the problem. Then, interventions are developed and tested. Lastly,

interventions are implemented and measured for effectiveness.

Figure 1

Public Health Model of a Scientific Approach to Prevention

Problem Response

From: Mercy, J. A., Rosenberg, M. L., Powell, K. E., Broome, C. V., & Roper, W. L.

(1993). Public health policy for preventing violence. *Health Affairs*, *12*(4), p. 15.

To address the first step of the process, a problem must be defined and data that will help

to further define the problem are identified. After data are identified to define the problem, the

data are collected. Next, risk factors that could increase the problem are identified. After research

data have been collected and analyzed, the next step is to develop interventions based in large

part upon information obtained from the previous steps and to test these interventions. Methods

for testing include prospective randomized controlled trials, controlled comparisons of

populations for occurrence of health outcomes, time series analyses of trends in multiple areas, and observational studies such as case-control studies (Dutton et. al., 2006). For the purposes of this study, interventions will not be implemented or tested. However, interventions will be addressed as a part of the recommendations to deter and prevent interpersonal violence events.

The final stage of the Public Health Model is to implement and evaluate interventions that have been proven to be, or are highly likely to be, effective. In both instances it is important that when interventions are implemented, that data are collected to evaluate the program's effectiveness, particularly since an intervention that has been found effective in a clinical trial or an academic study may perform differently at the state or local community level. Another important component of the Public Health Model is determining the cost-effectiveness of implemented programs. Balancing the costs of a program against the cases prevented by the intervention can be helpful to policymakers in determining optimal public health practices (Rivara et. al., 2007). For the purposes of this study, since interventions will not be implemented, outcome data collection to address intervention effectiveness were not done.

While a full Public Health Model will not be used for this study, applying the model will likely yield helpful information. Although the public health model has not previously been applied to address interpersonal violence (IPV), the model has been effectively implemented in a variety of other areas (Cohen & Swift, 1993). The public health model, as a scientific approach to prevention, has been applied to a wide range of noninfectious as well as infectious public health problems, with a remarkable record of success (Sonesson & Bock, 2003). For example, using the Public Health Model has led to the eradication of Smallpox, drastically reduced smoking rates, and the number of people who die in car crashes has been reduced by tens of

thousands. This evidence-based, goal-oriented public health approach may yield similar benefits in the area of violence prevention (Issel & Wells, 2017).

A more detailed look at one example where the public health approach has been successful would be the use of public health concepts to reduce motor vehicle injuries. Over the past thirty years the United States has invested more than $250 million to identify ways to create safer cars, safer roadways, and safer drivers (Hart, 2005; Lewis, 2006). Because of this effort, cars now have steering wheels that protect the driver, front ends that crush to absorb impact, safety belts, and air bags; also, many highway systems have eliminated unsafe intersections. All drivers must pass licensing examinations and we have made great progress in removing drunk drivers from the roads. Improvements have been made in the areas of increased seat belt use, driver education, highway improvements, removing drunk drivers, and air bag installation. As a result, the highway driving death rate has decreased markedly, saving more than 243,000 lives (National Highway Traffic Safety Administration, 1991). As with motor vehicle safety, progress may be made with IPV by using a variety of approaches that include changes in behavior and environmental modification. A public health approach could help reduce physical injuries due to assault on or near the campus.

Another area where public health concepts have been successful is in the area of health promotion efforts to change individual behavior. For example, community-based health promotion programs have reduced teenage pregnancy rates, reduced smoking among adolescents, and improved dietary habits (Fung et al., 2012; Santelli et al., 2006; US Department of Health, 2010; Viner et al., 2012). If public health promotional efforts are similarly used to change individual behaviors related to IPV, this could be effective at decreasing the frequency of IPV in higher education settings (Inman, van Bakergem, LaRosa, & Garr, 2011).

Ultimately, no matter what public health issue is being addressed, and no matter how effective the proposed strategies could be, the community must assume responsibility for ongoing activities in order for the solutions to be effective. To do so, the community must have the desire and the skills (motivation and knowledge) to follow an effective program, which is much more likely if the community is committed to the program from the beginning (Minkler, Blackwell, Thompson, & Tamir, 2003). Performing comprehensive assessments of current higher education campus safety programs and using a public health approach to offer recommendations to strengthen current programs (as was effectively done with the Drug Abuse Resistance Education Program) into the college and the surrounding community could help decrease IPV events.

Economic Costs of IPV

While the majority of the focus on IPV has centered on physical, emotional, and psychological costs, there is a need to view the phenomena through an economic lens as well (Miller, Cohen, & Rossman, 1993). In order to obtain a comprehensive evaluation of the societal costs of IPV events in the U.S., details into productivity losses and economic costs should be considered. Economic societal costs of IPV events have productivity and financial consequences can be seen at the national level. For example, with millions of people in the U.S. affected by IPV events every year, it is likely that national productivity levels are adversely affected by people who need to take time off from work in order to recover (or take care of people who need to recover) from IPV events (Miller, Cohen, & Wiersema, 1996).

Losses in productivity related to IPV events also exact financial costs related to the IPV event. For example, there is a decrease in work productivity whenever people have to take time off from work to heal from injuries, or to care for someone who needs to heal from injuries. If

the person who needs time off from work doesn't get paid sick leave, the time taken off from work becomes a financial cost for the individual. If the person who needs time off from work does get paid sick leave, this time off is a productivity loss for the employer.

The methods for estimating productivity losses are not as clear-cut as they are for financial losses. Estimating productivity losses have some limitations. First, because women, the elderly, and children earn lower wages, the human capital approach applied in this analysis under-values violent injuries to these groups. Second, the approach places lower values on the work of full-time homemakers than the work of people participating in the labor market, which further depresses the value placed on women's losses due to violence relative to men's losses. The productivity losses used in this analysis exclude productivity lost by people other than those injured as the result of a violent injury. These losses may include the time that family, friends, and professionals spend caring for the injured, and time spent investigating, prosecuting, and punishing violent perpetrators.

In perhaps the most comprehensive analysis of crime costs related to IPV, Miller, Cohen, and Wiersema (1996) estimated intangible losses by averaging the monetary value of jury awards for pain and suffering. They calculated tangible losses by using a variety of sources, including the National Crime Victimization Survey (NCVS), state and federal data, previous research estimates, and a survey designed specifically for their study (Miller et al., 1996). Despite a comprehensive design, the study by Miller et al. (1996) underestimates tangible costs, particularly because it excludes "two of the largest costs associated with crime—the cost of operating the criminal justice system and costs associated with actions taken to reduce the risk of becoming a crime victim" (pp. 16-17). The total annual losses due to IPV crime in 1993 were

$105 billion for tangible losses and $345 billion for intangible losses, making a grand total of $450 billion.

Interpersonal violence events also often lead to high costs related to medical care. Medical costs related to IPV in the U.S. have been examined on the national, state, and city level. Hospital-based studies found that gun-related violence creates an especially heavy economic toll. For example, Cook et al. (1999) studied 800 cases of gunshot injuries treated in emergency rooms across the United States, They calculated that medical costs averaged $20,304 per gunshot victim. Even with a 3% discount rate, lifetime medical treatment costs per person amount to $37,000–$42,000 (Cook et al., 1999). In an assessment of the costs of gun violence on the state level, a study of 9,562 patients discharged from California acute care hospitals after treatment for firearm-related injuries was conducted. Vassar and Kizer (1996) found mean hospital charges of $23,187 per patient, 56 percent of who were paid for through publicly-financed insurance.

When looking at weapon related violence costs on the city level, data from Seattle were found. At a regional hospital in Seattle, Washington from 1986-1992 Mock, Pilcher, and Maier (1994) found direct average hospital charges of $17,367 for gunshot victims, compared to $7,699 for stabbing victims. When looking at costs at another U.S. city, Los Angeles, Song, Naude, Gilmore, and Bongard (1996) systematically categorized patients suffering from gang-related violence in UCLA Medical Center. They found 272 cases of gunshot injuries from gang-related violence over a 29-month period from 1992 to 1994. Song et al. (1996) found that the reported injuries resulted in an average of $21,200 in direct medical charges; for 58% of the charges, there was no available insurance or third-party reimbursement to pay the bill (p. 311).

Interpersonal violence costs include both direct and indirect costs. In the cases where the individual was unable to pay the medical bill, as seen in the aforementioned UCLA study, other

people bore the financial costs; Miller and Cohen (1997) reported that 70% of assault-related penetrating injuries treated at a hospital were not reimbursed. On the national level, Gunderson (1999) observed that 85% of the costs of medical care provided to gun violence victims in the United States were not reimbursed from insurance; the public paid the cost.

IPV in the Workplace

Aside from violence in the general vicinity, researchers have also focused specifically on workplace violence, due to the frequency of events (Biddle & Hartley, 2002; Hashemi & Webster, 1996; McCall & Horwitz, 2004). In 1995, homicide was second only to highway fatalities as a leading cause of job-related deaths (Toscano & Weber, 1995).

Biddle and Hartley (2002) studied the costs of homicides in the workplace in the U.S. and calculated an annual cost of approximately $970 million.

When considering the different types of locations where workplace violence occurs, schools were found to have the highest percentage (11.4%) of Non-Fatal Workplace Violence (NFWV) claims. The definition of a NFWV act ranges from offensive language or an action that makes a person uncomfortable at work, to serious bodily injury that may result in lost work time. The National Institute for Occupational Safety and Health (NIOSH) uses the definition "physical assaults and threats of assaults, directed toward persons at work or on duty." While episodes of NFWV may not lead to serious physical harm, they do impact both the employer (in terms of lost productivity) and the worker (in terms of lost wages, physical and mental pain, and suffering). Employers should acknowledge that NFWV incidents occur and recognize that the majority of the perpetrators are criminals or clients, rather than employees. If employers consider that perpetrators of violence are criminals or clients, rather than employees, they may be more likely to develop appropriate prevention and intervention programs (UCLA, 2009).

Non-fatal assault reporting is thought to be an underestimate of workplace assault because it excludes cases that do not result in lost time from work (Enosh, Tzafrir, & Gur, 2013; Peek-Asa, Howard, Vargas, & Kraus, 1997). Of the assessed claims, 90.3% were caused by criminals (Hashemi & Webster, 1996). This survey estimated that nearly one million individuals were victims of violent crimes (which include rape, robbery, simple and aggravated assault) each year while at work or on duty. These workplace episodes accounted for 15% of all episodes of violent victimization.

Researchers have also examined financial costs of workplace violence. Hashemi and Webster (1996) reviewed a random sample of nonfatal workplace violence claims filed with a large worker's compensation insurance carrier. They calculated $26.5 million in annual costs to the insurer, based on 7,173 compensated claims or $3,694 per claim (Hashemi & Webster, 1996). McCall and Horwitz (2004) found a cost to insurers of $6,200 average per claim. Claims reported in 1993 through 1996 were analyzed to report the frequency, cost, gender, age, industry, and nature of injury. An analysis of a random sample of 600 claims provided information on perpetrator type, cause of events, and injury mechanism. The distribution of cost was found to be considerably skewed, showing that there were only a few expensive claims (5% of claims cost more than $10,000), with the majority of claims (83.5%) costing less than $1,000. While NFWV episodes do not have as much financial impact as fatal workplace violence injuries it has been suggested that they have an unrecognized impact on productivity and increased health care costs as a result of stress both to the victim and any employee witnesses (Kapp, 1997).

IPV and Medical Cost

Estimating IPV costs is complicated since there are some limits to obtaining accurate estimates. Estimates include prevalence and the total number of victims. However, some victims

are victimized more than once. Costs for people who are victimized more than once may not be included in the cost estimates. For example, sexual assault records indicate that some victims of sexual assault neglected to report having been victimized more than once (Peterson, Voller, Polusny, & Murdoch, 2010). In addition, reporting to the FBI Uniform Crime Reports (UCR) is voluntary; so the UCR only reflects numbers from agencies that choose to report their assault numbers to the FBI. Lastly, reporting agencies may use different definitions of rape and sexual assault than those used by the UCR, leading to confusion as to which crimes actually involved rape and sexual assault (Campbell & Adams, 2009; Kilpatrick, Edmunds, & Seymour, 1992).

Economic estimates were also obtained via responses to the National Crime Victimization Survey (NCVS), an annual survey based on 100,000 interviews with crime victims. These costs amounted to $1.8 billion. That is 0.02% of the United States' GDP in 1994. When indirect costs are included, estimates of the costs of violence in the United States are substantially higher. Miller et al. (1996) estimated an annual cost of intentional injuries of $84.1 billion in the U.S. for the time period 1987–1990. Total annual cost to victims of personal crime in the United States, including domestic violence, sexual assault, rape, and child abuse is $507 billion, or 6.5% of GDP, equaling $1100 per person in the United States (Waters, et al., 2005).

Because of the complexities involved in calculating estimates of interpersonal violence (IPV), researchers have used a wide range of methodologies to calculate the costs of violence. The researchers' choice of methodologies and approaches can affect their cost estimates. The most evident methodological difference among studies of the economic effects of IPV is the broad range of categories of costs employed. Many of the differences in economic estimates are due to the inclusion or exclusion of specific categories of costs, rather than to different approaches towards counting costs. Another significant difference among studies is the

perspective from which costs are calculated. Some studies use a social perspective, including all costs and benefits, while other studies do not.

Several studies, however, included only costs to the victims, without counting the societal costs of prevention, law enforcement, incarceration, and lost productivity (Bellis, Leckenby, Hughes, Luke, Wyke, & Quigg, 2012; Biddle & Hartley, 2002; Centers for Disease Control and Prevention, 2011; Corso, Mercy, Simon, Finkelstein, & Miller, 2007; Payne, Berne, Kaufman, & Dubrowskij, 1993). Most of the cost estimates of the aggregate economic losses caused by violence are for a 1-year time period (Miller, Fisher, & Cohen, 2001; Centers for Disease Control and Prevention, 2005; Brown, Butchart, Corso, Florquin, & Khanh, 2008; National Center for Health Statistics, 2010). However, many physical assault injuries create injury or disability recovery times that last longer than one year. In instances where recovery takes longer than one year, the cost estimates are less than the actual costs.

