2013

A Survey Study of Prepare Workshop Participants' Application of Knowledge, Confidence Levels, and Utilization of School Crisis Response and Recovery Training Curriculum

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A SURVEY STUDY OF PREPaRE WORKSHOP PARTICIPANTS'

APPLICATION OF KNOWLEDGE, CONFIDENCE LEVELS,

AND UTILIZATION OF SCHOOL CRISIS RESPONSE AND RECOVERY

TRAINING CURRICULUM

A DISSERTATION SUBMITTED TO

THE FACULTY OF THE GRADUATE SCHOOL

IN CANDIDACY FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

PROGRAM IN SCHOOL PSYCHOLOGY

BY

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CHICAGO, IL

AUGUST 2013

ACKNOWLEDGEMENTS

It has been a long road but I have not traveled this road alone. I sincerely want to thank my family and the following individuals for all of their support along the way. First, I want to thank my wife, Becky Lazzaro, and my children, Nathan and Emily, for giving me the motivation to complete the dissertation experience. Secondly, my mother and father were always the driving forces behind my own education. They encouraged me to continue on even when the going got rough. My father always told my brothers and me that "There is nothing more important than an education." And a special thanks to Joanne Little ("Mama Jo") and Steve Little ("Papa 'Teve") for watching our children and providing me with the gift of time.

In addition, I am forever grateful to Loyola University and all of the professors I have had over the years, especially Pamela Fenning, Rosario Pesce, Lynne Golomb, Terri Pigott, Dennis Simon and Dr. Ron Morgan. I feel that I have been well prepared for the field of education and I hope to continue to be able to teach aspiring school psychologists in the years to come. An education is not meant to be owned but to be shared. Special thanks to my dissertation committee, Steve Brock, the NASP PREPaRE workgroup, John Utterback, Kathy Palmer, Lori Russo, Lauren Bilbrey, Aunt Dr. Terry Schuepfer, Christina Conolly-Wilson, Josh Polanin, Brad Skaja, Stephanie Grunewald, Laura Swanlund and others.

And finally, this study is also dedicated to the unrelenting pursuit of all of those who engage in school crisis prevention and intervention whether it be actual practice, teaching, or related research. Our nation's students, namely our children, deserve our attention and utmost dedication.

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ABSTRACT

This survey study investigated the effects of the National Association of School Psychologists PREPaRE Workshop 2 training on workshop participants. PREPaRE is a comprehensive crisis prevention and intervention model that is specifically designed for schools. This study evaluated the impact of the PREPaRE model and the training of school psychologists in terms of (a) can school psychologists apply the knowledge gained when responding to crisis situations as a result of the PREPaRE training? (b) what are school psychologists' perceptions of their confidence in responding to an actual crisis situation? (c) and have school psychologists utilized PREPaRE response and recovery techniques in actual crisis situations? This survey study utilized a quasi-experimental ex post facto (or causative comparative) research design. Surveys were sent electronically to two groups of school psychologist members of the National Association of School Psychologists; a group that received the PREPaRE Workshop 2 training and a second that had not received the training. Results revealed those who completed Workshop 2 scored higher on the knowledge scale and reported higher levels of confidence in responding to school crises. In addition, although school psychologists reported using various crisis interventions and techniques, there were no significant differences in application of these interventions in schools between the two groups.

CHAPTER I

INTRODUCTION

> Knowing how to respond quickly and efficiently in a crisis is critical to
> ensuring the safety of our schools and students. The midst of a crisis is
> not the time to start figuring out who ought to do what. At that moment,
> everyone involved – from top to bottom – should know the drill and know
> each other.
>
> – Margaret Spellings
> (Secretary of Education from 2005 to 2009)

The modern English word "crisis" comes from the Greek word "Krisis" meaning "decision." A crisis is an intense and defining moment that will inevitably bring about change in the individual (Slaikeu, 1990). A recent definition of crisis and crisis event characteristics was suggested by Stephen Brock, at California State University, Sacramento. Brock defined school crisis as containing the following characteristics: (1) perceived as extremely negative, (2) generate feelings of helplessness, powerlessness, and/or entrapment, and (3) occur suddenly, unexpectedly, and without warning. Crisis events have the potential to affect entire school communities (Brock, 2011).

It is estimated that over 67,000,000 students in our nation walk through their school's doors each morning (NCCD, 2010). As a whole, our nation's schools are among the safest places a young person can be (Jimerson, Morrison, Pletcher, & Furlong, 2006). The Bureau of Justice Statistics and National Center for Education Statistics has partnered to produce an annual report titled *Indicators of School Crime and Safety, 2009*

(NCES, 2009). This report provides current and detailed statistical information on the nature of crime occurring in and around schools.

> In each year during the period spanning 1992-1993 to 2007-2008, there were at least 50 times as many homicides of youth away from school than at school and generally at least 150 times as many suicides of youth away from school than at school. During the 2008–09 school year, there was approximately one homicide or suicide of a school-age youth at school per 2.5 million students enrolled. (National Center for Education Statistics [NCES], 2010, p. 6)

The Problem

Despite school safety statistics reaffirming that school is a relatively safe place for children, tragedies and crisis events do occur in our nation's schools. In fact, school tragedies have existed since the inception of American education. Recent school tragedies, such as those that occurred at Columbine High School in 1999, Santana High School in 2001, Virginia Tech in 2007, Northern Illinois University in 2008, Deer Creek Middle School in 2010, and Sandy Hook Elementary School in 2013 all point to the reality that violent school assaults continue to occur. Most of these highly publicized events have received an extraordinary amount of media coverage viewed by millions in the United States and throughout the world.

The following statistics are a reminder of the potential for violence in America's schools: "In 2009-10, 74 percent of public schools recorded one or more violent incidents of crime, 16 percent recorded one or more serious violent incidents, and 44 percent recorded one or more thefts, and 68 percent recorded one or more other incidents" (National Center for Education Statistics [NCES], 2011, p. 26). In addition, data from the 2009 Youth Risk Behavior Surveillance Survey (YRBS) found that 5.9% of

students, nationwide, had carried a gun on at least one day during the 30 days prior to the administration of the survey (Centers for Disease Control and Prevention, 2009 [CDC]).

In response to the highly publicized school crises of the 1990's and 2000's, there has been a subsequent proliferation of school crisis prevention guides and related intervention literature (Adamson & Peacock, 2007; Nickerson & Zhe, 2004). Some school districts were quick to respond to these national events by implementing zero tolerance policies (Skiba, 2000). Other schools responded by creating crisis plans, increasing security measures, and lobbying for stricter laws aimed at school violence (O'Toole, 2000). The perceived increase in school violence also prompted legislators to mandate improved school crisis policies and procedures. In one survey study conducted by Adamson and Peacock (2007), respondents reported that 95% of their schools had crisis plans and 84% had crisis teams. However, the U.S. Department of Education reported that, in general, school crisis plans were not comprehensive, practiced, coordinated with the community, or developed with the input of students, families, and school staff (U.S. GAO, 2007).

Similarly, a report on the Status of School Districts' Planning and Preparedness by the U.S. Government Accountability Office (2007) stated that 27% of school districts have not trained with first responders or community partners. Schools need to become trained for potential disasters by implementing emergency plans and partnering with community first responders such as police, fire, and emergency medical services (Klingman, 2004; U.S. GAO, 2007). Although some still consider crisis planning to be "in its infancy" in the school setting (Pitcher & Poland, 1992, p. 4), the recent expansion

in the literature base has helped to establish a national foundation for continued and future research (U.S. Department of Education, 2007).

Prior to the 1999 events at Columbine High School, many schools did not have formal crisis response planning or training. Schools often responded to crises in a reflexive manner with little coordination and minimal structure (Schonfeld & Newgass, 2000). School crisis prevention and intervention curriculum was not readily available or included in the standard curriculum in university graduate education programs (Allen et al., 2002).

In the past, for schools to engage in crisis or emergency planning they relied on community-based crisis intervention models or those that were tailored to other professions. This was before the advent of specific school crisis prevention and intervention curricula. One organization that provided this training was the National Organization for Victim Assistance (NOVA). Founded in 1975, NOVA is a private, nonprofit organization which provides assistance to victims of crime and to advocate and provide services to those affected. In 1986, NOVA recognized that major crimes, disaster sites, and large-scale accidents required significant and prolonged crisis response and disaster support. To meet this growing need, NOVA created the National Community Crisis Response Team. The first executive director of NOVA, Marlene Young, originally developed a community crisis response manual to train volunteers to assist in times of crisis. The NOVA crisis response training curriculum was infused with rich experiences and numerous examples of "lessons learned" from large-scale community disasters. For example, some of the many disaster sites that NOVA has

responded to include the Oklahoma City bombing, a tornado outbreak in the Midwest,

World Trade Center Attacks, and several school shootings. The NOVA model of

community crisis response includes both individual and group crisis interventions.

Although NOVA responders have historically responded to large-scale school shootings

in the past, the NOVA training curriculum was not specifically designed to assist schools

and school-aged children (Young, 1998).

In the early 1980's, Jeffrey Mitchell presented the "Critical Incident Stress

Debriefing" (CISD) intervention (Mitchell, 1983). CISD is a structured group

intervention designed to mitigate posttraumatic stress (Everly, 1995). The CISD group

intervention was specifically created to provide psychological debriefing for first

responders, such as fire department personnel and staff from emergency medical services.

The entire comprehensive and systematic crisis intervention approach for responding to

traumatic events was later referred to as "Critical Incident Stress Management" or CISM

(Bledsoe, 2003). Although CISM was expanded in the late 1980's and 1990's to also

include school crisis responses, the CISM model was not specifically designed to address

the needs of children in school settings (Everly, 1995). In the 1980's and 1990's, since

there were limited debriefing models available, some professionals in schools were

trained using the Jeffrey Mitchell CISD/CISM model (Mitchell & Everly, 1996).

The National Association of School Psychologists (NASP) is an organization that

has demonstrated national and international leadership in the field of school crisis

prevention and response. A NASP (2010) publication titled *Standards for Graduate

Preparation of School Psychologists* includes language that school psychologists in

training be able "to implement effective crisis preparation, response and recovery."
School crisis experts within the NASP organization have been active in the development
and dissemination of crisis prevention and intervention materials for well over a decade
(Zenere, 1999). In 1996, several NASP members created the National Emergency
Assistance Team (NEAT). NEAT consults with and assists schools, families, and
communities by providing support and helping them cope following a significant crisis
(Zenere, 1999). In 2006, several members created the school crisis prevention and
intervention workgroup. From the beginning, the workgroup recognized a need to create
a comprehensive crisis prevention and intervention training curriculum that would be
intended for schools. This curriculum was subsequently developed and named the
PREPaRE model (Brock et al., 2009).

The PREPaRE Model

The PREPaRE acronym stands for Prevent, Reaffirm, Evaluate, Provide and
Respond, and Examine. The PREPaRE curriculum was initially developed beginning in
2003 and the two PREPaRE workshops were piloted in 2006 at the NASP national
convention in California. The first edition of PREPaRE was officially launched in 2007
and the second edition was recently launched in 2011.

The PREPaRE Workshop 1, *Crisis Prevention and Preparedness: Comprehensive
School Safety Planning*, is a one-day workshop that provides school-based mental health
professionals, administrators, security professionals, and other educators the knowledge
and resources to help them establish comprehensive school safety and crisis prevention
and preparedness efforts in schools. PREPaRE Workshop 1 provides information about

developing school safety teams and the specific roles of individuals on these teams. The workshop also explores how to prepare for school crises by developing, exercising, and evaluating safety and crisis plans. Participants are exposed to various activities and realistic tabletop exercises to practice and reinforce workshop objectives (Brock et al., 2009; Reeves & Nickerson, 2011).

The PREP<u>a</u>RE Workshop 2, *Crisis Intervention and Recovery: The Roles of School-Based Mental Health Professionals*, is a two-day workshop that provides school-based mental health professionals and other school crisis intervention team members with the knowledge to respond to and meet the mental health needs of students and staff following a school crisis event. It is also appropriate for administrators and other school and community members that would assist in the aftermath of a crisis by providing psychological first aid (Brock, 2011; Brock et al, 2009; National Child Traumatic Stress Network, 2006). Upon workshop completion, participants will know how to evaluate the degree of psychological trauma, respond to those needs and provide interventions, and examine the effectiveness of school crisis intervention and recovery efforts (Brock, 2011).