Another important difference across studies, with regard to cost estimates, lies in the values assigned to human life, lost productivity, and psychological distress. The value of life has been calculated using lost wages, estimates of the quality of life, wage premiums for risky jobs, willingness to pay for safety measures, and individual behaviors related to safety measures. The values used for the different categories among studies based in the United States ranged from $3.1 to $6.8 million (Department of Justice, 1994; NCVS, 2010). These estimates are in line with those generally used in the economic evaluation literature.

Given the wide range of methodological differences and extensive gaps in the existing literature on the economics of interpersonal violence (IPV), there is a clear need for systematic future research into the costs of violence. Such research should follow rigorous methodological guidelines, include both direct and indirect cost categories, and permit comparisons across

countries and settings. There is also a need for standardized research on the indirect costs of violence. Beyond the individual consequences of opportunity cost and pain and suffering, IPV has a series of economic effects at the population level, including reduced foreign investment and lowered confidence in society's economic, legal, and social structures. There are very few estimates of the extent of these costs which, if quantified, are likely to be several times the value of the direct costs of violence.

Likewise, an important future step is to document the costs and benefits of potential interventions to reduce interpersonal violence (IPV). This section shows that an economic approach can demonstrate the magnitude of the damage caused by IPV—a first step towards a unified agenda to reduce the human toll caused by unnecessary violence. Society cannot control the cost of violence after crime has been committed; the best control mechanism is through prevention. Policy makers need to know the cost of a crime to determine if the cost of the program outweighs the cost of the crime (Cohen, 2000).

Economic Costs of Sexual Violence

The true extent of intimate partner violence is unknown and the underreporting of the crime seems to be a worldwide issue (Whitaker, Haileyesus, Swahn, & Saltzman, 2007). However, due to the frequency of sexual violence on college campuses, the cost of this type of IPV should be considered for this study. Surveys suggest there is a worldwide range in prevalence, but the results are difficult to compare given cultural differences and social taboos in responding to questions. For example, twenty-two percent of women report being assaulted by intimate partners in the United States. By comparison, 38% of currently married women in South Korea, and 53% of currently married women in the West Bank and Gaza have been assaulted by intimate partners (Krug, Mercy, Dahlberg, & Zwi, 2002). There are complex methodological

issues involved in measuring the economic impact of intimate partner violence. Many, if not

most, incidents of intimate partner violence go unreported, and the effects of such abuse on

investments in human capital and productivity inside and outside the home are difficult to

estimate.

National estimates of sexual violence have been made by using data from the National

Crime Victimization Survey (NCVS) (2010), and basing estimates on 1995 Census data, Tjaden

and Thoennes (1998) estimated that nearly 0.3% of women (302,091) over the age of 18 had

been raped or sexually assaulted in the past year. Having information for women over the age of

18 is important since most college students fall into this category. Assault on college campuses,

including sexual assault, is so consistently prevalent that higher education institutions should

consider the costs of not addressing this issue. As previously stated, Tjaden (2002) estimated that

25% of female college students will be victims of a physical, sexual or armed assault.

Researchers estimate that 20% of American women are raped during their lifetime (Koss,

1993; 2006). Rape and sexual assault have been difficult to research because an estimated 50%

to 90% of rapes are not reported (Gise & Paddison, 1988; White House Task Force, 2014). The

problem of underreporting contributes to the difficulty of estimating the prevalence and

incidence, as well as the cost of rape and sexual assault (Koss, Gidycz, & Wisniewski, 1987).

The reported assaults cost $87,000 per incident, therefore the total cost of sexual assault and rape

for the United States in 1995 was more than $26 billion (Tjaden & Thoennes, 1998).

Furthermore, the Uniform Crime Report supplementary homicide reports show 70 sex-offense

homicides for 1996. At a cost of $2,940,000 per incident, the total cost of sex-offense homicide

for the United States in 1996 was more than $205,800,000. Thus, the total national cost of sexual

violence alone in 1996 was nearly $261.25 billion (WHO, 2009).

Another issue with cost estimates for sexual assault is that the FBI codes crimes according to a hierarchy in which "only the most serious offense committed during an incident is counted, even if there are multiple offenses" (FBI, 2012; Schneider & Schneider, 2014). Because homicide ranks higher than rape and sexual assault, sexual violence ending in homicide is reported only as homicide and not as a sex crime (National Victims Center, 1992; Wiersema, Loftin, & McDowall, 2000). Sex-offense homicide is the most expensive crime, costing nearly $3 million per victimization (Miller et al., 1996).

Tangible costs of sexual violence include the costs of medical care, mental health services, loss of economic productivity, insurance administration costs, police investigations, criminal prosecutions, and costs associated with the correctional system (Campbell, 2008; Miller et al., 1996). Intangible costs of rape and sexual assault include the psychological pain and suffering of survivors and the generalized fear of victimization in society (Choudhary, Coben, & Bossarte, 2008; Miller et al., 1996; Rosenblum & Taska, 2014). Researchers have described in detail the numerous psychological outcomes experienced by rape and sexual assault survivors, including feelings of powerlessness, difficulty concentrating, lowered self-esteem, depression, and the development of phobias (Amar & Genarro, 2005; Bonomi et al., 2009; Brecklin, 2011; Campbell et al., 2011; Ullman, 2011). Individuals with a history of rape and sexual assault are six times more likely to report having attempted suicide (National Research Council, 2014). The United States Department of Justice (1991) calculated the economic losses of rape as $33 million, based on reported direct medical costs and lost earnings, though this estimate did not include psychological costs.

As an example of the economic costs at the state level, a conservative estimate is that rape, sexual assault, and sex-offense homicides cost Michigan more than $6.5 billion per year. If

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divided equally among Michigan's population in 1996, rape and sexual assault would have cost

each resident of Michigan $40.20 in tangible losses and $641.57 in intangible losses, for a total

of $685.71. If there had been a "sexual violence tax" in 1996, the average Michigan family of

four would have paid an extra $2,750 in taxes (Pony & Mazey, 2009).

Throughout the literature on the costs of violence, psychological costs greatly outweighed

the direct costs of violence—partially explaining the wide variance in the estimates that are

available. New and Berliner (2000) found that women who were compensated through the Crime

Victims Compensation Program in Washington state averaged $3,087 for mental health

treatment and counselling costs. Cohen (1988), using pain and suffering awards from more than

100,000 jury decisions in the U.S., calculated that the annual aggregate direct and indirect costs

of rape were $14.9 billion—equivalent to 0.2% of the GDP. The direct and indirect costs of

sexual violence (as just one category of IPV) for society and, most importantly, for the victim are

extremely high and must be considered when studying violence.

The U.S. Supreme Court and the judicial system may not define rape as an economic

crime, but the economic costs of rape, sexual assault, and sex-offense homicide are astronomical.

Laws and public policy that ignore the economic burden sexual violence places on society at

large, as well as on individual survivors, are laws and public policy that misunderstand and

underestimate the nature and cost of sexual violence.

Interpersonal Violence Prevention Programs: Overview and Efficacy

The development and implementation of public policies that lead to violence prevention

is a formidable challenge. President Clinton said, "the problem of violence in America did not

appear overnight; nor will it disappear suddenly" (Clinton, 1992). A sustained and coordinated

effort to prevent violence will be necessary at all levels of society to address this complex and

deeply rooted problem. A public health program for violence prevention provides a reasonable

response to IPV (Niezgoda, Dawley, Date, Date, & Date, 2006). The evidence-base for the

violence prevention effects of programs is limited (Brown et al., 2008, p. 14). A critical broad

strategy is to invest in the primary prevention of interpersonal and self-directed violence to

reduce the likelihood that injuries will occur in the first place (Corso, Mercy, Simon, Finkelstein,

& Miller, 2007).

Preventative Programs

While there is no standardized program to address IPV at higher education institutions,

there are prevention programs that have been used in other settings. For example, early

interventions such as Head Start and home visitation programs, take a long time to demonstrate

effectiveness because they target children who will not enter the periods of highest risk for

violent behavior for many years. Hawkins' (1991) research focused on skill development and

rewards for conventional behavior in elementary school children. There was no tracking for

assaults committed by the subjects after elementary school (Hawkins, Von Cleve, & Catalano,

1991).

In an attempt to limit violence in the workplace, Gertz (1980) produced an early report on

a two-day aggression management workshop in a U.S. mental health center for 317 staff.

Content included prevention guidelines and plans, verbal de-escalation techniques, and physical

breakaway and restraint skills. A descriptive comparison of year-before versus year-after patient

incident figures showed a 33% reduction in incidents over two years (Gertz, 1980). Lehmann,

Padilla, Clarck, and Loucks (1983) delivered a similar five-hour program to 144 staff in a U.S.

veteran's hospital. Course content included prevention measures, risk factors, verbal de-

escalation, legal issues, and physical breakaway and restraint skills. Several measures of change

were used, including attitude to violence, objective knowledge, confidence, comfort, and number of assaults (Lehmann et al., 1983). Pre-and immediate post course administration of a 10-item questionnaire (and an additional small sample of interviews) revealed improvements in knowledge, significantly increased confidence, and slowed acceleration of rate of incidents.

In another violence prevention program, Goddykoontz and Herrick (1990) selected a different course design and delivered four workshops over four months to 27 registered staff and aides in a U.S. university psychiatric unit. Content included verbal de-escalation, early signs recognition, self-awareness, physical breakaway and restraint skills, and awareness of burnout and feelings. They measured burnout, confidence and control, number of incidents and number of staff injuries and compared scores immediately before training with four months post-training, concluding no overall impact on burnout measures, but a reduction in the number of incidents and anecdotal evidence of fewer injuries.

While the types of programs instituted in other settings could prove useful in higher education settings, a standardized, evidence-based nationwide program specifically focused on college students, faculty, and staff (to address the unique setting in which the population exists) would likely prove to be most effective. Some higher education organizations have addressed violence by implementing elements of a comprehensive safety program. For example, some higher education institutions have offered didactic courses as part of their college curricula (Hollander, 2010; McMahon, Postmus, & Koenick, 2011; McNamara & Marsil, 2012). However, teaching courses on IPV is just one part of a comprehensive campus safety program. A comprehensive program would incorporate prevention, intervention, and institutional responsibility (Choudhry, Fang, & Mohamed, 2007).

Part of what makes the college environment unique is that for many college students, being on a university campus is their first taste of long-term unsupervised living. Being completely independent, being away from parents and family, and making new friends can be exciting and empowering. However, newfound independence can put people in high risk situations. It is important to teach students, who are new to the campus, precautions regarding safety. Students should be made aware that it's important to consider how to react to situations such as alcohol and drug abuse, safe places to gather, and how they will spend non-academic time. Being prepared and having a plan for action can mean the difference between a near miss and a harmful incident (Cherpitel,Ye, & Bond, 2005).

Injuries due to campus related IPV crimes can be reduced by implementing some evidence-based practices. While there is no standardized campus security plan in the U.S., there are interventions that organizations can implement to help protect their students, faculty, and staff. Some institutional efforts that have been implemented in an effort to reduce campus crime, that are evidence-based practices that have helped in the general population, include sidewalk lighting, emergency call boxes, presence of campus security personnel, and educational programs to diminish campus crime (Coker, et al., 2016; Mercy & O'Carroll, 1988). A multiple focus program will give more layers of protection to our students, staff and faculty. No one factor will reduce campus related assaults, but several factors utilized in conjunction will likely have a positive influence. Many authors have contributed evidence-based campus security suggestions (Coker, et al., 2016; Haggerty & Goodman, 2006; Hahn et al, 2007; O'Neill, et al., 2008; Ullman, 2011). Here is a distillation of the ideas.

One of the most important evidence-based factors for a college safety program is awareness. Students should all be trained to observe their surroundings as they move from place

to place. The following guidance on awareness has been used in campus safety training programs (David, Simpson, & Cotton, 2006). Avoid constantly reading or looking at the smart phone; it isn't smart. Be aware of who is coming towards you, who is around you, where you could go if escape is needed in a short instant. If you're unfamiliar with campus, check a map so you can follow a path before you go. Walk with a group or a friend. Know where the campus emergency "blue light" phones are located along your route. Blue light phones give you immediate access to security.

Other evidence-based practices include offering a security guard to escort people to their car as needed. Being aware of what is happening in your surroundings, both on and off campus. Be alert for people who look out of place, maintain vigilance in poorly lit areas or sparsely populated locations. If someone looks like they are up to no good they likely are, so avoid walking near them and notify security of their location. Unsafe situations can be avoided or ended by early detection and removing yourself. Be quick to report situations that could lead to someone getting hurt.

Some evidence-based practices have been adopted from the general community. For example, "if you see something, say something" is a slogan adopted by community watch groups. This slogan is also effective when applied to college campuses. Many incidents could be avoided if someone steps up to help at the first sign of distress. Many campuses have initiated an evidence-based bystander intervention program (Coker, et al., 2016; Guttman, Mowder, & Yasik, 2006; Menning & Holtzman, 2015). Components of the program include being courageous and asking someone who seems to be distressed if they are ok, or get someone like a dormitory resident advisor to help if someone looks like they are in trouble. Students, faculty,

and staff are all part of one community and, as a community, they should all be looking out for and caring for each other.