As of April 2013, over 4,000 participants have been trained in the PREP<u>a</u>RE Workshop 2, both nationally and internationally (M. Drake, personal communication, April 5, 2013). All of the authors of the PREP<u>a</u>RE curriculum have had extensive practical experience in dealing with the aftermath of school tragedies. Their goal was to create a national school crisis prevention and intervention curriculum so that other

educators could provide state-of-the-art crisis prevention and response procedures in their

schools and school districts.

The primary authors of PREPaRE originally recognized a need to develop a crisis

prevention and intervention training curriculum that is tailored to schools (Brock et al.,

2009). An extensive review of the current literature base was conducted to inform the

design of a proactive curriculum that promotes prevention and best practices in the school

crisis prevention and intervention field (Brock et al., 2009). Research and theory from

the literature base have been transformed into a comprehensive manual to train those

working in schools. Their efforts have resulted in a national curriculum and

accompanying training workshops that were written by school professionals and designed

specifically for school personnel (Brock, 2006; Reeves et al., 2006). A follow-up book

called *School Crisis Prevention and Intervention: The PREPaRE Model*, was published

to compliment the workshops and to provide more in-depth coverage of the research that

the PREPaRE model was based upon (Brock et al., 2009).

Purpose of this Study

The purpose of this study is to evaluate the impact of the PREPaRE model and the

training of school psychologists in terms of (a) can school psychologists apply the

knowledge gained when responding to crisis situations as a result of the PREPaRE

training? (b) what are school psychologists' perceptions of their confidence in responding

to an actual crisis situation? (c) and have school psychologists utilized PREPaRE

response and recovery techniques in actual crisis situations? There are a lack of studies

examining and evaluating the effectiveness of response programs (Pagliocca &

Nickerson, 2001). This survey study will help add research to the school crisis intervention field by studying the impact of the PREPaRE school crisis response and recovery training upon workshop participants in terms of the application of knowledge, confidence levels, and utilization of school crisis interventions in the school setting.

Research Questions

Based on a review of the existing literature and an analysis of the PREPaRE training components, the following research questions will guide this study:

1. Are PREPaRE Workshop 2 participants able to acquire, retain, and apply key concepts after successfully completing the two-day training? Will PREPaRE Workshop 2 participants have a higher mean score on school crisis scenario survey questions than participants that did not take the PREPaRE Workshop 2 training?

2. Is there a significant relationship between the length of time following workshop completion and the number of key workshop concepts retained by PREPaRE Workshop 2 participants?

3. How many hours and what type of school crisis training have both groups of participants received? Does the number of hours of previous crisis training have an effect on school crisis intervention content knowledge? Are there other demographic variables that will significantly impact participants' knowledge?

4. How confident do PREPaRE Workshop 2 participants feel about conducting school crisis response and recovery activities in their schools after successfully completing the training curriculum? Is there a significant difference between the levels of confidence of those who have completed the PREPaRE Workshop 2 as compared to

those who have not received the training or those who have received other school crisis response training?

5. Does the number of hours of previous crisis training have an effect on participants' levels of confidence? Are there other demographic variables that will significantly impact participants' confidence?

6. Have school psychologist participants applied crisis response and recovery knowledge when responding in an actual school crisis response? Is there a significant difference between the utilization of school crisis response information as compared to those who have not received the training? Does the years of experience of the participant affect their utilization of PREPaRE interventions following an actual school crisis?

CHAPTER II

LITERATURE REVIEW

In the last decade, the literature surrounding school crisis prevention and response has greatly expanded (Adamson & Peacock, 2007; Jimerson, Brock, & Pletcher, 2005; U.S. GAO, 2007). However, there remains limited research in the area of investigating the impact that school crisis prevention and intervention training has on participants (Pagliocca & Nickerson, 2002). This study is seeking to investigate the impact of crisis response training on participants who have completed PREPaRE Workshop 2.

In particular, this dissertation seeks to study whether, and to what degree, the successful completion of the workshop affects three areas: (1) participants' application of school crisis response knowledge in simulated crisis scenario situations; (2) participants' reported perceptions of confidence responding to school crises; and (3) their self-reported use of school crisis interventions in the school setting.

Although school crisis prevention and intervention is a relatively new area of educational research, school crises are not at all unfamiliar in American schools.

Brief History of School Crisis Planning and Response

Many of the early disasters that took place in schools in the 19th and early 20th century were due to fires. For example, on March 4, 1908, the Lake View School caught fire in Collinwood, Ohio which claimed the lives of a staggering 175 people. Another infamous blaze took place in 1958 at the Our Lady of Angels School in Chicago, Illinois

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which claimed the lives of 95 people (Cowan, 1996). By 1961, thousands of school children in New York City schools were practicing fire drills and could demonstrate a school evacuation within minutes of a fire drill alarm being sounded. Clearly, safety planning and practice had saved lives.

More recently in April of 1999, the tragic events that took place at Columbine High School in Littleton, Colorado received international media attention. The events that took place at Columbine have been one of the most widely publicized school shootings in American history. This landmark example of school violence in America evoked a national and international response that has had a lasting impact on school safety planning, crisis response procedures, staff training, etc. (Cullen, 2009).

School disasters often have great impact on the general population and it is not uncommon that new lessons are learned after each event which subsequently are published in a public forum. For example, following the shootings at Virginia Tech in 2007, the president of the university commissioned and published an "autopsy" of the events called *Mass Shootings at Virginia Tech: Report of the Review Panel*. In addition, new policies and legislation are often enacted following a school tragedy (Pagliocca & Nickerson, 2001). Sadly, school shootings and other school incidents continue to make the news on a regular basis, some being publicized more than others.

Prevalence of School Crises and School-Related Violence

Since school shootings are highly publicized events, they are subsequently perceived as occurring with more frequency than they actually do. School shootings are quite rare (Skiba et al., 2000; U.S. Department of Education, 2007). School children are

much more commonly exposed to and affected by serious family issues, domestic violence, suicides, accidents, and the death of a loved one or someone close to them (CDC, 2009). Since school personnel have daily contact with children, they are in a unique position to help identify, assess, and potentially prevent accidents, youth suicide and violence towards others (Miller, 2011).

Schools have demonstrated outstanding safety planning and outcomes related to school safety in specific areas. For example, school fire safety and school bus transportation are American school safety success stories. In the past 50 years, school fires have not killed more than 10 people. "It has been a very long time since any student, from kindergartners up to high school seniors, has died in a school fire during the school day" (Carella, 2008). Similarly, school bus transportation also has an outstanding safety record. According to the National Highway Traffic Safety Administration's Report to Congress (2002), "each year, over 450,000 public school buses travel about 4.3 billion miles to transport over 23.5 million children to and from school. And yet, each year on average, six school age children die in school bus crashes as passengers" (p. 3). Although six students dying each year is six too many, this statistic does highlight the overwhelming number of kids who are transported to school safely each day. These examples serve as school safety success stories.

Effects of Psychological Trauma on Student Mental Health and Learning

The promotion of effective crisis prevention and intervention programming for our nation's schools and students is paramount. Research has shown that the three leading causes of death in school-aged children are accidents, homicides, and suicides

(American Association of Suicidology, 2010; CDC, 2007). Training staff in school crisis prevention and intervention programming and procedures may help prevent such tragedies from occurring. After a traumatic event, effective early intervention may also serve to eliminate or significantly reduce potential negative effects on children. Caplan (1964) stated that primary prevention involves "lowering the rate of new cases of mental disorder in a population over a certain period by counteracting harmful circumstances before they have a chance to produce illness" (p. 26).

Unfortunately, not every incident can be prevented and students of all ages will inevitably be witnesses to a myriad of tragic events. These events will range from domestic abuse suffered in the home to having witnessed a terrorist attack upon our nation. However, it is important to note that some children will only experience minimal or no psychopathology after witnessing an event (Udwin et al., 2000). In fact, most children who are witnesses to trauma will recover on their own without professional help and will not develop long-term emotional impairments (Flouri, 2005; Klingman, 2004; National Institute of Mental Health, 2001; Saigh, 1997). These children are psychologically resilient, have supportive family to guide them, have positive coping styles, and grow stronger from having experienced traumatic events.

Conversely, a growing body of research has also shown that there will inevitably be a smaller percentage of children that will have negative lasting effects as a result of exposure to violence or tragedy (Barenbaum, 2004; Brock et al., 2009; Nickerson et al., 2009; Pagliocca & Nickerson, 2001). Childhood psychological trauma can be an etiological factor in the development of a variety of serious and pervasive disorders in

childhood and in adulthood (Terr, 2003). Research has demonstrated that the effects of experiencing trauma will commonly manifest in the form of anxiety disorders (Green, 1994; Pfefferbaum et al., 2008). The anxiety disorders include Acute Stress Disorder, Posttraumatic Stress Disorder, Panic Disorders, and phobias (APA, 2000). The most studied anxiety disorder resulting from traumatic experience is Posttraumatic Stress Disorder (PTSD). The National Center for PTSD (Hamblen, 2007) reports that 3-15% of girls and 1-6% of boys who have experienced a trauma could be diagnosed with PTSD.

Additional psychopathological manifestations that children or adolescents may acquire after a traumatic exposure may include: Dissociative Disorders, Mood Disorders (including Depression), Separation Anxiety Disorder, Sleep Disorders, Substance Related Disorders, and Adjustment Disorders (Brock & Jimerson, 2004; Hoven et al., 2004; Pine & Cohen, 2002). These findings point to the conclusion that youth are a vulnerable portion of our population both physically and psychologically (Norris et al., 2002). Negative early experiences can have a profound effect upon the young developing brain (Kaplow, 2006; Nemeroff, 2004). Unfortunately, some perpetrators of school violence will target youth populations specifically because they are vulnerable (Klingman, 2004).

As a result of trauma, psychological symptoms in children can manifest in multiple ways depending on the developmental stage of the student. For example, pre-schoolers and younger elementary school students exposed to trauma may exhibit clinginess, over-dependence, regression, sleep problems, irritability, temper tantrums, incontinence, aggressive and hyperactive behaviors and increased separation anxiety (ARC, 2004; Norris et al., 2002). Older elementary-aged students will continue to

complain of physical symptoms. Their quality of play reenacting witnessed traumas may be more imaginative or elaborate. School problems such as distractibility, decrease in sustained attention, and a decline in classroom performance and quality of schoolwork may emerge. Adolescent trauma reactions will be most similar to adult reactions. Adolescents have the ability to cognitively process abstract concepts and have a greater ability to reason than younger students (Brock et al., 2009). Unfortunately, just as adolescents have many of the same trauma reactions as adults, they also have many of the same maladaptive coping responses such as turning to alcohol, drugs, and other potentially high-risk or harmful behaviors.

The impact of psychological trauma on the student's mental health and education is also dependent upon the crisis event itself. While all crisis events are perceived as extremely negative, generate feelings of helplessness, powerlessness, and/or entrapment, and occur suddenly, unexpectedly, and without warning (Brock, 2011), they vary based on crisis type, and the likelihood one will have a traumatic reaction to it. Crises can be delineated into the following classifications: acts of war and/or terrorism, violent and/or unexpected death, threatened death and/or injury, human-caused disasters, natural disasters, and severe (non-fatal) illness or injury (Brock, Sandoval & Lewis, 2001; Brock et al., 2009; Klingman, 2004). All of these crisis classifications have the potential to significantly impact students, both physically and psychologically (Reeves et al., 2010). It is generally accepted that human-caused crisis events are more traumatic to individuals than natural crisis events. Along those lines, crises that are intentionally caused as opposed to accidentally caused are also more traumatic (Charuvastra & Cloitre, 2008).

Research has demonstrated that the degree of crisis exposure is related to the severity of individual crisis reactions (Brock, 2002). It has been established that physical proximity is one of the most significant variables regarding crisis exposure (Brock, 2002; Galea et al., 2002; Pynoos et al., 1987). For example, a child that has witnessed their teacher collapsing in class and dying from a heart attack will likely be more significantly impacted than a student that learns this information second-hand from parents or from a school notification.