Other evidence-based prevention measure suggestions include that if you walk alone at night, consider a safety app for your phone, or consider carrying non-lethal weapons (Orchowski, Gidycz, & Raffle, 2008). Being prepared for walking alone (if you must walk alone) is another way to prevent an incident. A safety app on the phone can alert police in an emergency. If you choose to carry a non-lethal weapon, you could choose pepper spray, keychain, a taser or another non-lethal weapon, but be sure to get trained on how to effectively use it (Morgan, 1986). If you decide to carry a taser, please be sure to check on local rules and regulations, since tasers require a class and certificate of training in some states. Tasers are prohibited in the state where the interview participants' school is located. A background check is required in some states, while no permit is required in other states (Taser, 2018).

Since preventive measures are not always enough to avoid an interpersonal violence situation, many schools offer self-defense classes as part of a physical education program (Wood & Wilson, 2008). There were no documented academic self-defense courses taught below the high school level (Von Lohmann, 1995). Most self-defense courses are taught at the college and adult level (Chen, 1998). For most people, college was the only exposure to self-defense. Chen also found that 36% of schools had no self-defense program; 22% had a martial arts course that was not specific to self-defense; 41% had self-defense courses listed in their catalog; 53% of the schools had a gender-oriented class (self-defense for women), and 0.2% of schools blended a martial art and self-defense (Chen, 1998; Chen & Plato, 2007). The term "self-defense" was only used by 57% of the schools (Chen & Plato, 2007).

Self-defense classes can be evidence-based interventions that are used to train individuals to defend themselves, or others, in case they end up in a violent situation (Chen, 2004). However, there is no standardization to these types of courses, so quality of classes may vary (Hollander, 2016). Some schools may offer these classes or seminars to freshmen, as it is freshmen who tend to be primary targets (Brown & Messman-Moore, 2010; Menning & Holtzman, 2015). Self-defense classes should teach simple techniques that are easy to learn and retain (Edwards et. al., 2014)). Fighting back is not the goal: personal safety is the goal. Resistance may give you the option of running away (Cermele, 2010). Running away is a better option than being injured. In the case of Rape Aggression Defense (RAD) or Model Mugging classes, participants actually defend themselves against an (acting) attacker, disabling the attacker long enough for the student to escape (Rape Aggression Defense program, 2018; Model Mugging, 2018). As a result of a proper training program, changes can be determined in the knowledge and practice of individual course attendees (Ajzen, 1991). Training can result in fewer assaults, less serious injuries, a reduction in the psychological sequela following assaults, improved response to assaults, and better student, faculty and college staff morale (Goudarzi, 2000).

According to Damian Ross of the Self-defense Training Network, a good program should include a development of physical skills, learning awareness, pre-emptive, and prevention skills, increasing self-confidence, and body conditioning (Ross, 2018). Course objectives should be based on an analysis of the nature of self-defense, and what should be taught in a standardized self-defense course for college aged individuals. Any course should include information and practice using mental strategy, awareness and pre-emptive skills, prevention and back-away strategies, physical skills at four distances (kicking, punching, trapping, and grappling range),

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vulnerable targeting, applying these skills in laboratory practice, and post-assault measures (Lee, 1975).

Thompson (2014) mirrored Ross's sentiment, in that training needs drills to reinforce movement and decision making under stress. Certified instructors need know how to teach defense against various attacks—grabs, punching, kicking, armed, multiple—to provide opportunities for students to learn and practice physical skills (Thompson, 2014). Thompson (2014), Brecklin & Ullman (2005), Hasday (2001), Brecklin & Middendorf (2014), and Turchik, Probst, Chau, Nigoff, & Gidycz, 2007), particularly made the case for self-defense programs in efforts to prevent rape, noting that it was critical that self-defense training increases women's ability to resist sexual assault. In its simplest form, that means self-defense instructors teach effective physical self-defense and create opportunities for practice. Empowering self-defense training means a focus on the centrality of the physical body. When women learn how to use strong parts of their bodies (e.g., elbows, knees, feet) to strike targets (e.g., eyes, nose, groin) that are vulnerable on anyone, regardless of height, body mass, or strength, they dismantle ideas about men's invincibility and challenge the inevitability of rape (Brecklin, & Middendorf, 2014; Brecklin & Ullman, 2005; Hasday, 2001; Thompson, 2014).

There are documented cases where individuals used self-defense methods in order to dissuade or prevent further instances of interpersonal violence (Ballan & Freyer, 2012; Sinclair, Sinclair, Otieno, Mulinge, Kapphahn, & Golden, 2013). Ballan and Freyer (2012) surveyed disabled women and self-defense, finding that 50% of the population had been victimized. However, it was revealed that forceful physical resistance resulted in the crime being completed less often and 57% of the women surveyed felt that using self-protective measures was helpful in avoiding greater injury (Ballan & Freyer, 2012; Cermele, 2010).

For women who were injured in the process of resisting an intimate partner, it is possible that they may have prevented a graver injury, or even death, had they not defended themselves (Reed, Raj, Miller, & Silverman, 2010). Of those women who were injured during an assault, 80.7% reported injuries consisting of bruises, cuts, scratches, or swelling, raising the question of whether these more minor injuries may have been sustained in prevention of more serious injuries such as broken bones and gunshot wounds (Ballan & Freyer, 2012). For women, self-defense may be effective in harm reduction. Brecklin and Ullman (2005) found that individuals with some form of pre-assault training were more likely than women without training to report that their resistance stopped an attempted rape, or made the attack less aggressive.

Through effective self-defense programs, interpersonal violence (IPV) can be prevented, and if not prevented, at least stopped or injuries minimized. The need for these programs arises from the fact that while prevention strategies are indeed effective, they are not always applicable (Nation, Crusto, & Wandersman, 2003). In many cases, potential victims find themselves in scenarios where they have done everything they could have to avoid confrontation but are still targeted. This is where the self-defense programs are useful (Littleton & Henderson, 2009).

College and workplace violence is increasingly recognized as a serious problem with implications for both educational leaders and staff. Students, faculty and staff require training in a range of knowledge, skills and policy areas that are regularly updated (Rasmussen & Johnson, 2008). Educational leaders need to address their responsibilities under health and safety legislation by organizing risk assessments, negotiating protocols and policies, and organizing staff training based on particular identified needs. Therefore, a total organization response is needed with duties and responsibilities for all members of an organization.

Summary

Average annual worldwide numbers show that the number of interpersonal violence (IPV) events has maintained consistency throughout the decades. The evidence of the consistently high number of IPV events supports that the issue has not been effectively addressed. Effectively decreasing IPV events will yield positive outcomes via fewer physical, psychological, financial, and economic effects on the U.S. population. The complexity and consistent frequency of IPV incidents defies a single simple solution; multiple complementary activities (i.e. preventive activities, education activities, and physical interventions) are required to effectively address IPV (Brown, Finkelstein & Mercy, 2008; WHO, 2002). However, the vast majority of IPV programs do not consist of multiple complementary interventions, as was recommended by the World Health Organization (2008).

For example, one of the complementary interventions that has not been consistently used in IPV programs in higher education settings are physical interventions (Sinozich & Langton, 2014). IPV programs (in settings other than higher education settings) which trained potential victims to prevent and minimize injuries (i.e. bruises and/or abrasions vs. completed rape and/or broken bones) have been fairly effective (Cascardi & Avery-Leaf, 2014; Hollander J., 2014). While teaching physical interventions, as a form of defense, has been effectively used to help prevent and/or minimize injuries related to IPV events this intervention has not generally been used in higher education settings.

To further support the idea of utilizing complementary interventions to address IPV events a multipronged Public Health Model has been somewhat successful with efforts to change individual behaviors with regard to issues other than IPV (Maurer & Smith, 2013). For example, community-based health promotion programs have been used to effectively reduce teenage

pregnancy rates, reduce smoking among adolescents, and improve dietary habits (U.S. Department of Health and Human Services, 1991; U.S. Department of Health, 2000). However, even with the successes using Public Health Models there is a paucity of research addressing comprehensive IPV programs in higher education settings.

In an effort to describe and evaluate current IPV programs within higher education organizations, this study involved interviewing two current higher education safety program personnel. Because IPV continues to occur with a high rate of frequency in higher education settings, campus safety program personnel were surveyed in order to identify possible gaps in their programs. It is hoped that identifying (and providing information on) gaps in campus safety programs will provide the organizations with information that will be used to strengthen their IPV prevention programs.

Chapter Three: Methodology

Students, faculty, and staff face the potential of interpersonal violence (IPV) both on and off campus. For example, students, faculty, or staff may be at a local ATM, parking lot, study group, or another off-campus location and experience a violent confrontation. When students, faculty, or staff are involved in IPV events there is the potential for a decrease in productivity, since the person involved may have to take time off from work or school to recover from the event.

When a higher education student needs to take time off from school to recover from an IPV event this could affect future productivity as well as future earning potential, since a student who needs to take time off from school will likely take longer to complete his/her degree (Nelson, 2010). In addition, faculty or staff who have to take time off from work also have decreased productivity levels when they are unable to work. Faculty and staff's time away from work could also affect students' abilities to complete their degrees, if the affected faculty or staff are involved in students' degree earning pathways.

Higher education organizations that employ, house, or instruct students have a responsibility to ensure the safety of their students, faculty, and staff, both on and off campus. Higher education institutions in the U.S. can use a Campus Safety Program to ensure the safety of people affiliated with their campus. The purpose of this qualitative research study is to describe, and evaluate, how a higher education institution maintains safety for their students, faculty, and staff.

This study is designed to explore the methods that a campus safety program uses to minimize the potential for IPV events while on or near the college campus. Qualitative interviews were conducted with two current higher education campus safety personnel in order

to obtain data that were analyzed. This chapter identifed the location and setting for the research, the research design, instrumentation used to collect data, as well as the data treatment and limitations of the study.

Research Questions

This study describes a U.S. higher education campus safety program. The research is an exploration of effective responses to prevent interpersonal violence (IPV) at one higher education institution. Maxwell (2013) affirms that in many works on research design, research questions are presented as the starting point and primary determinant of the design. Maxwell's (2013) research design and validity matrix were used when selecting appropriate research questions for this study. The following research question was posed to guide the study and collect data to inform students and teachers how best to minimize injury to themselves or others when being actively assaulted:

Research Question

1. What are the elements of an effective IPV prevention program?

   a. Using a public health approach, what programs appear to have the best chance of reducing IPV in the college environment?

Research Approach

The design of this study is that of a qualitative case study using interview response data. A qualitative research study is appropriate when the specific variables of the study are unknown and the research is exploratory (Johansson, 2003). Rather than investigating quantitative data, this study was conducted based on the questions such as, "what do I need to know," "why do I need to know it," and "what kinds of data will answer the questions?" Quantitative data are not useful in answering such open-ended questions (Yin, 2014).

The qualitative approach was selected for several additional reasons. Qualitative data are interpretive, experiential, situational, and personalistic (Stake, 2010). Qualitative data allow for the presentation of multiple perspectives and are said to be subjective, meaning that this method it is interpretive, and is not concerned with scientifically verifiable data. Qualitative data develop from the experiences of others and are empirical. In this way, qualitative research may be considered experiential, as the data regard only the focus of the study as it is understood through the lens of the population of interest. Qualitative studies can also be interpreted as situational due to the fact that different perspectives are presented and differences in experience may occur based upon place, time, and the individual's circumstances (Yin, 2014). Qualitative research is meant to bolster knowledge pertaining to multiple perceptions, and to find commonalities; however, it is also useful in examining the diversities of situational experiences, and is thus considered to be personalistic (Stake, 2010).

Design

In following qualitative methodology, the research was conducted using a case study design. Case study research involves studying an area of interest through one or more cases with a common link, such as the setting. In this study, the bounded case is defined as IPV prevention for students, faculty, and staff within the setting of higher education institutions in the U.S. The goal of the case study is not necessarily to create findings that are generalizable to the larger population, but to create a greater understanding of the case itself for study Site B (Johansson, 2003). Data analyses and program evaluation included information on how to better protect students, faculty, and staff in higher education settings.

Case studies are appropriate when the goal of the research is to explain the how or why of some current and specific circumstance (Yin, 2014). These case studies allow for the

examination of this distinct situation, which is bound by the setting (Yin, 2014). Within the

scope of this research, the specific circumstance is how students and faculty are instructed to

prevent and react to violent attacks, and is intended to contribute to determining which strategies

are the most effective for victims to take when faced with such a situation (Lee, 1975). A major

factor in the decision to follow a case study methodology is that this method allows for the

combination of several data collection sources, with the purpose of examining a case from

several perspectives (Johansson, 2003).

Using this design, the researcher may draw on multiple sources of information including

interviews, observations, artifacts, archival records, or documentation (Yin, 2014). Any

combination of these sources may be pooled with the purpose of illuminating a case from

different angles, and therefore capturing the complexity and depth of an issue through the use of

data triangulation (Johansson, 2003). As Schram (2006) highlighted, "whether you consider case

study as a way of conceptualizing human social behavior or merely as a way of encapsulating it,

its strategic value lies in its ability to draw attention to what can be learned from the single case"

(p. 107). The focus is placed on the complexity within the case, figuring out what complex

things go on within that system, the uniqueness of the case and the social context of which it is a

part (Stake, 2010).

Role of the Researcher

When collecting qualitative data for a case study, the researcher should have standardized

interactions with all of the interviewees in order to ensure that the data collected is valid. Weiss's

(1994) guidelines which detail an ideal partnership between the interviewer and the respondent

will be followed during the course of the study. First, the interviewer will work together with the

interviewee to produce information useful to the research project. Second, the interviewer will

not ask questions out of idle curiosity. The interviewer will be a privileged inquirer in the sense that the interviewer may ask for information the respondent would not make generally available. Third, the interviewer will respect the respondents' integrity. This means that the interviewer will not question the respondents' appraisals, choices, motives, right to observations or personal worth. Finally, the interviewer will ensure, both during the interview and afterward, that the respondent will not be disadvantaged because the respondents' participation in the interview. In particular, the interviewer will treat the respondents' participation and organization as confidential information.