Similar to physical proximity, emotional proximity is another crisis exposure variable that is highly correlated with symptom severity in children (Brock & Davis, 2008). Emotional proximity refers to the degree of emotional closeness or how well the student may have known the person who was affected by the crisis. For example, Pynoos et al. (1987) reported that many students who were not present at school during a playground school shooting were still exhibiting significant symptoms of PTSD.

Psychological trauma may cause or exacerbate pre-existing mental health problems. It may also be a major contributing factor to academic decline and educational problems (Cook-Cattone, 2004; Vogel & Vernberg, 1993). For example, psychological trauma could directly affect students by contributing to lower attendance rates, increase risk for psychological disturbance, increase behavior problems, lower test scores and lead to an overall decrease in academic performance at school (Ratner et al., 2006; Stuber et al., 2005; Terr, 2003).

Additional student problems following psychological trauma may include difficulty concentrating, moodiness, and increased disruptive and distracting behavior in

the classroom (Berkowitz, 2003). Saigh and colleagues (1997) reported that adolescents exposed to exceptional stress suffered scholastic impairments, especially students exhibiting Posttraumatic Stress Disorder (PTSD) symptoms. Children who are formally diagnosed with PTSD in a clinical setting have been found to be at increased risk for low academic achievement, aggressive and delinquent behavior, and substance abuse (Kilpatrick & Saunders, 1997). The implications of children suffering from the effects of psychological trauma are numerous. It is estimated that 15-43% of girls and 14-43% of boys will witness a trauma in their lifetime (National Center for PTSD, 2006). Therefore, it is important to be able to identify the degree of crisis exposure in children and to monitor their reactions.

School mental health professionals trained in crisis prevention and intervention are among those best suited to play this important role of identifying, monitoring, and helping children impacted by trauma. Klingman and Cohen (2004) have suggested that school-based mental health professionals may conduct school-wide screening after the occurrence of a crisis event at school. Other experts in the field of school crisis prevention and response have concluded that early identification and intervention have the potential to positively influence the outcome for students diagnosed with PTSD and other disorders (McNally, Bryan & Ehlers, 2003; Nickerson, Reeves, Brock, & Jimerson, 2009). School mental health personnel know their students well and will be able to track their recovery in the weeks and months following a tragedy. They can also help by collaborating with and educating parents and serving as a bridge between families and community mental health providers when more intensive psychotherapy is warranted

(Nickerson et al., 2009). These are all important components of comprehensive school crisis response and recovery following a crisis.

The Evolution of School Crisis Planning

In the past, school crisis response and intervention was limited or nonexistent depending upon the nature of the crisis. For example, following the Our Lady of the Angels school fire in 1958, it was a social norm at the time to encourage students to not talk about the fire and to "put it behind them." Our current conceptualization of how children can be severely impacted by school crises was not fully understood. The current utilization of psychological first aid, psychoeducation, and individual and group crisis intervention techniques simply were not in widespread use at that time, if at all. Cowan and Kuenster (1996) wrote, "Treatment of what is now recognized as posttraumatic stress disorder was not an option in 1958" (p. 250). One sixth-grade victim of the Our Lady of Angels fire recalled, "No one ever came up to us to ask, 'How are you doing? How do you feel? What do you think of this?'" (p. 251).

Events like the Our Lady of Angels fire and other school tragedies of the era served to increase awareness about the need for more comprehensive school safety measures. Congress authorized the Safe and Drug-Free Schools and Communities (SDFSC) program in 1986, the Safe and Drug-Free Schools and Communities Act (SDFSCA) and Gun-Free Schools Act in 1994. Following the 1998 shooting at Thurston High School in Springfield, Oregon, President Clinton called for a guide to be developed to help "adults reach out to troubled children quickly and effectively." In 1998, a school psychologist named Kevin Dwyer led a writing team and created a research-based guide

entitled, *Early Warning Timely Response: A Guide to Safe School* (Dwyer, Osher, &

Warger, 1998). A companion guide was created in 2000 titled, *Safeguarding our*

Children: An Action Guide (Dwyer & Osher, 2000). The No Child Left Behind (NCLB)

Act of 2001 has served to promote the development of school safety planning and the

regular practice of school emergency drills. Schools are now encouraged to partner with

their local community emergency response agencies to more efficiently respond to school

crises.

The United States Secret Service and the U.S. Department of Education published

a document in 2002 entitled: *The Final Report and Findings of the Safe School Initiative:*

Implications for the Prevention of School Attacks in the United States. This well-known

guide reported that while there was no single "profile" of a school shooter, many of the

perpetrators engaged in behavior that seriously concerned at least one adult. Other key

findings were that school shootings were rarely impulsive acts (Jimerson, Brock, &

Cowan, 2005; Vossekuil et al., 2002); and student perpetrators usually planned out the

attack in advance and with behavior that was oftentimes observable. More specifically,

in 81% of the incidents, at least one other person had knowledge of the attacker's plan

and more than one person had such knowledge in 59% of the incidents (Vossekuil, 2002).

These findings also suggest that many school attacks are preventable and that

students and adults can play a vital role in reporting suspicious behavior and, thus,

preventing tragedy (Daniels et al., 2007; Vossekuil et al., 2002). Educators need to take

action and make it easier for bystanders, students, and other witnesses of potentially

dangerous behavior to report the information they have. Training school staff in current

school crisis prevention and intervention programming and appropriate response techniques, the primary content of the PREPaRE curriculum, is key to keeping students safe.

In the wake of school crises across the nation, schools took the initiative to work on crisis preparedness and responding. In the 1990's and 2000's following the highly publicized school shootings, federal legislation and school safety documents were disseminated. This subsequently led to increased awareness regarding school safety and emergency management planning. Many schools began to develop basic crisis plans while others established preparedness plans and crisis response teams should an event occur at one of their schools.

At the present time, as school crisis planning continues to become more sophisticated, more time needs to be dedicated to develop comprehensive school safety plans that are aligned with "Best Practice" approaches. Checking off "written crisis plan" on the school's "to do" list is no longer sufficient. For example, more schools are now engaging in school crisis planning such as practicing realistic scenario tabletop drills and conducting full-scale functional drills. Schools are coordinating with their local police and fire departments to carry out some of these practice drills and trainings. School boards are creating school safety policies that include both a district-wide comprehensive school safety plan as well as site-based school crisis plans. All of this planning, with the primary goal of keeping students safe, requires periodic review and practice as opposed to a one-time or annual planning event.

Barriers to School Crisis Planning

Researchers and practitioners have observed and reported a number of significant barriers to effective school crisis prevention and intervention efforts. First off, the U.S. Department of Education reports that many schools now have crisis plans but that they are not practiced (GAO, 2007). In concert with the evidence-based movement in education, school crisis plans need to be implemented by school professionals with integrity (Cornell, 1998).

Conoley, Hindmand, Jacobs, and Gagnon (1997) have identified that one of the greatest mistakes of school leaders is that their motto is: "Let's wait until there's trouble" (Cornell, 1998). The "wait-and-see" model and method of crisis planning is no longer acceptable and federal guidelines have recommended the establishment of multidisciplinary crisis response teams (U.S. DOE, 2007).

There is a need for more advanced crisis education and training for school administrators and school boards. There are many school districts across the country that serve as examples of "cutting edge" school crisis prevention and intervention programs. However, the U.S. Department of Education has articulated that many schools need to continue to develop their school safety programming efforts and to implement federally recommended practices. For example, a 2007 Government Accountability Office survey revealed that 56% of all school districts do not have plans for continuing student education in the event of an extended school closure. In addition, many of the schools plans and procedures do not specifically address special needs students. Less than 50%

of school districts with emergency plans involved community partners when developing and updating their plans.

Other common barriers to crisis planning have been identified as lack of one or more resources: time for planning, time for staff development and training, access to curriculum, money specifically dedicated to crisis prevention planning, etc. (Bischof, 2007; GAO, 2007). One survey identified lack of time as the single most common barrier preventing involvement in crisis planning and intervention work (Nickerson & Zhe, 2004). Other barriers include issues of territoriality such as 'Who takes the lead in school crisis planning?' Some schools limit their focus to academic issues and safety planning is given minimal time, and attention (Reeves, Kanan & Plog, 2010). Proactive school districts have included school safety planning as part of their formal policies and procedures.

Legal and Policy Considerations

In the past several decades, the extensive media coverage of high profile school shootings has prompted many legislative bodies, school boards, and education leaders to draft new policies and legislation in regards to school safety (Pagliocca & Nickerson, 2001). While necessary, many of the changes were immediate, superficial, and lacked adequate plans for implementation. The changes often had little impact and were not accompanied by comprehensive staff education and training.

Other school districts established comprehensive plans and policies without the training of the staff to carry them out should an incident occur. Pagliocca and Nickerson (2001) have stated that "anecdotal evidence is insufficient for establishing public policy

affecting the physical and psychological health of the nation's children" (p. 396). On the other hand, effective policies, legislation, and interventions that are informed by the most updated research have the potential to most effectively increase school safety (Brock, Sandoval & Lewis, 2001; Hobfoll et al., 2007; Klingman, 1996).

More than simply preparing to intervene after an acute crisis, some schools have taken a proactive approach by conducting needs assessments, completing vulnerability checklists, or even hiring an independent firm to conduct a safety audit. Needs assessments and safety audits can serve to highlight vulnerable areas so adjustments can be made to these physical vulnerabilities, thus, preventing future problems. These proactive measures and efforts continue to promote safe school environments that optimize opportunities for student learning. These measures may also have the residual benefits of reducing potential lawsuits brought against a school district for potential negligence, injuries, or breach of duty.

The Federal Emergency Management Agency (FEMA) is currently taking proactive steps to expand comprehensive emergency management by advocating for mitigation planning. The 2007 federal guide, *Practical Information on Crisis Planning: A Guide for Schools and Communities,* promotes the philosophy of mitigation planning and encourages school districts across the nation to also adopt this philosophy (U.S. DOE, 2007). It states, "the goal of mitigation is to decrease the need for response as opposed to simply increasing response capability" (U.S. DOE, 2007, section 2, p. 3). Mitigation is any sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event (FEMA, 2002). Creating and improving policies and

legislation that promote comprehensive school safety planning is an important first step in making schools safer for children.

School Crisis Prevention and Intervention Survey Research

With the expansion of the crisis prevention and intervention literature base in recent years and the many changes in policies and legislation, school districts across the nation are struggling to keep up with the changes. Researchers are aware that school districts are often found to be functioning at different levels of capacity. In response, recent survey studies have been conducted to obtain a current measure of schools' crisis planning and preparedness. For example, Allen et al.'s study (2002) surveyed 276 school psychologists to learn more about school psychologists' preparation, continuing professional development, and current involvement with school crisis plans and crisis teams. At the time of the Allen et al. study, 5% of school psychologists reported having taken a crisis intervention course at the graduate level. Only 15% of respondents reported having school crisis information integrated into other graduate level courses. In terms of local crisis intervention training, 81% of school psychologists reported receiving instruction in this area. In the same sample, 91% reported working in school districts with crisis plans, however, only 53% were active participants on school crisis teams. Based on the results of the study, the authors determined that school psychologists need increased opportunities for crisis preparation not only in graduate training programs but also in the form of continuing professional development opportunities (Allen et al., 2002). Interestingly, the school psychologist respondents also suggested that school crisis topics cover prevention programming and not just intervention strategies.

Another survey completed by Nickerson and Zhe (2004) sampled 197 school psychologists to learn about their experiences and perceptions concerning crisis preparedness, prevention, and intervention in schools. More specifically, the survey sought information about their direct experience with different types of school crises, use and perceived effectiveness of prevention and intervention strategies, and their role in developing, implementing, and evaluating the interventions. School psychologists reported that the most common crisis events they experienced were student-student physical assaults, serious illness or death of students, suicide attempts, and guns or other weapons brought to schools. The most common crisis prevention strategy used was reported to be the school crisis team response itself, which was also perceived by respondents as the most effective strategy to address school safety. Other common prevention strategies included anger management and social skills programs, school resource officers, crisis plans and drills, peer mediations, and violence prevention programs.

And lastly, the findings reported by Nickerson and Zhe (2004) revealed that school psychologists play a large role in the implementation of crisis prevention and intervention strategies. Some of these intervention strategies included triage, psychological first aid, debriefing, and counseling. However, only 44% of school psychologists reported being involved in program development and systematic evaluation of crisis prevention and intervention strategies. Therefore, evaluation was identified as an area where more involvement is needed (Nickerson & Zhe, 2004).

Another survey study conducted by Adamson and Peacock (2007) analyzed the responses of 228 school psychologists regarding school crisis intervention teams and school crisis plans. Results revealed that 95.1% of school psychologists reported having school crisis plans, and 83.6% reported having school crisis teams at their schools. Most of the participants (93%), shared that their schools experienced and responded to significant school crises. A typical crisis team response involved providing direct service to students, staff, and the media. However, only 44.3% of school psychologist respondents reported that meetings were conducted with parents and other community members following a crisis. In addition, 43.4% of respondents indicated that their school had conducted safety drills other than fire drills and drills related to natural disasters. The majority of the school psychologists (98.2%), reported that they had school crisis intervention training. Despite the high percentage of school psychologists who reported having training, many of the participants suggested that more crisis intervention training would improve their overall crisis response capabilities (Adamson & Peacock, 2007).

Bauer and Gurdineer (2010) conducted a survey evaluating the PREPaRE school crisis prevention and intervention curriculum. This two-part study focused on both PREPaRE workshop sponsors and PREPaRE workshop participants. Their goal was to collect self-report survey data to assess the participants' and sponsors' levels of PREPaRE curriculum utilization. They also sought to determine if participants and sponsors needed or wanted additional support and whether they wanted to participate in future PREPaRE training sessions. Results from the participant survey indicated that most of the PREPaRE workshop participants used their training to a "moderate" degree.

Personal motivation and experiencing a crisis event affected their utilization of the curriculum to a "moderate" extent. On the other hand, having too many other priorities negatively affected utilization to a "moderate" degree. Factors that affected utilization to a "minimal" degree included lack of time and administrative support, low confidence, political issues, and lack of interest from others.

The second part of the study indicated that most of the organizations that sponsored PREPaRE workshops have made slight changes to their crisis plans, policies, and/or procedures. Similarly, survey data indicated that "slight" changes had been made to the amount of information provided to students and parents regarding crisis plans. Additionally, a large percent of the organizations that sponsored a training "agreed" or "strongly agreed" to having further questions or suggestions related to crisis prevention and responding. These results may suggest that if organizations receive additional follow-up or more advanced training then they may be able to utilize the PREPaRE curriculum content to a greater extent.

Bauer and Gurdineer (2010) made several recommendations as a result of their survey which focused on the need for future research to investigate "the effects of demographic variables and the amount of time since training on utilization" (p. 28). They also stated: "Although training utilization was only moderately reported in the current research, half of the organizations reported a willingness to sponsor future trainings" (p. 28). Since comprehensive crisis planning is a long-term commitment for school districts, the results of this study support that school staff may benefit from additional support and training. Future research could investigate whether increased training, such as offering

refresher workshops and providing consultation to support implementation, is correlated with higher rates of PREPaRE curriculum utilization.

Another recent study in the *Journal of School Violence* discussed the development, evaluation, and future directions of the PREPaRE school crisis prevention and intervention curriculum (Brock et al., 2011). This study analyzed satisfaction data as well as pre-post data from 1,212 participants that attended *Crisis Prevention and Preparedness* – Workshop 1, and 1,008 participants that attended *Crisis Intervention and Recovery* - Workshop 2. Results from the satisfaction data indicated high participant satisfaction. The second part of the study examined pre and posttest content which measured participant knowledge and attitudes about crisis prevention, preparedness, response, and recovery. Results revealed significant improvements in crisis prevention and intervention knowledge and attitudes. The data collected were from PREPaRE workshops ranging from early 2006 through May of 2008.

In addition to the data analysis, the authors of this study also provided future directions for research pertaining to the evaluation of the PREPaRE curriculum. The authors discussed that "the program evaluation data included in this study do not allow for definitive conclusions to be made about the effect of PREPaRE on participants' school crisis prevention and intervention attitudes and knowledge" (p. 50). It was suggested that future research studies should employ experimental or causal comparative designs to draw more definitive conclusions about training effects on participants. Another suggestion was to control for the variable of prior crisis training in participants (both amount and type of training) as this information has the potential to moderate the

effects of PREPaRE school crisis prevention and intervention training. And lastly, it was recommended that future investigations focus on the long-term effects of training on participant knowledge and meaningful changes and implementation of the PREPaRE curriculum in the school setting (Brock et al., 2011).

Conclusion

The traumatic effects of school violence on students' mental health and academic achievement are many. Psychological trauma has the potential to directly affect students by contributing to lower attendance rates, increased risk for psychological disturbance, increased behavior problems, lower test scores and an overall decrease in academic performance at school (Ratner et al., 2006; Stuber et al., 2005; Terr, 2003).

The National Association of School Psychologists (NASP) has recognized the negative effects of trauma on children' performance at school. After reviewing the related literature, school crisis experts within NASP created a comprehensive school crisis prevention and intervention training curriculum called PREPaRE. At this time, there are no other comprehensive school crisis prevention and intervention training curricula available. The school psychologists that created the PREPaRE training materials, as well as those who have participated in PREPaRE training, are among the most well prepared school staff members to prevent, respond to, and provide services to those affected in the aftermath of a school crisis. Therefore, the continued examination of the effects of the PREPaRE training workshops on school psychologist participants is an important endeavor.

This study seeks to compare the application of knowledge, confidence levels, and utilization of PREP<u>a</u>RE interventions and strategies of those who have taken PREP<u>a</u>RE Workshop 2 versus those who have received no training (or training in a different crisis prevention model). Several of the other studies that specifically examined PREP<u>a</u>RE did not have a control or comparison group. This will be the first study that will have a comparison group so that the responses of participants who have taken PREP<u>a</u>RE Workshop 2 and those who have not (or received other school crisis training) can be compared. Another unique component of this study is that it will also specifically measure how much prior crisis training the participants have had, in addition to, or in place of PREP<u>a</u>RE training. Some other variables that will be accounted for will be length of time after training and age of participants to determine if these factors impact curriculum utilization. By studying some of these other factors, we will have a better understanding of the impact made by the PREP<u>a</u>RE curriculum on participants and whether the training impacts the types of interventions that are delivered in the aftermath of a school tragedy. It is hoped that this study will add to the findings of prior PREP<u>a</u>RE-related research studies and will provide a better understanding of the impact of the PREP<u>a</u>RE workshop curriculum on school crisis intervention.

CHAPTER III

METHODOLOGY

The intent of this study was to evaluate the impact of the PREP<u>a</u>RE model and the

training of school psychologists in terms of (a) do school psychologists gain knowledge

in responding to crisis situations as a result of the PREP<u>a</u>RE training? (b) what are school

psychologists' perceptions of their confidence in responding to an actual crisis situation?

(c) and have school psychologists utilized PREP<u>a</u>RE response and recovery techniques in

actual crisis situations? The specific research questions to be answered by this study are

as follows:

Research Questions and Hypotheses

1. Are PREP<u>a</u>RE Workshop 2 participants able to acquire, retain, and apply key

concepts after successfully completing the two-day training? Will PREP<u>a</u>RE Workshop

2 participants have a higher mean score on school crisis scenario survey questions than

participants that did not take the PREP<u>a</u>RE Workshop 2 training?

Hypothesis – It is hypothesized that the school psychologists that have taken the

PREP<u>a</u>RE *Crisis Intervention & Recovery* - Workshop 2 will have acquired, retained, and

will be able to apply the key concepts to school crisis scenarios. School psychologists

who have successfully completed PREP<u>a</u>RE Workshop 2 will have greater crisis

response and recovery knowledge than those who have not been trained or those who

have been trained in other crisis response models as measured by survey questions

designed to assess such application of knowledge. The key concepts that will be assessed are: psychological trauma assessment variables, physical and emotional proximity, Incident Command Structure (NIMS), natural recovery, acute stress disorder, individual crisis interventions, reaffirming health and safety perceptions, and reestablishing social support systems.

2. Is there a significant relationship between the length of time following workshop completion and the number of key workshop concepts retained by PREPaRE Workshop 2 participants?

Hypothesis – Workshop participants that have experienced longer periods of time since they completed the workshop will have retained less crisis response and recovery content knowledge than those who have more recently completed the workshop.

3. How many hours and what type of school crisis training have both groups of participants received? Does the number of hours of previous crisis training have an effect on school crisis intervention content knowledge? Are there other demographic variables that will significantly impact participant's knowledge?

Hypothesis – It is expected that a school psychologist with more hours of previous crisis training will have higher scores on the application of knowledge survey items. For example, a person with 80 hours of crisis intervention training may have a high level of content knowledge even if they have not taken PREPaRE Workshop 2. Some key demographic variables such as type of previous training experience, years of experience, and amount of previous crisis experience may all have a significant impact on participants' knowledge scores.

4. How confident do PREPaRE Workshop 2 participants feel about conducting

school crisis response and recovery activities in their schools after successfully

completing the training curriculum? Is there a significant difference between the levels

of confidence of those who have completed the PREPaRE Workshop 2 as compared to

those who have not received the training or those who have received other school crisis

response training?

Hypothesis – Participants who have completed PREPaRE Workshop 2 will have

high levels of confidence in their ability to apply response and recovery skills in the

aftermath of a school crisis. Participants that have completed the PREPaRE Workshop 2

training curriculum will have significantly higher confidence levels than those

participants that have not completed Workshop 2 or those participants that have had other

varying levels of crisis response training.

5. Does the number of hours of previous crisis training have an effect on

participants' levels of confidence? Are there other demographic variables that will

significantly impact participants' confidence?

Hypothesis – The number of hours of previous crisis training will be positively

correlated with higher levels of confidence. Some key demographic variables such as

type of previous training experience, years of experience, and amount of previous crisis

experience may all have a significant impact on participants' confidence levels.

6. Have school psychologist participants applied crisis response and recovery

knowledge when responding in an actual school crisis response? Is there a significant

difference between the utilization of school crisis response information as compared to

those who have not received the training? Does the years of experience of the participant affect their utilization of PREPaRE interventions following an actual school crisis?

Hypothesis – It is hypothesized that a small percentage of Workshop 2 participants will have utilized acquired crisis response and recovery knowledge in their school/district in the aftermath of an actual school crisis situation. It is surmised that a small percentage will have utilized PREPaRE crisis interventions because previous studies have reported significant barriers that exist within school districts that hamper implementation. Several questions within the survey will help determine some of the potential barriers that may prevent the implementation or application of PREPaRE interventions. A school psychologist that has more years of work experience may be more likely to have applied PREPaRE interventions in the aftermath of a crisis.

Research Design

This survey study utilized quasi-experimental research design specifically referred to as ex post facto (or causative comparative) research design. The survey tool was originally opened and sent to potential participants on February 6, 2013 and closed to responses on March 10, 2013. To answer the research questions, surveys were sent electronically to two groups of school psychologist members of the National Association of School Psychologists. The first group was members who had not received any training and the second group was members who had received PREPaRE Workshop 2 training. The original PREPaRE survey was modified before being sent out to the non-PREPaRE group. The non-PREPaRE survey has four less questions because items that specifically referenced PREPaRE were not included. Overall, the two surveys are very similar and

have the same core set of questions. The actual surveys can be found in Appendices A

and B of this document for reference.

Rate of Return

Once the initial e-mail was sent out with the survey link, it was reported that 291

of the potential 959 participants in the sample opened the e-mail. Of those 291 potential

participants that opened the e-mail, 72 NASP members clicked on the survey link to view

and potentially complete the survey. A second reminder e-mail was sent on February 27,

2013, to the same group. At that time, 301 members opened the e-mail and an additional

61 people accessed the survey to potentially complete it. In the end, a total of 133

members clicked on the survey link and 109 people completed the survey to some degree.