Qualitative researchers have opinions, beliefs, attitudes and prejudices, and these can be revealed in their notes, because notes often reflect one's own way of thinking (Bodkin and Biklen, 2009). Any of these outlooks will be set aside during data analysis in order to gather highly credible data. In addition, it is the researcher's responsibility to ensure that the interviewee is comfortable and at ease so that rich comprehensive data may be collected (Moustakas, 1994). The researcher must also ensure that interviewees are aware of the voluntary nature of the interview and knows that they may choose to leave at any time without penalty.

Sample and Population

Population

The higher education organization population that this study considered is based on one local, private university campus. To maintain anonymity of the faculty and staff of this organization, this example University will be referred to as Site B. Site B does not have a traditional campus. Site B is located in the Western Region of the U.S. In 2019 Site B's total student population was 3,000.

Sample

The purpose of this study was to obtain a description of, and evaluate, a higher education campus safety program, via interviews from current campus safety staff and field notes to obtain information on how a campus program provides safety for their students, faculty, and staff. To do so, two Campus Safety and Security Officers were interviewed. This selection of respondents was based on nonprobability sampling or what Patton (2002) referred to as purposeful sampling. Purposeful sampling was based on the assumption that, "the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned" (Merriam, 2009, p. 77). Thus, a typical sample was used to represent the phenomenon of this study. The nonprobability sampling or purposeful sampling method was used to gather data from two known authorities in the area of campus safety and IPV. The initial sample for this study consisted of two known authorities on the subject of IPV. These participants were all drawn upon due to their relationship with the case settings, and are thus able to inform the case of interest (i.e., IPV curricula and instruction for students, faculty, and staff at Site B).

Description of Participants

Ten potential participants from six different higher education organizations were contacted to request their participation in this study. Two participants from one private organization located in the Western Region of the U.S. agreed to participate in the study. To protect their identity, the two participants will be referred to as Subject 1 (S1) and Subject 2 (S2). Campus safety and security personnel were purposefully selected based on the following criteria: Each of the interviewees had more than 10 years of college security work, or work with a law enforcement organization. Each interviewee agreed to be interviewed, and stated they had the experience that would lend information to the research project. The university was also selected

based on convenience sampling to allow for easier access to participants through connections and contacts of the principal investigator.

The sampling practices should neither have a negative threat to validity nor negatively threaten integrity of the data obtained. Due to convenience sampling, data revealed could possibly be more positive in nature toward preserving the reputation of the participant's institution. Pseudonyms were used to protect the identities of the participants and university. The university had approximately 3,000 students at the time of the interview.

Two participants from one private university participated in this study. Each participant was emailed the interview questions one week in advance of the interview, and participated in a 20 to 30-minute face-to-face interview. Interviews were conducted individually and the interviews with S1 and S2 occurred about two weeks apart. The participants were both employed in the campus safety and security department at the university. Neither participant was able to disclose the number of IPV events that had been reported on their campus. However, they did say that there were very few events that occurred at their facility.

While S1 and S2 stated that there were very few IPV events on their campus, the fact that there were any IPV events at their organization implies that there are security gaps that should be addressed. Interviewing the two participants provided insights into possible security gaps in their organization's security program. In an effort to address the quality of the responses of S1 and S2, it was helpful to establish the participants' experience in general security and safety, as well as to establish their specific IPV campus security experience. The interview questions for this study included some questions regarding the participants work and experience background.

The background information that was obtained from the participants included their previous job positions, their education, and their employment history at their current

organization. Educationally, S1 reported that he had a B.S in Psychology and an M.A. in Public

Administration. S1 stated that he previously worked in a Police Department for 35 years and

simultaneously also held a position at a State University for 25 years. S1 is currently Security

Chief of Site B.

S2 did not disclose any college degrees but he stated that he was an FBI Special Agent

for 23 years. S2 also reported that after he left his FBI position he worked in Campus Security at

a State University for 10 years, where he became a Security Captain after 3 years of service

before coming to this organization. S2 stated he went to the State University aftere he left his

position with FBI because he wanted a less stressful work environment. While at the State

University, he was a security consultant, setting up and monitoring the security cameras and

other security enhancements. When asked how long they had served in their current positions at

Site B, S1 stated he had been there for 6 months. S2 stated that he had been the Senior Security

Manager at this organization for 2 years. S2 is currently Security Lieutenant at Site B.

Ethical Considerations

The research was done by a single researcher, and no assault victim interviews were

conducted, therefore, no true victims of interpersonal violence (IPV) were interviewed or

surveyed. Anonymity was assured for the subjects who participated in the interviews;

interviewees were de-identified and assigned pseudonyms. None of the interviewees were

identified by name or location. None of the interviewees' ages were identified. The interviewer

met and interviewed all respondents, but none of the respondents were named or otherwise

identified in the research. The issue of neutrality is considered by not arguing, debating, of

expressing the interviewer's views during the interviews (Merriam, 2009). In addition,

participation in the study was entirely voluntary and participants were allowed to stop or change

their mind at any time. Ethical considerations acquired in the coursework throughout the Ed.D. program were applied and Institutional Review Board guidelines on qualitative research were followed.

Instrumentation

DeMarris (2004, as cited in Merriam, 2009), defines an interview as "a process in which a researcher and participant engage in a conversation focused on questions related to a research study." In developing the interview protocol, Patton's (2002) six types of questions were considered. Of Patton's (2002) six questions, the protocol included questions of feelings that "tap the affective dimension of human life" (as cited in Merriam, 2009, p.96). A qualitative researcher attempts to understand, "how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences" (Merriam, 2009, p. 5). To expound on the nature of this qualitative study, two open-ended interview questions were developed to inform the research questions (Appendix A). These interview questions were then developed into a semi-structured protocol meant to collect data relevant to the case.

The interview questionnaire was developed to be individually administered by the investigator in a controlled and structured setting located at the interview site (Appendix A). This interviewed protocol was based on a semi structured format where the questions were open-ended, allowed for some flexibility, and were guided by a list of questions (Merriam, 2009). A pilot study was done first to test, discuss, and subsequently revise the questions in order to avoid closed-ended questions and to get a feel for the interviewing process. Responses to the pilot study were used to modify and align the interview protocol to better prompt interviewees to respond with the intended data.

Data Collection

Once the Institutional Review Board (IRB) process at USC was completed the data collection process began. Two interviews of actively working Campus Security authorities were conducted. Each interview ranged from twenty to thirty minutes. Interview protocols were emailed to each participant about one week prior to the actual in-person interview taking place. Data collection for the initial interview phase of the research spanned approximately two weeks. These interviews were conducted with the intent to determine which strategies were available to college students, faculty, and staff to identify the best responses to prevent or minimize injury to the intended victim or companions. In addition to digital recordings, hand written or computer word processing field notes were taken during the interviews. Each interview was reviewed within 24-48 hours to assure accuracy of recording. As an observer, the researcher considered the issue of neutrality in order to optimize the integrity of the data.

The data for this study was collected using interview questions (Appendix A). From the interviews, the transcripts and field notes were reviewed and prepared for analyses. The alignment of the interview questions with the research questions for this study are displayed in Table 1. Each interview included a written record, and time was available after the interview to transcribe and enhance the interview and field notes. The field notes were written immediately after the interview in order to optimally capture and remember what was said (Merriam, 2009). Once all of the data were gathered, the process of analyses began.

Table 1

Research Question Alignment with Interview Questions

Research question	Interview question
1. What are the elements of an effective interpersonal violence prevention program?	A. Describe your current campus safety program.

	B. What have you observed that needs to be in an effective IPV prevention program?
	C. What have you seen that works in your current program?
	D. What would make your program more effective?
	E. What is being taught to prevent IPV?
	F. What prevention methods does your program have?
	L. What else would you like to see in place to prevent IPV on campus?
	M. Describe what you know about programs that aim to minimize injury from IPV.
	N. What is the role of safety personnel in providing safety training for IPV?
	O. Who provides the safety training?
1a. Using a public health approach, what programs appear to have the best chance of reducing IPV in the college environment?	G. Please respond "Yes" or "No" to the following questions (Evidence-based practice): 　　a. Do you provide escort service? 　　b. Do you have call boxes in place? 　　c. Do you have effective lighting on campus?
	H. Has the campus used programs such as Rape Aggression Defense (RAD), IMPACT (Self-defense training program), Self-defense Training System (SDTS), or Model Mugging? (Evidence based practice)
	I. What strategies are being taught for use before an assault? (Public Health Model Primary Prevention)

	J. What strategies are being taught for use during an assault? (Public Health Model Secondary Prevention)
	K. What strategies are being taught for use after an assault? (Public Health Model Tertiary Prevention)

Data Analysis

Analysis is the process of generating, developing and verifying concepts over time (Maxwell, 2013). Merriam (2009) states that "analysis begins with the first interview, the first observation, the first document read. Emerging insights, hunches, and tentative hypothesis direct the next phase of data collection" (p.165). Data analysis is an interpretive process that allows the investigator to produce believable and trustworthy findings. The interpretive process of interviewing, categorizing, notetaking and finding the responses that minimize the potential for injury were done using digital recordings of the interviews, plus hand written or computer field notes taken during and after the interviews. Utilizing interview data, evidence-based practice information, and field notes allows the researcher to triangulate the data which makes for stronger data analyses (Johansson, 2003).

Prior to analysis, the researcher identified text that was responsive to the research questions (Merriam, 2009). By selecting this raw data, the segments or unit of data were identified to inform the research question, and irrelevant data were removed so as to not impede efficient analysis. After these pertinent data were compiled, the analyses took place. The qualitative data analysis was conducted in two phases, and included both open and axial coding.

Open coding. Open coding refers to the breakdown of a response into a set of underlying substituent meanings. During this phase of coding, units of meaning were assigned to each response. If a participant's response contained more than one unit of meaning, the response

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was identified as containing each of the resulting open codes. Completion of the open coding

phase resulted in a list of annotated responses to each open-ended survey question (Clandinin &

Connelly, 2000). The open coded data was "open to anything possible" (Merriam, 2009, p. 178).

Open coding involved writing annotations for each observation in the margin.

Axial coding. During axial coding, the units of meaning which resulted from open

coding were matched between participants. Any resulting groups of open codes were referred to

as a theme. A single response may contain several themes. Discrepant responses were also

indicated at this time so that all perspectives were captured. The axial coding process included

creating categories, which are "conceptual elements that cover or span many individual

examples" (Merriam, 2009, p. 181). After reaching a saturation point, these categories were

named.

Once data were fully analyzed, the resultant axial codes served as the framework for the

presentation of results. Each axial code was posed to inform the relevant research question, and

included a description of the meaning. For each of these codes, supporting excerpts will be cited

to provide additional detail, the code's meaning, and to ensure that the codes are grounded in the

data. A previously stated, utilizing interview data, field notes, and evidence-based practices from

the literature reviews allows the Investigator to triangulate all of the obtained data, which

strengthens the project's data analyses.

Limitations

In any research study, limitations are important to acknowledge (Connelly,

2013). External validity focuses on applicability of the findings to larger populations. It would

be difficult to generalize beyond the small sample of observations, especially since only two

participants were interviewed for this study. The sample being very small makes generalizability

a limitation for this study; findings can only be suggestive.

The details of the limitations for this study are as follows. This study is limited by (1)

This study was conducted using one university located in the Western Region of the U.S. Results

may not be applicable to other institutions. (2) The data were collected from staff at one private

University. Results may not be applicable to state supported or public institutions. (3) The data

were collected from interviews with two staff. The information obtained may not be

representative of other staff at the institution. The data may not be representative of other staff at

any other institutions. A college can attract students in part by a positive security report. No

school wants to report higher numbers of security incidents. The impression of a secure campus

is appealing to prospective students, as well as parents, potential staff, faculty and donors. (4)

This study may not be applicable to universities outside of the U.S., community colleges, high

schools or other learning institutions, like elementary schools, Kumon, Mathnasium or

Montessori schools. (5) Results may not be applicable to schools that are smaller or larger than

3,000 students. (6) The interviews were conducted by one Investigator. There may be

unintentional bias based on the Investigator's background and personal perspectives.

Additionally, there was an abundance of research on social mores, patience and respectful

behaviors, proper dating behaviors, the effects of alcohol on campus issues, and a very large

literature base on the care of the victim/survivor after the assault. However, limited research was

available on prevention of or minimizing the potential for injury at the moment of assault with

regard to college students, faculty, and staff (David, Cotton, Simpson, & Weitlauf, 2004). This

lack of research has been a positive argument in favor of pursing this area of research. Finally,

interview data can have limitations as the lone researcher may have selective memories, may get

the timing of events wrong, attribute positive events to unobserved actions and negative events to external forces, etc. Such responses may produce a systematic bias in the research (Bauhoff, 2011)

Chapter Four: Presentation of Findings

The purpose of the study is to obtain a description of, and evaluate, a higher education Campus Safety Program on how the campus program provides safety for their students, faculty and staff. The data obtained were analyzed and evaluated against evidence-based practices in keeping with usage of a Public Health Model.

The research questions provided overall guidance for the study, under the umbrella of the overarching question. One research question and one research sub question guided this study.

1. What are the elements of an effective IPV prevention program?

    a. Using a public health approach, what programs appear to have the best chance of reducing IPV in the college environment?

Chapter four presents the findings from this case study examining the elements of an effective violence prevention program used by a university in the Western Region of the U.S. First, a description of the participants is made. Second, a brief description of the results, and lastly, the chapter concludes with a summary of the findings.