Table 1. Summary of E-Mail Results

	Date	Delivered	Opened	Accessed
Comparison Group	2/6/13	480	142	23
	2/27/13	476	147	21
PREPaRE WS 2 Group	2/6/13	479	149	49
	2/27/13	477	154	40

Of the 109 survey response sets that were examined, it was determined that 38

surveys were found to be incomplete and were not included in the final analysis. A

survey was deemed incomplete if the participant did not complete at least up to the first

14 questions. In fact, most incomplete surveys that were deleted only had the first three

to six questions completed before the participant exited the survey. The total number of questions in the PREPaRE and non-PREPaRE surveys was 40 and 36, respectively. In the end, the final dataset consisted of 71 surveys that contained analyzable data. This represents 7.4% of the original possible sample that received the e-mail. The group that received PREPaRE training consisted of 36 completed surveys and the non-PREPaRE comparison group consisted of 35 completed surveys.

Participants

The participants for this survey study consisted of two comparison groups. The first group of 500 participants was randomly selected from a subgroup of the NASP membership database that completed PREPaRE Workshop 2. NASP members that had completed more than one Workshop 2, a Workshop 2 Training of Trainers (TOT), or a Workshop 1 Training of Trainers (TOT) were excluded from this group.

There are currently over 4,000 participants who have completed Workshop 2. Once the survey was approved by NASP, it was sent to 500 NASP members that had completed Workshop 2. NASP membership e-mail addresses were stored in the iMIS Membership Database. NASP staff created a query using the program Crystal Reports to identify the two samples: NASP members that completed PREPaRE Workshop 2 & NASP members that did not complete PREPaRE Workshop #2. The results of the query were then downloaded into Excel spreadsheets, assigned random numbers to each e-mail address, and 500 respondents from each spreadsheet were then selected. Random sampling of each of the two subgroups was conducted to allow for an equal chance of those asked to complete a survey. This helped to reduce the possibility of sampling bias

and resulting errors. Both of the samples were drawn from the population of current

NASP members from the following membership types: student, early career, and regular

(J. Charvat, personal communication, February 5, 2013).

The second group, which was randomly selected from a subgroup of the NASP

membership database, served as the comparison group of school psychologists who had

not completed any of the PREPaRE workshops. There are many people who have

completed PREPaRE workshops that are non-school psychologists (ex. school

administrators, social workers, etc.). Only school psychologists were selected as

participants to maintain increased homogeneity of the sample. Surveys were sent to 500

members of the general NASP membership that had not taken PREPaRE workshop 2.

NASP members were also excluded from this group if they had ever taken Workshop 1

Training of Trainer (TOT) at any time. However, even though the comparison group did

not complete PREPaRE Workshop 2, it was important to determine what type and how

much previous crisis prevention and intervention training each individual has previously

received. Accounting for prior training was important as this information has the

potential to moderate the impact of the PREPaRE training curriculum on participants.

The final sample for this study consisted of 71 school psychologists from the

current membership database of the National Association of School Psychologists. The

sample included approximately twice as many females (48) as males (21) which is

representative of the current national trend in school psychology. The years of

experience in the field ranged from 0-33 and the mean was 12.4 years. Most of the

school psychologist participants have a specialist degree level of training (44), followed

by doctorate (12), master's (9), and student status (3). Most participants reported being full-time status (56) and (44) hold the Nationally Certified School Psychologist (NCSP) credential. The number of schools worked at ranged from 0-9 with the most number of psychologists working in 1-3 schools (51). Schools worked at included: early childhood program (11), pre-school (17), elementary school (44), middle school or junior high, high school (38), college/university (1), or "other" (9). The great majority of people reported working in a public school (67) and only (2) participants worked in a different or "other" setting (neither public nor private). Most participants' schools were located in a suburban setting (31), followed by urban (16), rural (12) and mixed setting (10).

Table 2. Demographic Characteristics of Survey Participants

Characteristic	PREPaRE Group % (n = 36)	Non-PREPaRE Group % (n = 35)	Overall Sample % (n = 71)
Gender			
Male	25.7	33.3	29.6
Female	71.4	63.9	67.6
Type of School			
Public School	91.4	97.2	94.4
Private School	5.7	0	2.8
School Setting			
Suburban	57.1	30.6	43.7
Urban	22.9	22.2	22.5
Rural	5.7	27.8	16.9
Mixed	11.4	16.7	14.1
Type of School			
Early Childhood	17.1	13.9	15.5
Pre-School	20	27.8	23.9

Elementary	62.9	61.1	62
Junior High	48.6	38.9	43.7
High School	34.3	72.2	53.5
University	2.9	0	1.4
Work Status			
Full-Time	82.9	75	78.9
Part-Time	8.6	13.9	11.3
Not Practicing	5.7	8.3	7.0
Level of Education			
Practicum Student	2.9	2.8	2.8
Intern	0	2.8	1.4
Master's	11.4	13.9	12.7
Specialist	60	63.9	62
Doctorate	22.9	11.1	16.9
Nationally Certified			
NCSP	68.6	55.6	62
No NCSP	28.6	41.7	35.2
Years of Experience			
0	5.7	22.2	14.1
1-5	25.7	8.3	16.9
6-10	17.1	22.2	19.7
11-15	11.4	11.1	11.3
16-20	17.1	11.1	14.1
21-25	5.7	5.6	5.6
26-30	5.7	11.1	8.5
31-35	8.6	5.6	7.0
Number of Schools			
0	5.7	2.8	4.2
1	25.7	27.8	26.8
2	40	22.2	31.0
3	8.6	19.4	14.1
4	8.6	5.6	7.0
5+	8.6	19.5	14.0

Note. Percentages do not add to 100% due to missing values

Procedures

First, the survey instrument was created by the investigator and was then piloted in the fall of 2012. The survey was also submitted to the NASP PREPaRE Workgroup to review the content and to further revise the instrument in July of 2012. The NASP Research Workgroup required that studies have approval from a university institutional review board prior to submitting a research proposal. The Loyola University Institutional Review Board approved this survey study and the "exempt status" documentation was provided to the NASP Research Workgroup. In addition, the NASP Research Workgroup requested that a "research partnership agreement" be created, agreed to, and signed by both parties. This document is located in Appendix G for reference.

Research Workgroup staff then sent out an e-mail solicitation to the two groups: school psychologists who have completed PREPaRE Workshop 2 and school psychologists who have not received such training. Potential participants were informed that the results of this study may add knowledge to the field of school crisis prevention and response and improve future revisions of the NASP PREPaRE Workshops curriculum. NASP members were also informed that the study was voluntary, that it would take approximately twenty minutes to complete, and that they would be entered in a raffle drawing if they completed the survey. The solicitation e-mail provided the name and contact information of the faculty advisor, principal investigator, and the Institutional Review Board of Loyola University Chicago. And lastly, those randomly selected members that received the e-mail were asked to click on the hyperlink to complete the school crisis intervention survey. A sample of this e-mail is included in Appendix C.

The completion of the survey by participants implied that the participants willingly consented to participation in the study. The content of the e-mail containing the survey link was intentionally kept brief to increase the likelihood that participants would quickly read the e-mail and then click on the hyperlink to complete the survey. Participants were given a two and one half week window to complete the survey. A follow-up reminder e-mail was sent out three weeks after the initial survey launch and the survey was open for an additional ten days. The reminder e-mail was successful and an additional 40 NASP members completed the surveys. This second e-mail was almost identical to the initial e-mail that was sent out. The only modifications made to the original e-mail included a change in the content of the subject line in an attempt to convince a greater number of potential participants to open the e-mail and a survey end date that was added. A sample copy of the reminder e-mail can be found in Appendix D.

Survey participants remained completely anonymous. Participants were not asked to attach their names or any other personally identifying information to the survey. The surveymonkey.com website has a feature that allows the participants' IP addresses to be suppressed as an additional measure of anonymity. Participants were provided with an incentive of possibly winning 1 of 5 *School Crisis Prevention and Intervention – The PREPaRE Model* books with the completion of their survey. Those participants who completed the survey sent an e-mail to an independent third party person indicating that they would like to be entered into the raffle. This person, independent of the study, randomly selected five participants and sent them an e-mail notification informing them

that they won and requested an address so that a book could be sent to them. The five books were then mailed to all of the raffle winners.

Instrumentation

Survey studies are often used to evaluate crisis planning and response in schools because it is deemed less invasive than other methods. This is especially important in light of school crisis prevention and response being a potentially sensitive topic. In addition, researchers have identified survey methodology as a promising approach to systematically studying school professionals' crisis prevention efforts, response, and management practices (Nickerson & Osborn, 2006). For this study, two similar surveys were designed as the primary data collection tools. The surveys were purposely designed to contain 40 questions or less to increase the likelihood of participant completion. The survey was created using the Surveymonkey.com website. Surveymonkey.com allows for the completed dataset to be stored and analyzed as a Microsoft Excel database document.

Instrument Development

It was expected that the initial drafts of the survey instrument would contain errors and would need modifications. The pilot served to revise and refine the instrument. Initial drafts of the survey instrument were administered to approximately 15 school psychologists and practicing educators. Some of the people that received the pilot had PREPaRE Workshop 2 training and some did not so as to provide balanced feedback. Theoretically, school psychologists who have not received formal crisis intervention training should have been able to answer some specific content questions correctly. This

was found to be true. However, it was hypothesized that school psychologists that have been PREPaRE trained should have a higher mean score on the specific content related questions. Their higher score should be a reflection of their increased knowledge of best practices in school crisis prevention and intervention. The brief pilot study proved valuable as many of the people provided suggestions to clarify unclear or ambiguous language. Modifications and corrections were also made to the pilot survey to improve the quality of the data that was obtained.

Dr. Stephen E. Brock is an expert in crisis theory and school-based crisis prevention and intervention and was the primary expert reviewer of the survey measure instrument utilized in this study. The expert review of school crisis prevention and intervention content in the survey measure served to establish validity for the instrument. Dr. Stephen Brock is a professor at California State University, Sacramento (CSUS). He is also a Nationally Certified School Psychologist (NCSP) and Licensed Educational Psychologist (LEP). Dr. Brock is a member of the NASP National Emergency Assistance Team. He was also the lead editor of the NASP publication *Best Practices in School Crisis Prevention and Intervention – Second Edition* and lead author of *School Crisis Prevention and Intervention.*

The survey instrument was also submitted for review to members of the National Association of School Psychologists PREPaRE Workgroup, chaired by Dr. Melissa Reeves and co-chaired by Dr. Stephen Brock. Additional members of the workgroup that helped edit the survey were Christina Conolly-Wilson, Franci Crepeau-Hobson, Ted Feinberg, Benjamin Fernandez, Shane Jimerson, Rich Lieberman, Amanda Nickerson,

Rosario Pesce, Melinda Susan, and Scott Woitaszewski. This workgroup consisted of many of the primary authors of the original, and more recent second edition, PREPaRE workshop curriculum and corresponding book. The members of the NASP PREPaRE Workgroup reviewed the survey instrument multiple times as it progressed through the drafting process. Numerous suggestions were made to improve the overall quality of the survey and the changes were accepted and incorporated. The combined knowledge and expertise of the workgroup is vast and their feedback was valuable. All of their expert feedback helped to establish the content validity of the survey so that it was ready to launch to the NASP membership in February of 2013.

The first section of the survey contained questions about the participants' membership, level of involvement on their school crisis team, and experience with specific types of crises and frequency of crises. Participants were asked to estimate the total number of school crises they have experienced in the last year. The second section of the survey contained questions about confidence levels and, in general, how prepared participants felt in responding to different levels of crisis. For example, participants were asked how prepared they would be in participating in a minimal level crisis, building level crisis, district level crisis, and regional level crisis response, respectively.