Physical layout of a site is a large part of security, since the type of security needed to keep students, faculty, and staff safe depends on the overall campus layout as well as the layout within buildings. For example, a campus layout with many concealed areas tends to be less secure than a campus with few concealed areas. The same could be said for a building with many concealed areas as opposed to a building with few concealed areas. The physical layout of the campus for Site B could affect security practices. The overall campus is in an oval design. The oval design has one two-lane street with six intersections leading to various college areas. The architectural design of buildings allows for exposure and visibility because you can easily see where people are walking, in general, across the entire campus. There is no security checkpoint

going on to the campus. There is no security guard station that monitors who is coming on to the campus. Parking is open to anyone who wishes to simply drive on to the campus and park.

The sidewalks around campus, to include the parking lot and dormitory areas, were all very well lit. While walking through the campus, the P.I. noted two blue emergency call boxes. The P.I. did not go into campus areas specifically designated for students or faculty. The P.I. did not go into the dormitory section of the campus, since it is restricted to students, invited guests and security officers. While the P.I. also did not go into faculty offices, S2 mentioned that the faculty offices were, as a security feature, purposely grouped in pods. The faculty offices were grouped in pods so that faculty would not be isolated, in order to decrease the chances of someone being able to assault a faculty member. There seemed to be a few areas of vulnerability that could be addressed and the areas that the PI noted in field notes were addressed by the participants during their interviews.

Overall security of Site B is mainly the responsibility of the security office. There is one security office on Site B, so the security officers spend most of their shift patrolling the campus. The security office is near the back of the main campus. The interviews for both S1 and S2 took place at Site B's security office.

In an effort to try to evaluate Site B's campus security program against a standardized set of campus security measures, a literature search was conducted to find U.S. campus security program standards. The literature search revealed that there is no standardization with regard to Campus Security Programs in the U.S (Dameron, DeTardo-Bora, & Bora, 2009). It was also discovered that there is no standardization with regard to Campus Security Staffing in the U.S. In researching the university/college security forces, titles of positions were found to vary from program to program. Job duties were found to be somewhat similar despite differences in

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position title, and often included many roles and responsibilities. Details on the various roles and responsibilities will be further discussed.

Interviews

The interviews were conducted on the date, time, and location as selected by the two participants. Both interviewees chose to have the interviews conducted at their place of work. The participants were emailed the interview question about one week in advance of the interviews. Emailing the questions in advance of the interview allowed the participants to review the questions so that they would have the opportunity to decide if there were any questions that they would prefer not to answer. Interviewees were asked prior to the interview if they would agree to having the interview digitally recorded, ensuring accuracy of the interview during transcription. Both participants agreed to be digitally recorded. Once the interviews were transcribed, and the transcription was verified as being accurate based on the digital recordings, the digital recordings of the interviews were deleted.

The interview questions consisted of three pre-interview questions, to obtain some background on the participants, and 15 interview questions. Interview questions were piloted with a respondent who currently works in security in a non-higher education institution setting. The pilot respondent data were not included with study participant data, since she did not work at a higher education institution. However, the respondent who replied to the pilot interview questions replied with answers that were consistent with the type of data that the Investigator was trying to collect. Once the pilot test was completed the research questions were aligned with the interview questions, as seen in the table below.

Findings: Research Question One

The first research question is: What are the elements of an effective interpersonal violence prevention program? In order to elicit descriptive details of a higher education Campus Safety Program, this research question was aligned with Interview Questions A through F and with Interview questions L through O.

Dominant Categories/Themes

During data analyses, several themes emerged to address effective elements of an IPV program. The themes and subthemes are as listed below:

1. Prevention

    a. Correlation between alcohol and campus issues (Primary Prevention)

    b. Awareness (Primary Prevention)

    c. Communication (Primary, Secondary, or Tertiary Prevention)

2. Shared Responsibility

    a. Personnel

        i. Students (Primary, Secondary, or Tertiary Prevention)

        ii. Faculty (Primary, Secondary, or Tertiary Prevention)

        iii. Security staff (Primary, Secondary, or Tertiary Prevention)

    b. Community (Tertiary Prevention)

3. Repetition of Training

4. Improve Self-defense Training

The two broad themes that were identified as elements of an effective IPV program (i.e. the first research question) were Prevention and Shared Responsibility. There were three subthemes identified for Prevention, namely, correlation between alcohol and campus issues,

awareness, and communication. There were two subthemes identified with Shared

Responsibility, namely, personnel and community. The final two themes that were identified

were Repetition of Training and Improve Self-Defense Training.

Once themes and subthemes were identified, the themes, as well as individual

interventions currently being used at the participants' organization, were correlated with the

Public Health Model. At this point, a review of the four-step Public Health Model process may

be helpful (Mercy, et. al., 1993). Step one is to define the problem (IPV events continue on

college campuses and the number of IPV events has not decreased over the past couple of

decades). Step two is to identify causes (outside the scope of this study) and risk factors (to be

addressed later in this chapter). Step three is to develop and test interventions. For the purposes

of this study, we will identify the evidence-based practice interventions used at the participants'

organization. The evidence-based practice interventions may be considered to be tested

interventions. Lastly, step four is to implement interventions and measure effectiveness. In the

interest of time, step four is outside the scope of this project.

Also, in keeping with the Public Health Model of using evidence-based practices as

interventions, when possible, for public health issues the following themes and subthemes were

identified as evidence-based practices: prevention, awareness, communication, shared

responsibility, repetition of training, and improve self-defense training (CDC, 2014; Hollander,

2016; O'Neill, et al., 2008; Perez & Johnson, 2008). Within the parameters of the Public Health

Model, it is often useful to categorize interventions into one of three prevention categories, for a

deeper understanding of the interventions. Themes and interventions, therefore, will be classified

into the Public Health Model's primary, secondary, or tertiary prevention categories.

The themes of prevention, awareness, communication, shared responsibility, repetition of training, and improve self-defense training could be considered to be Public Health Model Primary Preventions. That is, interventions used prior to any event occurring (Centers for Disease Control and Prevention, n.d.). The Public Health Model of Secondary Prevention includes interventions that are taken to minimize negative effects while something is occurring (Centers for Disease Control and Prevention, n.d.). Tertiary Prevention includes interventions that occur after the negative event to minimize the damage (Centers for Disease Control and Prevention, n.d.). The two subthemes that could fall into both the secondary and tertiary categories are communication and shared responsibility. Depending on when the communication or shared responsibility interventions occur (before, during, or after the negative event), the category for the intervention would change.

To further investigate the identified themes and subthemes for this study, each of the subthemes were individually discussed in the following sections. The three subthemes that fell under Prevention, namely, correlation between alcohol and campus issues, awareness, and communication were addressed first. Then the two subthemes that fell under Shared Responsibility, namely, personnel and community were discussed.

Prevention

As previously discussed, prevention is the preferred method of stopping IPV events. If IPV events could be avoided altogether, there would be no need for secondary or tertiary prevention interventions. Since IPV events have occurred at Site B, primary, secondary, and tertiary prevention interventions should be discussed. Primary, secondary, and tertiary prevention methodologies have been effectively implemented in situations other than with IPV situations. For example, awareness and prevention methods seem to help curb drinking and driving in the

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U.S. Similar interventions could be implemented to indirectly curb IPV events, since alcohol use is often a precursor to an IPV event. The issue of alcohol use and the impact it has on Site B's students will be discussed, since correlation between alcohol and campus issues emerged as a Prevention sub-theme during data analyses.

Prevention: Correlation between alcohol and campus issues

Alcohol is a well-known risk factor for some societal issues. Alcohol use and the negative effect that it could have on society as a whole has even spawned a nationwide movement in the well-known group Mothers Against Drunk Driving. It is common knowledge among Law Enforcement Officers (LEOs) that the vast majority of reported assaults, in the general public, occur while at least one of the involved parties has been drinking alcohol. S1 and S2, who both previously served as long-term LEOs, both commented on the issue of the correlation between alcohol and the issues it can cause on campuses.

Alcohol is prohibited on this campus. The interviewees felt that this minimized many behavioral issues on campus. However, the prohibition of alcohol on campus may create other student issues. Possessing alcohol at this particular university is a violation of the Honor Code and could result in negative consequences for the student who has been drinking. Therefore, alcohol prohibition could lead to underreporting of incidents that should be reported, along with other issues related to reportable events. S1 stated that students may be reticent to relay alcohol related incidents, due to the fear of being expelled. In addition, some of the female students did report something akin to sexual bullying, pressure or assault. S2 admitted that alcohol will lower inhibitions and impair proper protective defenses. He also mentioned that even drinking with friends can lead to trouble, and that trying to recall events and sequences while impaired can be questioned in litigation.

It should be noted that the participants' organization, being a private university, allowed them to set alcohol standards that are not usually set in public universities. Alcohol possession being a violation of the Honor Code did not, however, prevent all students from being in possession of it. Both S1 and S2 mentioned that alcohol is likely kept in students' private cars, which are not routinely searched.

Awareness

Awareness was the next theme that emerged from the data analyses. Awareness was seen as an evidenced based practice with regard to IPV according to Hollander (2016) and Perez (2014), in addition to the two study participants. Hollander (2016) stated that a quality, evidence-based IPV training program would include being aware and preparation/training. Perez (2014) stated that the evidence-based assault and violence program that they developed and implemented decreased assaults by 33%. Their program included monitoring behavior (awareness), among other interventions. S1 and S2 also mentioned the importance of awareness during their interviews.

The officers said that students are trained to assist with their eyes and ears. Both S1 and S2 stressed the importance of awareness for prevention of incidents on campus. In fact, both interviewees stated that because awareness is the best preventive action, students are trained to be observant and are told to always be alert. The Officers emphasized both awareness and preparation.

Awareness is an evidence-based practice that is currently taught at the participants' organization. Awareness can help to prevent a negative event prior to the event ever occurring, if the person who notices something suspicious either takes action or communicates about the situation to someone else who may take action. The importance of using awareness as a primary

prevention intervention was stressed as being an important part of their Campus Safety Program by both S1 and S2.

Communication

The next theme that emerged was communication. Effective communication was mentioned by both S1 and S2 as a core component of their Campus Safety Program. Communication is a theme that could fall under the Public Health Model's primary, secondary, and/or tertiary prevention, depending on when the communication occurs (Centers for Disease Control and Prevention, n.d.). If communication occurs prior to a negative event taking place, then it would be primary prevention. If communication occurs while a negative event is taking place, then it would be secondary prevention. If communication occurs after a negative event occurs, then it would be considered to be tertiary prevention. In addition, communication is an evidence-based practice as it has been cited as an effective prevention intervention according to both Hollander (2016) and Perez (2014).

To support that communication is an important part of their Campus Safety Program, the security officers said that if intervention was needed, security should be contacted immediately. Many of the students have cell phones, and can call for help quickly. Students are encouraged to call if they see any type of security situation. Security personnel make it a point to be very visible on campus, including roving patrol, presentations on safety and security, and social media messages. Site B's Security Staff make it a point to be very visible to students, faculty, and staff in order to promote awareness that they are available should personnel need their help.

In addition to Campus Security personnel physically being available to communicate directly with personnel who may need help, students may call campus security or they may also call 911 for the police if needed. Another mode of communication that is available on campus

occurs via the campus faculty. Faculty members can make safety and security announcements in class to inform their students about any ongoing issues. Lastly, the campus also has emergency call boxes scattered throughout campus and these boxes are manned 24 hours a day, 7 days a week.

Effective communication requires that students, faculty, and staff all communicate in a timely manner, as necessary. Without using effective communication, campus safety will likely be negatively affected. The participants in this study utilized low tech and high-tech communication. Low-tech communication would include things like faculty making announcements to students and security staff speaking with students and faculty. High tech communication would include things like cell phone use, emergency call box (blue box) use, and using social media to disseminate information. Based on the information provided by the participants, it appears that this organization had widespread, effective communication processes in place.

Having effective communication processes and interventions in place does no good if people do not use the methodologies available to them. In order to ensure that communication and interventions are effectively used, a concept such as Shared Responsibility needs to be embraced. Shared Responsibility was the next theme that emerged, along with the four subthemes of personnel and community. Each of the four subthemes will be elaborated upon in the upcoming sections.

Shared Responsibility: Personnel

An effective Campus Security Program must include shared responsibility between campus security and campus personnel. Campus security staff simply cannot be in all locations, at all times, to monitor for safety issues. In order for a campus to be safe, campus personnel

(other than security staff) must share the responsibility for keeping their campus safe by reporting any safety issues, or potential safety issues.

When analyzing the participants' data, shared responsibility with campus personnel and the community were identified as themes. The specific campus personnel mentioned by S1 and S2 during their interviews were students, faculty, and security staff. The participants felt that part of their Campus Security Program's efficacy was built upon a shared responsibility between students, faculty, and Security Staff.

Shared Responsibility: Students

Students were seen as the largest core group of the campus community whose active participation was needed for an effective Campus Safety Program, according to both S1 and S2. Having student participation as an integral part of Campus Safety was also an evidence-based practice (Coker, et al., 2016; O'Neill, 2008). The officers said there are 80 student security assistants, in addition to the Resident Advisors. The Outreach program is the strongest part of the security program. In the Outreach program, each student is encouraged to be active if they observe a security violation. The strongest intervention in the Security Program is a Bystander-type Program. The Upstander Program is based on a "see something, say something" program.

As is supported by comments from S1 and S2, students are the core of their campus safety program. Multiple types of student trainings are conducted to ensure that students are prepared to help in case they are in the location where a negative event is about to occur or has occurred. Because, numbers wise, the vast majority of students (approximately 75%) will not be directly involved with an IPV event, the chances are that they may, instead, be bystanders who witness a negative event. In that instance, it's important that students are properly trained on how to help their fellow student so that help is provided as soon as possible before, during, or after an

event. Lastly, by effectively and consistently integrating their students in their Campus Safety Program, Security Staff has, basically, increased the number of their security staff by (potentially) thousands of students.