The third section of the survey consisted of eight questions that measured participants' ability to apply school crisis prevention and intervention knowledge in simulated crisis scenarios. The survey respondent was presented with a school emergency and then given four multiple choice responses on how best to respond. The correct answer or best response was taken directly from the PREPaRE curriculum and

was designed to assess specific content knowledge. This section was intended to be the most objective part of the survey as these results were based directly on curriculum content. The following are examples of the content knowledge that was included in each of the eight questions: psychological trauma assessment variables, physical and emotional proximity, Incident Command Structure (NIMS), natural recovery, acute stress disorder, individual crisis interventions, reaffirming health and safety perceptions, and reestablishing social support systems. Most of the other survey questions were based on information that is more subject to opinion and bias which is inherent in self-report measures.

The fourth section of the survey measured to what degree the participants' school district(s) valued and/or adopted school crisis planning. The kind of crisis response training participants previously received and an estimate of the total number of hours of training were both assessed. Participants were also asked if they felt they needed additional training, whether it be PREPaRE training or otherwise. Another key question in the survey assessed potential "barrriers" that school psychologists may have experienced when attempting to promote or advocate for the use of effective school crisis prevention and response information and programs in their school. The remaining questions measured the actual utilization of school crisis intervention and response strategies that participants may have used in the aftermath of a local school crisis. Examples of assessed intervention and response methods were: reaffirming health and safety, conducting psychological triage, reestablishing social support systems, providing

psychoeducation, administering psychological intervention, and the use of essential

PREP<u>a</u>RE information such as key handouts and forms.

The last section of the survey instrument obtained demographic characteristics of

the sample of NASP school psychologists that were asked to complete the survey. The

demographic questions requested the following information: gender, years of experience,

level of training, part-time/full-time status, and NCSP status. Other demographic

questions sought information about participants' assigned school or district such as type

of school, location of school, number of schools worked at, grade levels of students, etc.

The last question of both surveys was simply an empty text box where survey participants

could express any additional thoughts, comments, feelings that they wanted to express.

Statistical Analysis

Once the survey was closed, the raw data was downloaded from the

surveymonkey.com website into a Microsoft Excel spreadsheet. Data from both surveys

was then combined and recoded into numerical values that could then be statistically

analyzed using SPSS Statistics Version 21.0. Prior to analysis, the numerical data was

checked for proper recoding. Responses that were left blank or recorded as "not

applicable" were coded as missing data.

Many of the results from this survey study were analyzed using descriptive

statistics. Demographic characteristics of the sample population were reported in the

narrative and through use of tables and figures. Several of the research questions were

answered by conducting comparisons of the two groups: PREP<u>a</u>RE trained group versus

the non-PREP<u>a</u>RE trained group. Comparison of mean scores for various scales was

carried out to using independent T-test statistics to determine if any significant

differences exist. Correlational analysis was used to determine significant relationships

between variables. And finally, multiple linear regression analysis was used to determine

which independent or predictor variables (ex. experience, prior training, education, etc.)

best predict the outcome measure (knowledge).

CHAPTER IV

RESULTS

The purpose of this study was to measure school psychologists' application of

knowledge, confidence levels, and utilization of school crisis response and recovery

information. The survey results of those who have completed the NASP PREPaRE

Workshop 2 were compared to responses of those who have not completed PREPaRE

Workshop 2. The following chapter is an analysis of this data that was collected over a

one month period from a sample of members of the National Association of School

Psychologists. The results of the statistical analyses of this survey are presented in the

following narrative, tables and figures.

Survey Results

The first question of both surveys solicited information about participant

membership on school safety teams, district crisis teams, and school safety committees.

Results indicated that 74.3% of PREPaRE participants were on their school crisis team,

62.9% were on a district crisis team, and 34.3% were on their school safety committee.

Non-PREPaRE participants were involved to a lesser degree: 55.6% were on a school

crisis team, 47.2% were on a district crisis team, and 16.7% were members of their

school safety committee (see Figure 1 below for a comparison of the two groups).
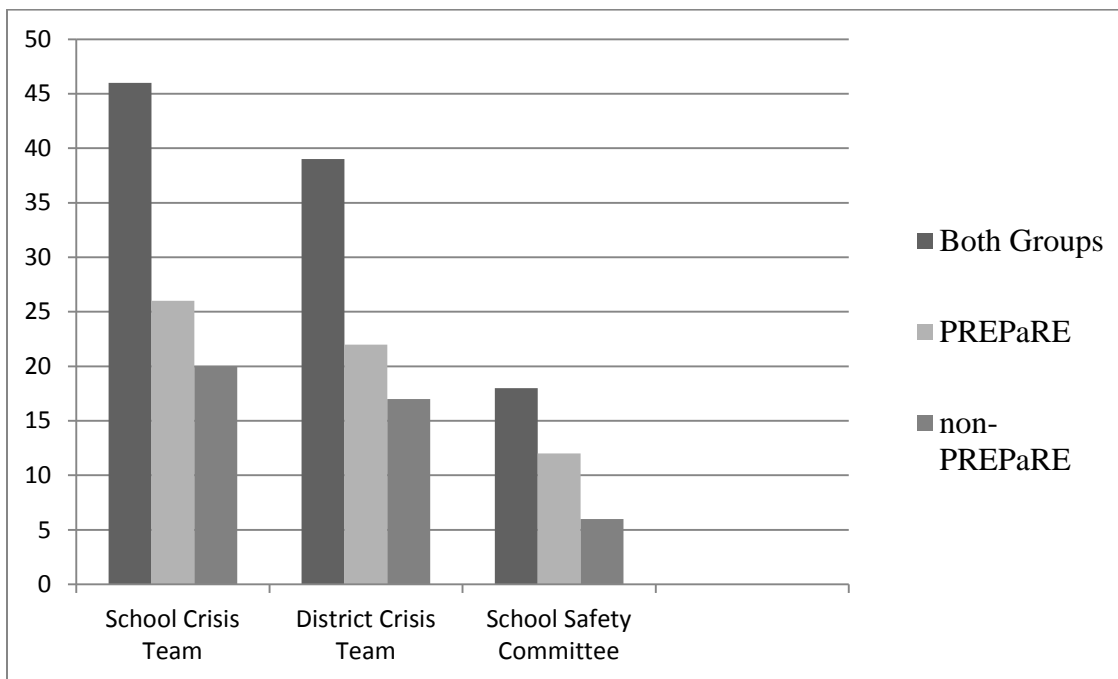
Figure 1. Bar graph representing crisis team and safety committee membership

The second survey question gauged participants' level of involvement in school crisis response. For example, did school psychologists participate only at the local level, their school or district level, or were they active at the state or national level. The differences of involvement between the two groups were negligible. For the overall sample, participants were most active at the school level (54), followed by district level (45), state level (7) and national level (4). A total of seven participants reported not being involved in school crisis response in their educational setting (see Figure 2 below).
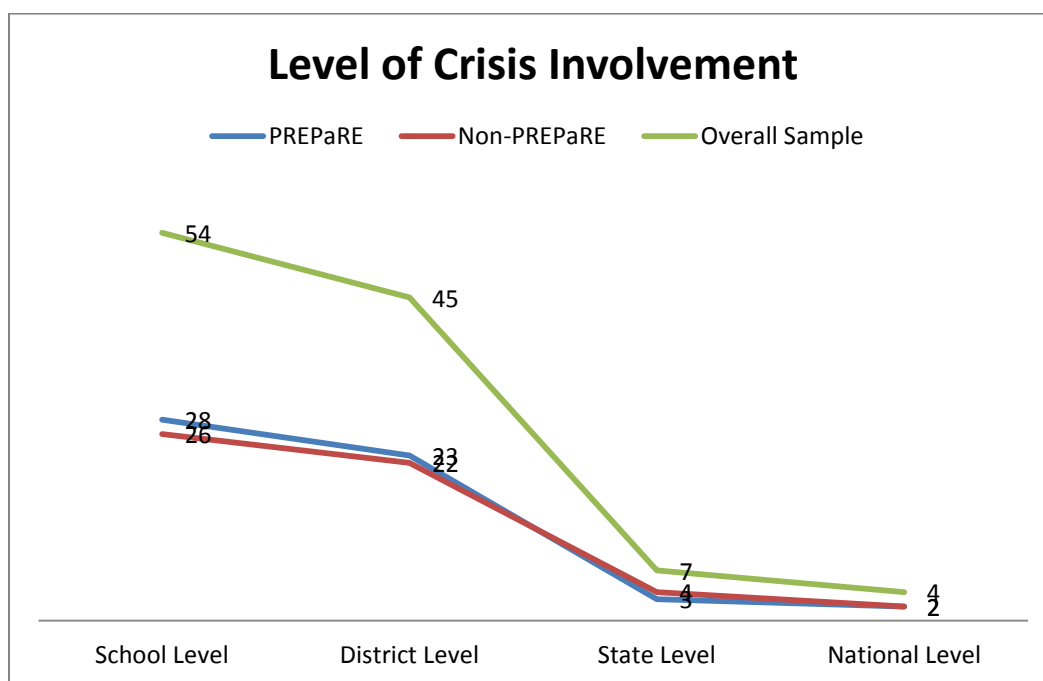
Figure 2. Line graph comparing level of crisis involvement between the two groups and overall sample (N=70)

Another survey question (Q18 on PREP<u>a</u>RE survey/Q17 on non-PREP<u>a</u>RE survey) gauged the amount of prior crisis training of all participants. The "hours of training" variable is simply the number of hours of school crisis prevention and intervention training each participant reported they have had. The following information (Figure 3) presents the number of hours of crisis training that each of the two groups has received.

An independent-samples t-test was conducted to compare the number of hours of crisis training of the PREP<u>a</u>RE group with the non-PREP<u>a</u>RE group. There was a statistically significant difference in the number of hours of training for the PREP<u>a</u>RE group (M=36.32, SD=29.39) and the non-PREP<u>a</u>RE group (M=14.79, SD=19.69). The t-

statistic was calculated to be 3.57 with a probability less than 0.01 for 57 degrees of freedom (see Table 3). Please keep in mind that the PREPaRE Workshop 2 is a two-day training that provides 10 hours of education. Therefore, those participants that have had Workshop 2 will have significantly more hours of training as compared to someone who does not have PREPaRE training.
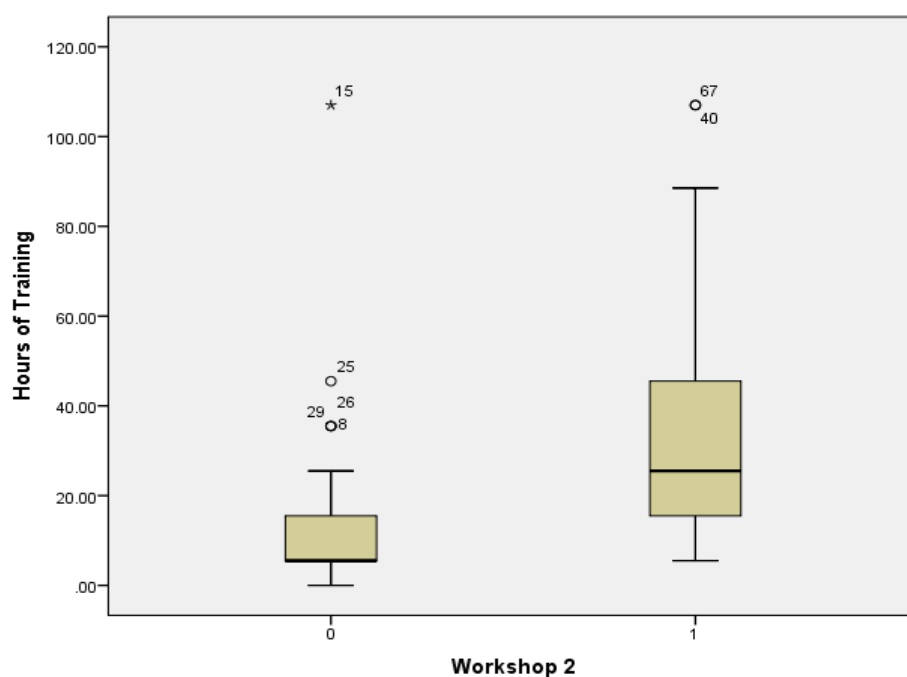
Figure 3. Boxplots representation of hours of training between both groups

Table 3. T-test Results for Number of Hours of Training for Both Groups

Variable	n	Mean	SD	T-stat	Df	P
PREPaRE	34	36.32	29.39	3.57	57	.001
Non-PREPaRE	35	14.79	19.69			

PREP<u>a</u>RE participants reported having the following previous training: CISD training (14.3%), NOVA training (11.4%), and REMS training (11.4%). Non-PREP<u>a</u>RE participants reported having CISD training (11.1%), NOVA training (11.1%) and no reported REMS training. The following bar graph provides a visual comparison of the two groups regarding types of training (not including PREP<u>a</u>RE training that defines the two groups). Participants were provided an open textbox after this survey question to list other potential crisis training courses or programs they had taken. Participants wrote in that they had also received the following trainings: threat assessment, suicide prevention and assessment programs (QPR), Mental Health First Aid USA, and Skills for Psychological Recovery.
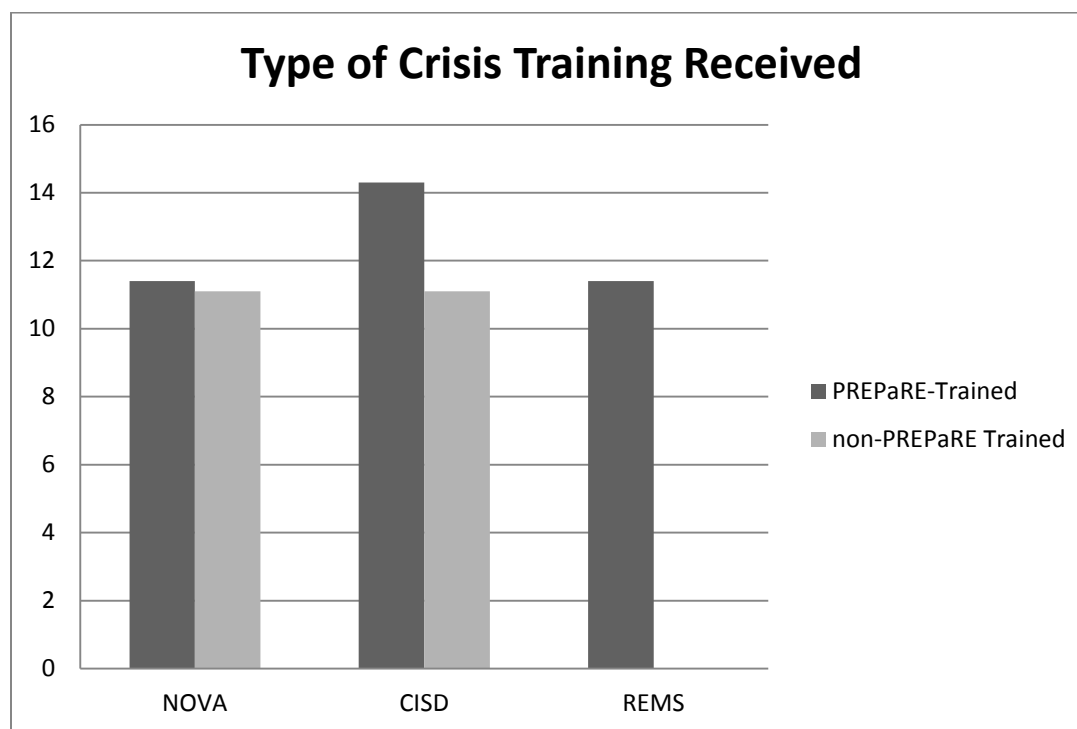
Figure 4. Percentages of types of crisis training for all participants

To gain an understanding of the types of crises participants had experienced, they were asked to place a check mark next to any of the 33 listed school crises (Brock et al., 2009) they experienced in the past 12 months. According to this study, the five school crisis categories experienced the most were suicide attempts (42.9%), life-threatening illnesses (42.9%), human aggression (38.6%), domestic violence (37.1%), and sudden fatal illness (30%). The next five most experienced crises were fatal accidents (28.6%), assaults (28.6%), suicides (27.1%), homicides (14.3%), and fire and arson (14.3%). Other crises that were endorsed by participants, less frequently, included road, train and maritime accidents (10%), hurricanes (7.1%), floods (7.1%), tornadoes (2.9%), kidnappings (2.9%), disfigurement and dismemberment (2.9%), lightning strikes (1.4%), and exposure to noxious agents (1.4%). While some school crises clearly occur more often than others, any one of the categories checked can be a devastating experience for a school community even if only experienced a single time (please refer to Figure 5).

Each crisis that was endorsed with a checkmark was counted towards the total for each participant. These totals were used to create a new variable referred to as "crises quantified." For both groups, the number of crises identified in the last year ranged from 0-16 with a mean of 3.42. T-test results revealed there were no significant differences between the two groups.
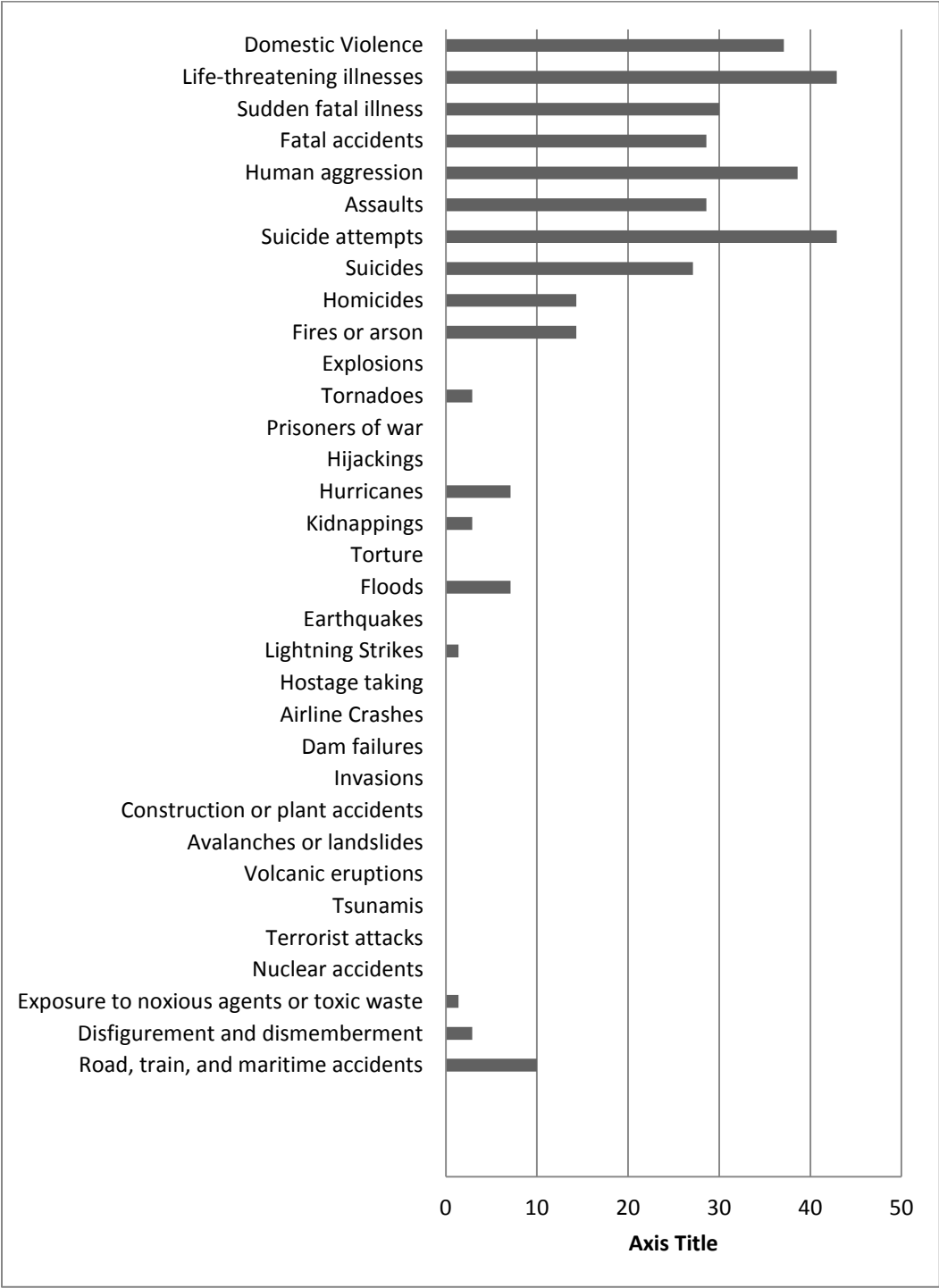
Figure 5. Bar graph showing percentage of type of crises experienced in the last 12 months

Application of Knowledge

Research Question 1- Are PREPaRE Workshop 2 participants able to acquire, retain, and apply key concepts after successfully completing the two-day training? Will PREPaRE Workshop 2 participants have a higher mean score on school crisis scenario survey questions than participants that did not take the PREPaRE Workshop 2 training?

Research question 1 was answered primarily using survey questions assessing knowledge (Q7-14) from both the PREPaRE and non-PREPaRE survey. Each of these eight multiple choice questions attempted to assess the participants' knowledge. If a participant answered the question correctly they received one point. (Please refer to Appendices A and B to reference the original survey items.) A mean score on the eight knowledge questions was calculated for each survey respondent and was referred to as the knowledge variable. The mean scores for the knowledge variable were then converted to percentages. An independent-samples t-test was conducted to compare the knowledge score of the two groups. There was a statistically significant difference in the scores for the PREPaRE group (M=.69, SD=.17) and the non-PREPaRE group (M=.49, SD=.20). The t-statistic was calculated to be 4.53 with a probability less than 0.05 for 69 degrees of freedom (see Table 4).

Table 4. T-test Results for Knowledge Scale Comparison in Percentages

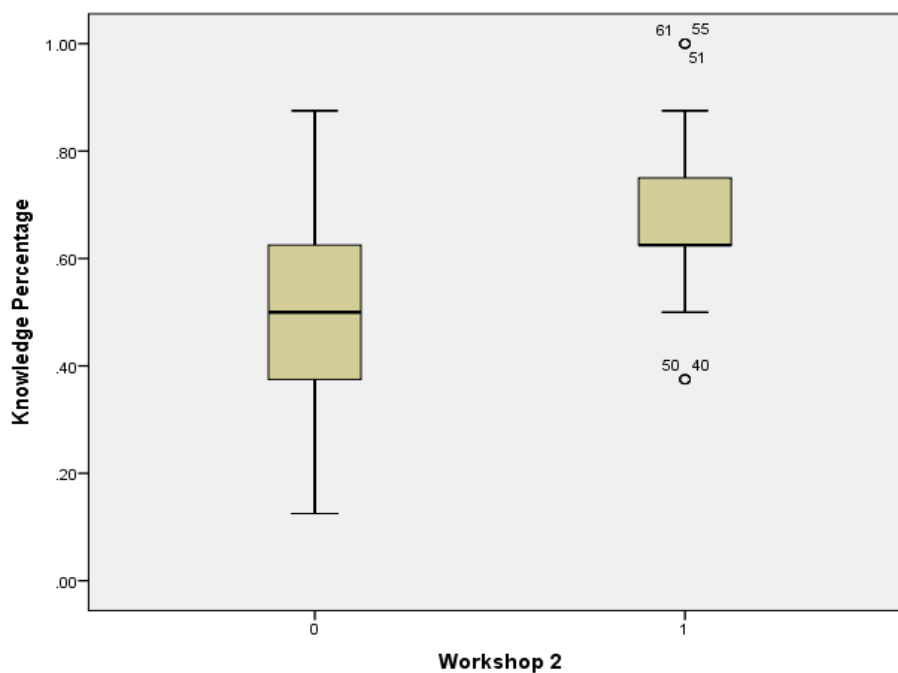| Variable	n	Mean	SD	T-stat	Df	P
PREPaRE	35	.69	.17	4.53	69	.000
Non-PREPaRE	36	.49	.20			

Figure 6. Boxplots representing workshop 2 completion and knowledge percentage

These results suggest that having completed the PREP<u>a</u>RE Workshop 2 training

had a positive effect on the participants' acquisition, retention, and application of

knowledge. In fact, PREP<u>a</u>RE participants scored 20% higher on the knowledge scale

than non-PREP<u>a</u>RE participants.