Shared Responsibility: Faculty

Faculty's role in campus security was similar to that of the students, according to S1 and S2. Faculty were trained in Bystander training (an evidence-based intervention) when they initially came to work at the participants' organization. The difference between the students' role and the faculties' role in helping to keep the campus safe was that faculty were seen as leaders in the organization. Students look to the faculty to lead and take charge during a negative event on campus. Faculties' additional role in campus security was supported by S1 and S2's comments.

Security relies heavily on unarmed security; the faculty, staff and students are the eyes and ears of the program. The Campus Security program, called the "Upstander program" is where campus personnel are trained to intervene in an assertive and positive way if there seems to be a security situation. Upstanders are trained to record an incident on their cell phone, or verbally intervene if needed. Faculty are expected to be leaders, and can take action in an emergency situation.

Having students and faculty trained to help others who may need help is an effective force multiplier to ensure that the campus is safe. Having thousands of students and hundreds of faculty ready to assist if a situation arises where someone needs assistance is an efficient, evidence-based intervention. Training students and faculty to assist is also cost effective since these are groups of people who are already on campus regularly. It does not cost the organization anything more, financially, to have students and faculty help each other with campus security.

Shared Responsibility: Security staff

The most obvious group of people on campus who have a responsibility for security on campus is the Security Staff. The big difference between students and faculty who are trained to assist and Security Staff is that Security Staff are paid to keep the campus safe. Therefore, they have more invested in ensuring that people on their campus are safe while they are there. Security Staff also have more formal training than students and faculty. Lastly, Security Staff are the ones who provide the training for the students and faculty, so Security Staff have a more prominent role in Campus Safety.

Comments from S1 and S2, with regard to their roles in Campus Security, noted that security visibility is important: the security office is in the back central campus section, between the dormitories, campus dining, and classrooms. Because the Security Office is not centrally located on campus, security staff make it a point to ensure that they are highly visible throughout the day by randomly patrolling areas on the campus. The P.I. noted five security vehicles on campus which also helps to keep security staff more visible should anyone on campus need their help.

As previously stated, the participants felt that an effective prevention strategy helped to curb IPV issues on their campus. The lieutenant said, "having strong personal boundaries and personal ethics are the best ways to prevent interpersonal violence." The security officers are all given individual training upon hire at the university, to ensure that all of the security staff have the same baseline training in case of an emergency. Even former LEOs are required to complete the university specific training when they are hired to be a part of Site B's security team. Both participants stated that their campus needs to be prepared for a myriad of security issues to keep

their campus safe. Training for security staff includes preparation to deal with all types of IPV, physical and sexual assaults, and active shooter events.

In order to be prepared for a variety of safety situations, Security Staff also provide training for specific types of safety issues. For example, to be prepared for an Active Shooter situation, the Campus Security Program has Active Shooter safety training. Security staff provide training to the student assistants and R.A.'s on what to do in case of an Active Shooter. To further secure some areas on campus, Security personnel can lock certain doors using Smart technology. Security personnel will determine if the local police need to be called to assist. The exact number was not disclosed, but they also have over 100 security cameras on campus to monitor ongoing situations.

Campus security clearly has the most responsibility with regard to keeping students, faculty, and staff safe since it is their job to do so. Their office implemented several evidence-based interventions, that are likely helping to prevent negative events. In addition, having several former LEOs on staff probably helps to keep their campus safer than other campuses who do not have experienced LEOs on their staff. As mentioned previously, they did not disclose how many IPV events had been reported but they did say that there weren't very many reports. One of the interventions that will help to keep their program moving forward is the fact that the head of their department is open to new ideas to improve campus security. It is likely that having experienced LEOs on their staff on top of having a leader who is open to continuously improving their program has helped and will continue to help keep their campus safe.

Shared Responsibility: Community

A comprehensive, evidence-based Campus Safety Program would include a multidisciplinary team approach in order to be most effective (Hollander, 2016; O'Neill, et al., 2008; Perez, 2014). A multidisciplinary team approach would allow for multiple levels of security from a variety of different perspectives, which would make intervening prior to an incident more likely. S1 and S2 have supported that their Campus Safety Program includes students, faculty, and staff (a multidisciplinary team) working together to provide a secure environment on campus. The interview data analyses revealed that there is another layer of security for the participants' campus, namely, the community.

Within Site B's local community, Site B has established community connections with the local Police Department (PD) as well as with the local church. The University has an agreement with the local police department so that three uniformed officers are available to the school, if Site B ever needs local PD assistance. An example of when Campus Security may need local PD assistance would be with regard to and Active Shooter situation, since none of the university security officers are armed. Having additional security support from the local community PD gives Site B an added layer of security for their campus.

In addition to a relationship with the local PD, S2 mentioned a community relationship with the local church. The local church is an organization to which many of Site B's personnel have a connection. Interview data supported that this relationship to the local church adds to campus safety since students, especially, who are connected to the church tended to feel a sense of responsibility and accountability to their church community. Data from the participants' interview supported that their Campus Safety Program has elements of shared responsibility between personnel and the community. In addition, Site B's Campus Safety Program has

external support from the local PD and from the local church. Between the interventions taken for Prevention and the Shared Responsibility demonstrated by the project participants it is not surprising that their campus has few reported IPV.

Sectional Summary

Analyses of the participants' semi-structured interview data to address the research question, "What are the elements of an effective interpersonal violence prevention program?" revealed the two themes of Prevention and Shared Responsibility. Subthemes were also identified within the two themes. Under the theme of Prevention, were the three subthemes of Correlation with Alcohol, Awareness, and Communication. Correlation with alcohol was seen as important since S1 and S2 noted that the majority of safety issues occurred when one of the parties involved had used alcohol. Even though alcohol is prohibited on Site B's campus, incidents involving alcohol still occurred on campus. Awareness, at all times, for all campus personnel was seen as paramount to preventing safety issues. Lastly, an effective communication system was stated to be an important part of Site B's security program. Multiple modes of communication between campus personnel was seen as an effective method of maintaining campus safety.

Under the theme of Shared Responsibility were the two subthemes of Personnel and Community. Shared responsibility was an evidence-based practice that was seen as being an essential component of a campus safety program. If stakeholders are engaged and feel a sense of responsibility to keep their campus safe, then the likelihood of campus personnel reporting and taking action when they see safety issues is higher. Within the subtheme of Personnel, three groups were identified, namely students, faculty, and security staff. Students were seen as the

greatest safety force multiplier, since they represent the largest of the three groups on campus. Students were trained to "see something, say something" via the Upstander Program.

The next subtheme under Shared Responsibility, Faculty, were seen as leaders in Campus Safety and students tended to look to them for guidance when there were safety issues. The last subtheme, Security Staff, were different from Students and Faculty since they were the group paid to keep the campus safe. Security Staff made it a point to be visible on campus so that personnel could easily see them if they needed help. Security Staff also trained incoming Security Staff and campus personnel on what to do in a variety of safety situations, including what to do in case of an Active Shooter on campus. The two participants' extensive backgrounds as LEOs with different organizations allowed the P.I. to gain rich, detailed data with regard to Site B's Campus Safety Program. The participants' varied work experiences, with a variety of safety-type organizations, likely contributed to what seems to be a comprehensive Safety Program that involves students, faculty, and staffs' participation to keep the campus safe.

Findings: Sub Research Question

The Sub Research Question for this study was, "Using a public health approach, what programs appear to have the best chance of reducing Interpersonal Violence (IPV) in the college environment?" Upon completion of data analyses for this project, one theme was identified along with four subthemes. The theme that was found was Improvement of Programs. The four subthemes were repetition of training, using official programs (Model Mugging, etc.), improve self-defense training, and men and women should take self-defense courses. The four subthemes will be discussed below.

When considering the evidence-based practices already in place at the participants' organizations, some gaps in training were identified.

Repetition of Training

Both S1 and S2 felt that repetition and practicing self-defense techniques was necessary in order to effectively use the techniques, if necessary, in the future. Hollander (2016) and O'Neill, et al. (2008) both supported that training and practice were necessary for an effective safety program. Repetition of training is an evidence-based practice that is not used at the participants' organization, since the self-defense course offered on their campus is a one-time course.

Security officers agreed that any self-defense practices need to be practiced regularly in order to be used effectively. The Women Only Self-Defense course is open to incoming freshmen and is only for females. They say that fighting back should be done in a trained way, and defense techniques should be practiced regularly. Having the course offered as a one-time training class was not seen as being an effective method of training students to defend themselves, should the need arise. S2 stated that self-defense training should be done annually in order to be effective. He mentioned that many things are learned via repetition, including things like Math and tennis.

Using Official Programs

The RAD, IMPACT, Model Mugging and SDTS programs (Refer to Definitions) are known programs that are considered to be evidence-based practices in that participants tend to report feeling more confident and secure once they have completed these type of courses (Hollander, 2016). The currently used self-defense program at the participants' organization is not likely an evidence-based, official program, since it is a one-time course that participants are not allowed to repeat.

The self-defense program currently being used also does not obtain or track any student outcome data, so program effectiveness is not known. Both S1 and S2 stated that they used an official self-defense course at their previous campuses instead of the course that is currently being used at this campus. They both felt that the official self-defense courses used at previous campuses were likely to be more effective than the on-time course currently being used by Site B.

S1 had experienced the Model Mugging Program at a previous campus. but Model Mugging is not available at his current campus. S1 felt that the Model Mugging Program would be a better program to use for Site B than the current self-defense course. The Self Defense Training System (STDS) is another program that was mentioned as a program that would likely be more effective than the current program. STDS is a 13 week video format that fits a 13 to 15 week college semester. S2 also recognized that the Federal "Run, Hide, Fight" program is a program that they do currently utilize and teach at Site B. While both participants stated that repetition of training was essential to an effective self-defense course, the training repetition is not currently happening at Site B.

Improve Self-Defense Training

The main reason that an official self-defense program is not used at the participants' organization may be because the aforementioned official programs are not available in the participants' state. Because there does not seem to be any option to switch out the currently used program with an official program, both S1 and S2 suggested ways that the current program could be improved. Both S1 and S2 suggested that a larger variety of techniques should be taught. They both felt that the Empowerment Self-Defense program that is currently taught at their school is not adequate for personnel to protect themselves in a variety of situations. They stated

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that the program gives no alternative interventions for Physical, Sexual or Armed assault. There are also no formal martial arts classes on campus, nor is there a martial arts club.

Although a martial arts program could prove to be more effective than what is currently being used at Site B, even many martial arts may not prove to be useful in self-defense during an IVP situation. Many martial arts teach "self-defense" in a clean, well-lit environment, and the assailant in these classes is cooperative. A cooperative assailant is important for initial learning, but the ferocity of the assault will likely never escalate to true assault force.

In addition, although Model Mugging is an approved program, there are pros and cons to this program also. One thing S2 appreciated about Model Mugging is how the assault phase is conducted. In Model Mugging, a uniformed "assailant" actually comes at the girl, and threatens her until she responds with a telling blow. The adrenalin factor in this training is very valuable to prepare for a real-life situation. Very few people outside of combat veterans have actually been assaulted, or trained on how to respond with high adrenalin levels. Even competition sports likely do not raise this level of adrenalin, this level of distress. S1 also stated that during an actual assault any surface level training is lost, and you become focused on the assailant. "Tunnel vision" develops and your heart rate increases, you lose focus on externals, and your fine motor skills rapidly decline.

S2 also stated that Model Mugging was a good program, but not available in (name of state). And, S2 also stated that Model Mugging did not give a variety of resources available to a potential victim. It followed the martial arts format, "If the mugger does this, then your response is this." There was little flexibility and little variety in the Model Mugging system.

Men and Women Should Take Self-Defense Courses

According to Coker, et al. (2002, 2016) women are almost three times as likely as men to be in an IPV situation and, the vast majority of the time, men are the perpetrators. Knowing that women will most likely have to defend themselves against a man, it would make sense for self-defense programs to be co-ed. If a woman may have to defend herself against a man, self-defense practices should be designed so that women practice the techniques against a man. In addition, some of the incidents that Coker, et al. (2016) reported were male on male events. It would also make sense to have men learn self-defense techniques in case they have to defend themselves (or a woman) against another male. S1 and S2 agreed that self-defense classes should be co-ed.

S1 stated that the five-week, women only, self-defense course was marginal, and "not much of a course," The university uses the local Empowerment S.D for women only course. There is no required P.E. self-defense course, and no course available to men. The question was raised by S2: "If the women in the class are learning to defend against male attackers, why are there no males in the class?" The optional Women's Self Defense course is taught by a P.E. instructor, not the security staff.

In addition, there is no program for men, men are not allowed in the class. Students cannot get P.E. credit for the non-credit class. Students cannot repeat the class. "Men should be included in the Self Defense class. Women will react differently if the assailant in a class is a known female. If males are included as both participants and "model muggers," the tone of the class is more serious." It is not likely that a female will assault a female as often as a male will assault a female. There is the possibility of male on male assault; that is much more likely to be the case in physical assault.

Relation to Theoretical Framework

According to Chen (2000, 2010); Hollander (2016); and McCaughey & Cermele (2017), the most critical factor for success of a campus safety program is personal responsibility. Personal relationships are key to engaging students, faculty and staff in preventing injuries related to interpersonal violence. If students, faculty and staff feel a personal connection to safety, they are more likely to be engaged and productive in preventing and intervening when an IPV event occurs. Even with a high level of student, faculty, and staff engagement to prevent IPV, a Campus Safety Program Evaluation should occur to identify and open discussion on any program gaps. Analyzing the data within the evidence-based Public Health Model framework will allow for a systematic program evaluation.

As previously stated, the Public Health Model is a four-step process (Mercy, et. al., 1993). Step one is to define the problem, which was that IPV events continue on college campuses and the number of IPV events has not decreased. Step two is to identify causes, which is outside the scope of this study, and risk factors. Step three is to develop and test interventions. For the purposes of this study, evidence-based practice interventions used at the participants' organization were identified, and may be considered as tested interventions because they are already being used, and will be further discussed in this section. Lastly, step four is to implement interventions and measure effectiveness. In the interest of time, step four is outside the scope of this project.

Upon completion of the identification of themes and subthemes, supported by interview data, an overview of how the data relates to Sub Research Question 1a was discussed. The data analyses of the responses to the interview questions that were used to address the Sub Question were used to provide information for Step three of the Public Health Model. Step three calls for

the development and testing of interventions (Mercy, et. al., 1993). Development of the

interventions had already occurred since a Campus Safety Program was already in place. The

testing of the interventions may be addressed by noting the suggested program improvements

from S1 and S2.

In general, both participants were in agreement that the main part of their program that

needed improvement was the self-defense program (negative testing outcome). The need for

improvement of the self-defense program is supported in that all four of the subthemes that fell

under the Improvement of Programs theme (namely, repetition of training, using official

programs, improve self-defense training, and men and women should take self-defense courses)

addressed ways to improve the current self-defense program. Several authors also emphasized

that men and women should take self-defense courses together (Angleman, Shinzato, Van

Hasselt, & Russo, 2009; Hollander, 2014; Ross, 2018). No other parts of the Campus Safety

Program were mentioned as an area for improvement. Since the self-defense program was the

only program mentioned by both participants as a program that needed improvement, the

implication was that other elements of the Campus Safety Program have been effective, as far as

the participants were concerned.

Although the participants want improvements to the current self-defense program, simply

having a self-defense program in place is an evidence-based practice. According to the literature,

self-defense classes should be included in a college security education program (Alegria-Flores,

2017; Banks, 2010; Chen, G. & Plato, P, 2007; Chen, G. 2010; Hollander, 2016; McCaughey &

Cermele, 2015; Orchowski, Gidycz & Berkowitz, 2010). However, the literature was not in

agreement as far as what specific components should be included in an effective self-defense

program. While it is not known how the current self-defense course was developed, the

participants did give a description of the course. There is currently only one self-defense course that is offered on the participants' campus. The course is offered once to incoming female freshmen and students are not allowed to repeat the course. The women only self-defense course is taught by someone who is not a member of the Security Staff. The instructor is actually a faculty member in the P.E. department.

Because the self-defense course was singled out as an area of improvement (negative testing outcome), the next step in the Public Health Model would involve evaluation. Evaluation of the current self-defense course should be done against evidence-based self-defense programs to see if the current course may be switched out with another course or modified to more closely resemble an evidence-based course. The Public Health Model's Step Four (evaluation) is outside the scope of this project.

However, if this project were to continue on with Step Four, the current course would be compared to courses used in other college settings. For example, one or more of the evidence-based self-defense courses should be considered as replacement courses. S2 mentioned that he had used Model Mugging on a state university campus in another state. S1 had also used Model Mugging at another campus. Participants were not aware of Rape Aggression Defense (RAD), IMPACT (Self-defense training program) or the Self-defense Training System (SDTS) before the interview preparation. Neither RAD nor IMPACT are available in the participants' state. Model Mugging can be brought to the state with prior notification of the Model Mugging program in California. It was not mentioned if either of the participants would pursue bringing any of the aforementioned programs to their campus.

To further analyze the interview data in keeping with the Public Health Model, the interview data may be compared, in totality, to evidence-based practices while using a table

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format. The evidence-based information with regard to what should be on a Campus Security Checklist was compiled from three references in order to provide a comprehensive evaluation (Chadley, 1996; O'Neill, 2008; U.S Department of Education, 2016). Once the comprehensive list was placed into a table format, the information in Table 2 (Appendix B) was streamlined. The only evidence-based interventions that were eliminated from the original comprehensive list were those interventions to which both S1 and S2 responded "N/A." The majority of the interventions were retained. Upon review of the information in Table 2, it was noted that there was no instance in which S1 or S2 gave a contradictory answer to each other, with regard to each of the interventions. The lack of contradictory responses between participants likely supports that the information in the table is valid.

Summary of Findings

The purpose of this study was to obtain a description of, and evaluate, a higher education campus safety program on how a campus program provides safety for their students, faculty and staff. Chapter four presented three themes that were found in the data in response to the research questions posed by the study. The themes were (1) Prevention, (2) Shared Responsibility, and (3) Improvement of Programs. Subthemes of Prevention included the correlation between alcohol and campus issues, awareness, and communication.

For the theme of Shared Responsibility, there were two categories: (1) Personnel and (2) Community. Campus security should be a shared responsibility with all campus stakeholders in order to be effective. Within the final theme of Improvement of Programs, the four subthemes included (1) Repetition of training, (2) Using official programs (e.g. Model Mugging, SDTS, etc.), (3) Improve self-defense training, and (4) Men and women should take self-defense courses. In order to further analyze interview data, themes and subthemes were identified and

addressed within the Public Health Model's three categories of Primary, Secondary, and Tertiary

Prevention interventions.

Three gaps were identified based on data analyses. The participants stated that there was

a need for consistent, regular repetition of training in order increase the chances that training will

be effective. In addition, the participants mentioned they would like to include more official

training programs. However, the official programs that they would like to include are not

available in their state. Lastly, the participants felt that men should be included in the female-

only self-defense course. The reasoning behind having men included in the course was that

females are most often in IPV events with male perpetrators, so it would make the course more

effective if the females practiced techniques with men. Also, men are sometimes involved in IPV

events with other male perpetrators so training the men to defend themselves, and others, would

be beneficial to campus safety. In order to further analyze the interview data, an evidence-based

theoretical framework, namely the Public Health Model, was used to provide greater context to

the Campus Safety Program Evaluation.

Chapter Five: Discussions, Implications, and Recommendations

This chapter will discuss the findings and implications of the study and suggestions for future research will be made. The four step Public Health Model (Mercy, et. al., 1993) was used with regard to data analyses. The basis for the study was that because the number of IPV events on college campuses has not decreased over the past couple of decades (Public Health Model Step 1: Define the problem), it would appear that campus safety programs need to be more effective. Literature has suggested that more IPV events occur on college campuses than in general public areas (Baker & Smith, 2008; Saewyc et al., 2009) (Public Health Model Step 2: Identify risk factors). Additionally, it was estimated that between 17-25% of college age females will be assaulted (Gidycz, 2008; Tjaden, 2002) (Public Health Model Step 2: Identify risk factors).

In order to obtain information regarding how higher education institutions provide safety for their students, faculty, and staff, this study was conducted. This study was designed as a descriptive case study, and program evaluation, using semi-structured interviews to detail campus safety practices from one university. The study was based on the following research questions:

1. What are the elements of an effective interpersonal violence prevention program?

    a) Using a public health approach, what programs appear to have the best chance of reducing IPV in the college environment?

Ten potential participants, representing six different higher education organizations, were contacted for participation in this study. A total of two participants from one private university, located in the Western Region of the U.S., agreed to participate in the study. Data analyses for the study revealed three themes and subthemes with each of the themes. The three themes were

Prevention, Shared Responsibility, and Improvement of Programs. All three themes fell under

Public Health Model Step 3: Develop and test interventions. For the purposes of this study,

Public Health Model Step 4: Implement interventions and measure fell outside the scope of this

project.

The sub themes for Prevention were correlation between alcohol and campus assault,

awareness, and communication. Under the theme of Shared Responsibility were the subthemes

of personnel and community. Prevention and Shared Responsibility, along with the subthemes,

were found to be "elements of an effective interpersonal violence prevention program" (Research

Question 1). The numerous evidence-based self-defense programs (e.g. RAD, IMPACT, SDTS,

etc.) and interventions were found to be "programs that appear to have the best chance of

reducing IPV in the college environment" (Research Sub Question 1a). The last theme,

Improvement of Programs, had the subthemes of repetition of training, using official programs,

improve self-defense training, and men and women should take self-defense courses.

Discussion of Findings

As discussed in chapter four, the study revealed three themes (and several subthemes for

each theme) in response to the research questions above. The data obtained from the two

interviews provided rich, in depth data for analyses. Although the two interviews were conducted

separately, almost two weeks apart, the data provided by the participants were quite similar in

nature. The data provided support that the interview questions were likely both valid and reliable,

since appropriate themes and subthemes emerged upon data analyses.

The first finding revealed by the study was that Prevention and Shared Responsibility,

along with the associated subthemes, likely eliminates most of the IPV issues on this particular

campus. In addition, because several of the Campus Security Staff previously served as LEOs,

for several years, their past job experiences likely resulted in the prevention and avoidance of many campus safety issues. The two participants interviewed for this study both had more than two decades' worth of job experience as former LEOs.

The Campus Safety Program training their students, faculty, and staff (Shared Responsibility) to serve as active Bystanders also likely prevents many issues. With thousands of students and hundreds of staff on campus, it is highly probable that there will be a witness, who has been trained to report, to any negative events that may occur on campus. Data analyses supported that both S1 and S2 felt that Prevention and Shared Responsibility played prominent roles in preventing IPV, and other negative events, on their campus. However, true efficacy of currently used programs and interventions cannot be accurately measured since the participants did not disclose actual numbers for IPV or other negative events that have been reported on their campus. They did say that there were "very few" events that have been reported.

The second finding revealed that S1 and S2 both felt that programs could be improved by repetition of training, using official programs (Model Mugging, etc.), improved self-defense training, and allowing both men and women to take the self-defense courses. Having previously served as LEOs for decades, it is likely that both participants were speaking from experience when they stated that the four subtheme areas were necessary areas for improvement. It is also noted that the area that was identified for improvement, namely the self-defense course, was the one element that was mentioned in both interviews that fell outside of the purview of the Campus Security Office. That is, the self-defense course was taught by an instructor from the P.E. department and not by any of the Security Officers. It would make sense to have the self-defense course switched out to an evidence-based official program instead of offering the course as a "one and done" course.

Both participants mentioned that it would be helpful to have more security staff on campus. From the perspective of a cost-benefit analysis, having more security staff on a campus that has a strong Bystander Program and a seemingly low incidence of crime may not be supported from a budgetary standpoint.

Implications for Practice

Utilizing a Public Health Model with IPV on college campuses offered a unique, evidence-based practice perspective on higher education campus safety. Using the Public Health Model makes sense since people involved in IPV events often need medical care and since IPV events can lead to widespread public health issues. For example, if someone involved with an IPV event requires hospitalization, the person's finances (current and future), physical health, and mental health could all be affected at the same time (Corso, et al., 2007; Miller et al., 1996). If the injuries from an IPV event affect a student long-term, it could lead to current and future financial difficulties in that the student may not be able to complete their college degree, which would have long-term financial implications (Pico-Alfonso, et. al., 2006).

The ability to provide a detailed description of one higher education Campus Safety Program could prove useful for other Campus Safety Programs. The fact that the participants had such long-term experience as LEOs allowed them to provide detailed, practical answers to the interview questions. The interviewees were able to provide in-depth information on effective interventions based on their past experiences. Other Campus Safety Program personnel could use the interventions mentioned as being effective, by the participants, on their campuses. In addition, others could use the information provided on ways the Campus Safety Program could be more effective and implement changes on their campuses.

Suggestions for Future Research

Several research projects come to mind for future research in terms of the implications of this study. First, research could be done to inquire about retention of training over time. That is, should students be given the option of repeating a physical education self-defense course? As with academic learning, some students will have an aptitude for learning the self-protection techniques and others will not learn as quickly. It would behoove the organization, and the students, to offer the option of repeating self-defense courses if the student feels that it would be beneficial to do so.

Research should be done to examine the impact and effectiveness of including men in self-defense courses, instead of having women only courses. Historically, the vast majority of female professional fighting champions (including UFC former Champion Ronda Rousey and Champion Boxer Leila Ali) have male sparring partners, trainers and coaches. The reason even professional female fighters workout, train, and spar with males is that males are, in general, bigger and stronger than females. Whether the athlete is male or female, if someone wants to get better at a physical activity it behooves the athlete to workout with someone who is bigger, faster, and stronger than they are. While males should be effectively taught, from a young age, how to properly treat other people, not all males are taught these lessons. If more males were effectively taught these lessons, it would stand to reason that there would be fewer IPV events against females.

Females are much more likely to be assaulted than males on college campuses (Coker, et al., 2016). Studies have also supported that males are most likely to be the aggressors in a female involved IPV situation (Coker, et al., 2016). Although it may be uncomfortable for some females to do so, practicing with male sparring partners would make sense if the females want to know if

what they are learning would truly be effective against a male aggressor. It would be practical to learn, via a future research study, how female students would react given different scenarios with males included in the self-defense courses.

This project did not address the motivation for students, faculty, and staff to use any of the training interventions that they are taught. This project also did not address the motivation of the staff who does the training to provide effective, up-to-date evidence-based practice interventions. Motivation is an important factor for any Campus Safety Program. An organization could have the most high tech, up-to-date training program but if no one is motivated to use the program, the program will never be effective. A follow up study to collect and evaluate data regarding motivation of students, faculty, and staff (including Campus Safety Staff) would be a worthwhile endeavor.

Lastly, this research project should be replicated in a variety of higher education institutions, to include universities in other Regions of the U.S., other private universities, public universities, high schools, and other educational institutions. Obtaining information from a variety of settings would strengthen the evidence-based practice interventions, which would be in keeping with the public health model. In addition, obtaining data from a variety of settings could allow future researchers to provide more institutional specific interventions. Providing institutional specific interventions may be useful, since there may be a difference between which interventions would be effective for which type of organization.

Also, in keeping with the Public Health Model, a future research project would include financial impact statements regarding any potential interventions to address IPV on campuses (Clancy, Misick, Covington, Churchill, & Maxwell, 1994). A quantitative study such as Chen (1998, 2004, 2008, 2010a), Allegria-Flores (2015), or Hollander (2016) could show the actual

impact of which types of preparation would yield the best outcomes. A financially focused study would help the organization determine the cost-benefit value of a program, and this information would likely prove to be useful when making budgetary decisions and allocations.

Conclusions

The purpose of this study was to describe, and evaluate, a higher education Campus Safety Program with regard to how the campus program provides safety for their students, faculty, and staff. Data analyses from semi-structured interviews were completed via open and axial coding. Three themes (and associated subthemes) emerged upon data analyses. The first theme, Prevention, had the subthemes of correlation between alcohol and campus assault, awareness, and communication. The second theme, Shared Responsibility, had the subthemes of personnel and community. The last theme, Improvement of Programs, had the subthemes improvement of programs, repetition of training, using official programs, improve self-defense training, and men and women should take self-defense courses.

Themes were identified, via the Public Health Model, as primary, secondary, and/or tertiary prevention. The four step Public Health Model was also used throughout the study to provide a practical, unique perspective on campus safety. The four steps to the Public Health Model that were addressed include: Step 1: Define the problem, Step 2: Identify causes (outside the scope of this study) and risk factors, Step 3: Develop and test interventions, and Step 4: Implement interventions and measure. Step 4 was also outside the scope of this study.

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Appendix A: Interview Questions

EdD Appendix 1 Interview questions   10 05 2019

Interview questions.

Research question	Interview question
2. What are the elements of an effective interpersonal violence prevention program?	Describe your current campus safety program.
	What have you observed that needs to be in an effective IPV prevention program?
	What have you seen that works in your current program?
	What would make your program more effective?
	What is being taught to prevent IPV?
	What prevention methods does your program have? • Do your provide escort service? • Do you have call boxes in place? • Do you have effective lighting on campus?
	Has the campus used programs such as RAD, IMPACT, Model Mugging, or STDS?
	What strategies being taught for use before an assault?
	What strategies are being taught for use during an assault?
	What strategies are being taught for use after an assault?
	What else would you like to see in place to prevent IPV on campus?
	What is the role of safety personnel in providing safety training for IPV?

	Who provides the safety training?
2. Using a public health approach, what programs appear to have the best chance of reducing IPV in the college environment?	Describe what you know about programs that aim to minimize injury from IPV.

Appendix B: Research Questions

Research Question Alignment with Interview Questions

Research question	Interview question
3. What are the elements of an effective interpersonal violence prevention program?	G. Describe your current campus safety program.
	H. What have you observed that needs to be in an effective IPV prevention program?
	I. What have you seen that works in your current program?
	J. What would make your program more effective?
	K. What is being taught to prevent IPV?
	L. What prevention methods does your program have?
	M. What else would you like to see in place to prevent IPV on campus?
	P. Describe what you know about programs that aim to minimize injury from IPV.
	Q. What is the role of safety personnel in providing safety training for IPV?
	R. Who provides the safety training?

1a. Using a public health approach, what programs appear to have the best chance of reducing IPV in the college environment?	G. Please respond "Yes" or "No" to the following questions (Evidence-based practice):
	    d. Do you provide escort service?
	    e. Do you have call boxes in place?
	    f. Do you have effective lighting on campus?

	I. Has the campus used programs such as Rape Aggression Defense (RAD), IMPACT (Self-defense training program), Self-defense Training System (SDTS), or

	Model Mugging? (Evidence-based practice)
	L. What strategies are being taught for use before an assault? (Public Health Model Primary Prevention)
	M. What strategies are being taught for use during an assault? (Public Health Model Secondary Prevention)
	N. What strategies are being taught for use after an assault? (Public Health Model Tertiary Prevention)

Appendix C: Checklist

Campus Security Checklist. McPherson, 2020

Security Item	S1 Addressed (Yes, No, or N/A)	S2 Addressed (Yes, No, or N/A)
Who are the campus security authorities?		
Is there a regularly scheduled security audit to define and address campus vulnerability?		
What is the office responsible for Clery Act documentation?		
Is there an individual responsible for campus security reporting?		
Who tracks information related to on-campus crime, and non-campus related buildings or property?		
Where are the records kept?		
Do you have a recent date on your policy and procedures?		
Are there other individuals/offices with significant responsibility for student and campus activities?		
Do campus security forces have the documentation needed to report crimes?		
What is the procedure for collecting, reviewing and reporting crime reports?		
Do you have an up-to-date list of the buildings and properties that your institution owns or controls and addresses for those buildings/properties?		
Have you identified public property that is within your campus or immediately adjacent to and accessible from your campus?		

Have you made a good-faith effort to obtain the crime statistics from all of the law enforcement agencies with jurisdiction for your Clery geography?	
Have you requested statistics for all of your Clery geography?	
Have you documented your institution's efforts to obtain the statistics and, if applicable, documented any nonresponse on behalf of an agency (or agencies)?	
Do you have a hard copy or electronic crime log that includes information on all reported crimes, including the nature of the crime?	
The date and time the crime occurred?	
The general location of the crime?	
The disposition of the complaint, if known?	
If you maintain an electronic log, do you have a back-up log in case there are technical problems accessing the log?	
Do you have more than one person trained to maintain the log?	
Do you notify the public how they can review the log?	
Does your institution have written emergency response and evacuation procedures that include the following?	
The procedures the institution will use to immediately notify the campus community upon the confirmation of a	

significant emergency or dangerous situation involving an immediate threat to the health or safety of students or employees occurring on the campus?	
A description of the process the institution will use to a) confirm that there is a significant emergency or dangerous situation as described above?	
b) determine the appropriate segment or segments of the campus community to receive a notification?	
c) determine the content of the notification?	
d) initiate the notification system?	
Who composes a statement that the institution will determine the content of the notification and initiate the notification system, taking into account the safety of the community?	
Do you have: a list of the titles of the person or persons or organization or organizations responsible for carrying out the actions described in (a) through (d) above?	
The institution's procedures for disseminating emergency information to the larger community?	
The institution's procedures to test the emergency response and evacuation procedures on at least an annual basis, including tests that may be announced or unannounced?	

Publicizing its emergency response and evacuation procedures in conjunction with at least one test per academic or calendar year?	
Does your institution have a written timely warning policy?	
Does your institution have an individual or office responsible for issuing timely warnings?	
Does your institution have one or more methods of disseminating timely warnings?	
Has your institution communicated with local police requesting their cooperation in informing the institution about crimes reported to them that may warrant timely warnings?	
Documenting, for each test, a description of the exercise, the date and time, and whether it was announced or unannounced?	
Has your institution communicated with local police requesting their cooperation in informing the institution about situations reported to them that may warrant an emergency response?	
Do you have a published statement that accurately reflects how your institution's policies are currently implemented?	
What campus security equipment is present: Blue emergency boxes, cameras?	

Is there adequate lighting on the campus walkways/parking lots/garages?	
Is there an escort service to provide safety to the parking areas, common areas and dormitories?	
Are there trained student patrols on campus? During what hours? What areas?	
What crime prevention training is offered to the students, faculty and staff?	
Does staff work area arrangement include safety considerations?	
Do public service/faculty office desks have duress alarms?	
Are employees allowed/encouraged to have personal alarms?	
Are faculty and staff trained to work in groups when dealing with a problem person?	
Are faculty offices grouped to avoid isolation?	
Does the architectural design of buildings allow for exposure and visibility?	
How does the university encourage a good working relationship between faculty and security forces?	
Does the campus library have an open 24/7 access?	
Are there specific library safety measures?	
Are remote or hidden library areas monitored?	
Are there emergency telephones in remote and hidden library areas?	

Do phones connect to a service desk and the security office?
Are whistles available to patrons and employees?
Are there signs in the library and on campus informing of available security services?
Are there signs informing people of security measures around campus and in the library?
Do dormitories have electronic pass keys?
Is there a live person to check in dormitory entrance?
Do classroom windows have cold steel mesh that will impede bullets?
Are there computer-controlled cameras in stairwells?
Does the college have Emergency notification/broadcast alert systems?
Are there policies related to student mental health in place?
What is the relationship with outside providers of medical/psychiatric care?
Are there alarm strips/scream alarms in toilet stalls?
Do campus security forces walk, ride bicycles, or have other transportation like Segway or automobiles?
What are the policies related to weapons on campus (including concealed carry)?
Do state CCW laws extend to the campus faculty and staff?

The institution must make a good-faith effort to collect crime statistics for all Clery Act crimes committed in applicable geographic locations from all law enforcement agencies with jurisdiction for your institution.

The institution must record all alleged criminal incidents, including non-Clery Act crimes, reported to the campus police or security department regardless of how much time has passed since the alleged incident occurred. Crimes are recorded in the crime log by the date they are reported. The log must be available for review by the public.

The institution must immediately notify the campus community (or significant segments of the campus community) upon the confirmation of a significant emergency or dangerous situation involving an immediate threat to the health or safety of students or employees occurring on the campus.

Who composes a statement that the institution will determine the content of the notification and initiate the notification system, taking into account the safety of the community? This may be modified if a notification will compromise efforts to assist a victim, or contain, respond to or otherwise mitigate the emergency.

The institution must alert the campus community regarding any Clery Act crime that is reported to campus security authorities or local police agencies and is considered to represent a serious or continuing threat to students and employees.

Your institution is required to publish and distribute an annual security report by Oct. 1 to all enrolled students and all employees. You must provide notice of the availability of the report to all prospective students and employees. The report must contain crime statistics and various policy statements. The statements must accurately reflect how your institution's policies are currently implemented.

Check list was created by information from:

Chadley, O. (1996). *Campus crime and personal safety in libraries*. College and Research Libraries, 1996, p. 385-390.

Dameron, S., DeTardo-Bora, K. & Bora, D. (2009). *An Assessment of Campus Security and Police Information on College/University Websites*. *Security Journal,* **22,** 251–268. https://doi.org/10.1057/palgrave.sj.8350082

Appendix D: Interventions

Evidence-based Practice Interventions vs Participants' Organization Interventions

	Yes or N/A	**Yes or N/A**
Is there a regularly scheduled security audit to define and address campus vulnerability?	Yes	N/A
What is the office responsible for Clery Act documentation?	Yes	N/A
Is there an individual responsible for campus security reporting?	Yes	N/A
Is there someone who tracks information related to on-campus crime, and non-campus related buildings or property?	Yes	Yes
Do you have a recent date on your policy and procedures?	Yes	N/A
Are there other individuals/offices with significant responsibility for student and campus activities?	Yes	Yes
Do you have an up-to-date list of the buildings and properties that your institution owns or controls and addresses for those buildings/properties?	Yes	N/A
Have you identified public property that is within your campus or immediately adjacent to and accessible from your campus?	Yes	Yes
Have you made a good-faith effort to obtain the crime statistics from all of the law enforcement agencies with jurisdiction for your Clery geography?	Yes	Yes
If you maintain an electronic log, do you have a back-up log in case there are technical problems accessing the log?	Yes	N/A
Do you have more than one person trained to maintain the log?	Yes	N/A
Does your institution have written emergency response and evacuation procedures that include the following?	Yes	Yes
The procedures the institution will use to immediately notify the campus community upon the confirmation of a	Yes	N/A

significant emergency or dangerous situation involving an immediate threat to the health or safety of students or employees occurring on the campus?		
A description of the process the institution will use to determine the appropriate segment or segments of the campus community to receive a notification?	Yes	N/A
Who composes a statement that the institution will determine the content of the notification and initiate the notification system, taking into account the safety of the community?	Yes	N/A
Do you have: a list of the titles of the person or persons or organization or organizations responsible for carrying out the actions described above?	Yes	N/A
The institution's procedures to test the emergency response and evacuation procedures on at least an annual basis, including tests that may be announced or unannounced?	Yes	N/A
Does your institution have a written timely warning policy?	Yes	Yes
Does your institution have an individual or office responsible for issuing timely warnings?	Yes	Yes
Does your institution have one or more methods of disseminating timely warnings?	Yes	Yes
Has your institution communicated with local police requesting their cooperation in informing the institution about crimes reported to them that may warrant timely warnings?	Yes	N/A
Has your institution communicated with local police requesting their cooperation in informing the institution about situations reported to them that may warrant an emergency response?	Yes	Yes
Do you have a published statement that accurately reflects how your institution's policies are currently implemented?	Yes	N/A
What campus security equipment is present: Blue emergency boxes, cameras?	Yes	Yes

Is there adequate lighting on the campus walkways/parking lots/garages?	Yes	Yes
Is there an escort service to provide safety to the parking areas, common areas and dormitories?	Yes	Yes
Are there trained student patrols on campus? During what hours? What areas?	Yes	Yes
Is crime prevention training is offered to the students, faculty and staff?	Yes	Yes
Does staff work area arrangement include safety considerations?	Yes	Yes
Do public service/faculty office desks have duress alarms?	Yes	Yes
Are employees allowed/encouraged to have personal alarms?	Yes	Yes
Are faculty and staff trained to work in groups when dealing with a problem person?	Yes	Yes
Are faculty offices grouped to avoid isolation?	Yes	Yes
Does the university encourage a good working relationship between faculty and security forces?	Yes	Yes
Does the campus have an open 24/7 access?	Yes	Yes
Are there specific campus safety measures?	Yes	Yes
Are remote or hidden campus areas monitored?	Yes	Yes
Are there emergency telephones in remote and hidden campus areas? (Blue boxes)	Yes	Yes
Do phones connect to a service desk and the security office?	Yes	Yes
Are there signs on the campus informing of available security services?	Yes	Yes
Are there signs informing people of security measures around campus and in the library?	Yes	Yes
Is there a live person to check in dormitory entrance?	Yes	Yes
Do state CCW laws extend to the campus faculty and staff?	Yes	Yes