A secondary level of analysis of the knowledge questions was conducted by

cross-tabulating each of the eight individual multiple choice questions across both

groups. This analysis was carried out to demonstrate the change in knowledge as

represented by each separate question. For each of the knowledge questions, a greater

number of PREP<u>a</u>RE participants correctly answered the question than not. This was not

true for the non-PREP<u>a</u>RE group which actually had a greater number of incorrect

answers for half of the questions. In addition, Chi-square analyses of the knowledge

questions revealed there was a statistically significant difference between the results for

five of the eight questions. For seven of the eight questions, a significantly larger

percentage of the PREPaRE participants scored higher than the non-PREPaRE

participants. For at least two of the knowledge questions (Q12 & Q14) that did not show

a statistically significant difference, this could potentially be due to two of the answer

choices being very similar to one another which split the group into two. For example,

for Question 12 most of the responses were split between the correct answer (Acute

Stress Disorder) and a very similar answer choice (Posttraumatic Stress Disorder). A

split in responses also occurred for Question 14 (Triage and referral) where, again, two

answers were very similar to each other. Table 5 is a summary of each of the eight

knowledge question results after cross tabulation.

Table 5. Cross-tabulation of the Eight Knowledge Question Results

Knowledge Concept	Workshop 2 Completion	Incorrect	Correct	Total Participants	Chi-Square
Question 7 (Evaluating psychological trauma)	Yes	16 (45.7%)	19 (54.3%)	35	.012
	No	27 (75%)	9 (25%)	36	
Question 8 (Emotional & physical proximity)	Yes	3 (8.6%)	32 (91.4%)	35	.011
	No	12 (33.3%)	24 (66.7%)	36	

Question 9 (Reestablishing social supports)	Yes	12 (34.3%)	23 (65.7%)	35	.522
	No	15 (41.7)	21 (58.3%)	36	
Question 10 (NIMS Incident Command Structure)	Yes	16 (45.7%)	19 (54.3%)	35	.005
	No	28 (77.8%)	8 (22.2%)	36	
Question 11 (Natural recovery)	Yes	5 (13.3%)	30 (85.7%)	35	.035
	No	13 (36.1%)	23 (63.9%)	36	
Question 12 (Acute Stress Disorder)	Yes	16 (45.7%)	19 (54.3%)	35	.193
	No	22 (61.1%)	14 (38.9%)	36	
Question 13 (Reaffirming perceptions of safety & security)	Yes	7 (20%)	28 (80%)	35	.004
	No	19 (52.8%)	17 (47.2%)	36	
Question 14 (Triage & referral)	Yes	11 (31.4%)	24 (68.6%)	35	.736
	No	10 (27.8%)	26 (72.2%)	36	

Research Question 2 - Is there a significant relationship between the length of time following workshop completion and the number of key workshop concepts retained by PREPaRE Workshop 2 participants?

Research question 2 was answered primarily using the same set of knowledge questions (Q7-14), from both the PREPaRE and non-PREPaRE survey. Participant knowledge was paired with the results of the question requesting the year of Workshop 2 completion (Q22), from the PREPaRE survey only. The year that participants reported receiving Workshop 2 training was recoded to the "years since training" variable. A Pearson product-moment correlation coefficient was computed to assess the relationship between years since training and knowledge variables. Results of the Pearson correlation test indicated that the number of years since a participant completed Workshop 2 and their knowledge score were moderately correlated, $r(34) = .36$, $p < .05$. So, the longer it has been since a person completed Workshop 2 the higher their score on the knowledge scale. Please refer to Figure 7 for a summary of this analysis.

Research Question 3 - How many hours and what type of school crisis training have both groups of participants received? Does the number of hours of previous crisis training have an effect on school crisis intervention content knowledge? Are there other demographic variables that will significantly impact participant's knowledge?

Correlational analyses were carried out for all of the independent variables that may be contributing to a change in knowledge. A Pearson product-moment correlation coefficient was computed to assess the strength of these relationships. Results revealed

that three factors are related to a change in knowledge: Workshop 2 completion, hours of

training, and other crisis training.
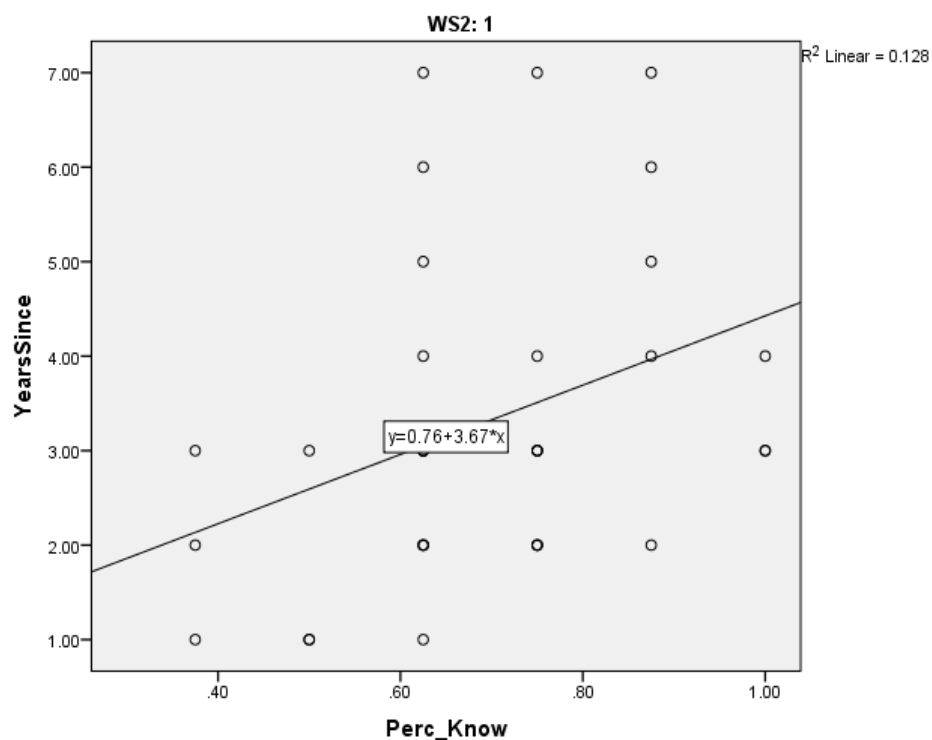
Figure 7. Scatterplot representing the positive relationship between "years since training" and knowledge scale

Results of the Pearson correlation test indicated that the Workshop 2 completion

and knowledge scores were strongly correlated, $r(71) = .48, p<.01$; hours of training and

knowledge were moderately correlated, $r(69) = .36, p < .01$; and other crisis training and

knowledge were weakly correlated, $r(71) = .25, p < .05$. The "other additional trainings"

variable was created as a measure of how many other types of crisis training a participant

completed in addition to PREPaRE training. So, participants that completed Workshop

2, have a greater number of hours of training, and have received other additional crisis

training, had higher scores on the knowledge scale. Please refer to Table 6 for a

summary of correlational analyses.

Table 6. Correlations Among Independent Variables and Knowledge

	Knowledge	Workshop 2	Hours of training	Other training
Knowledge	___			
Workshop 2	.479**	___		
Hours of training	.359**	.451**	___	
Other crisis training	.252*	.126	.460**	___

**$p < 0.01$ level
*$p < 0.05$ level
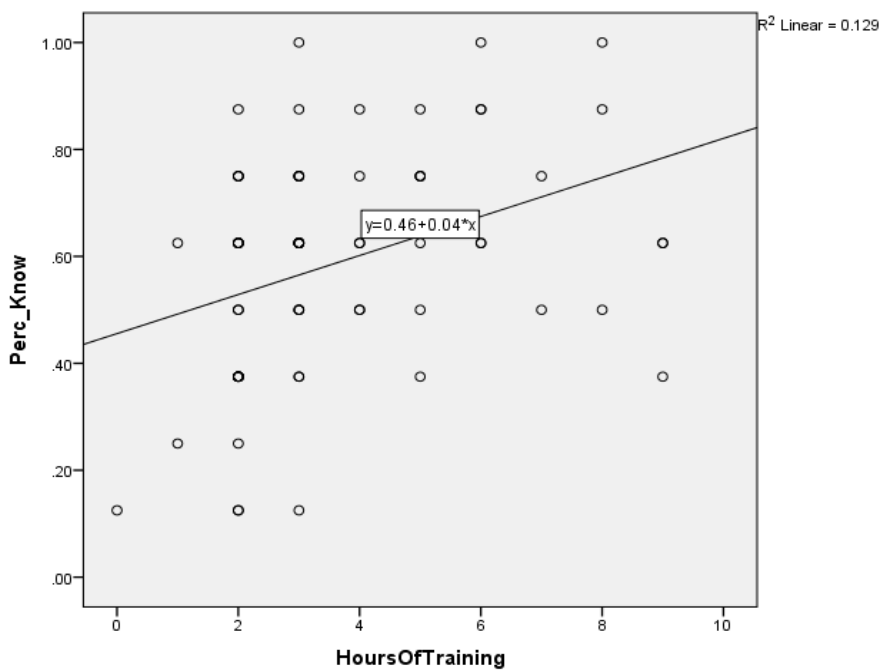
Figure 8. Scatterplot representation of the relationship between hours of training and knowledge

Furthermore, a Pearson correlation test was conducted to determine if hours of training and knowledge scores were correlated within the Workshop 2 group only. No significant relationship was found between these two variables. Figure 9 shows the range and frequency of hours of training that Workshop 2 participants had received.

A multiple regression analysis was used to see if predictor variables such as Workshop 2 completion, confidence level, number of other trainings received, years of experience, hours of crisis training, and level of education and gender, would predict participants' knowledge. Results of the regression analysis indicated that one predictor, Workshop 2, explained 33% of the variance (R_2=.33, $F(55,9)$=3.68, $p<.01$). Based on the regression results, one could say that completion of Workshop 2, by itself, was the only variable that positively impacted knowledge to a statistically significant degree.
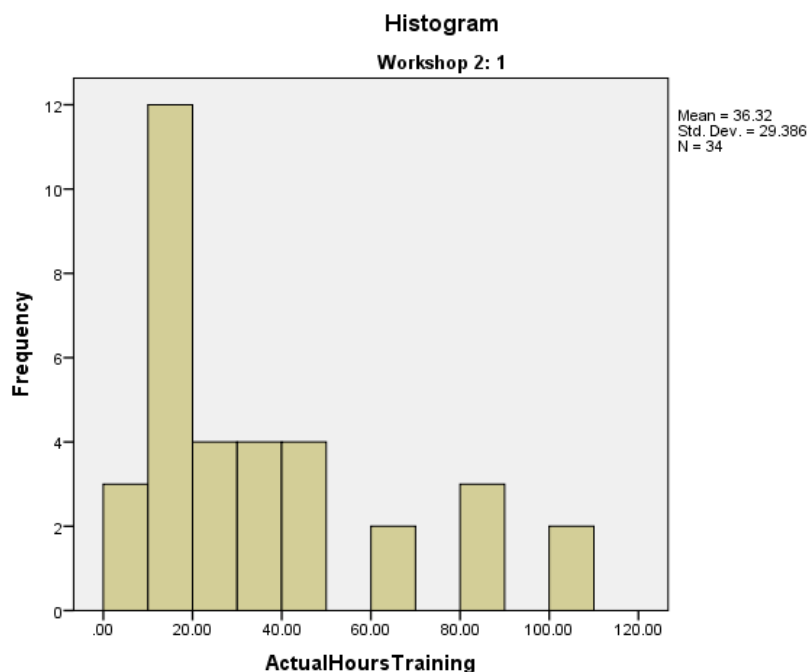
Figure 9. Histogram of hours of training for Workshop 2 participants

Table 7. Regression Model Prediction of Knowledge

Variable Name	B	SE	β	t	Sig.
Constant	.411	.16	.467	2.62	.011
Workshop 2	.203	.06	-.036	3.68	.001
Confidence	-.009	.03	.184	-.28	.784
Other Training	.071	.06	-.115	1.25	.216
Experience	-.003	.003	.031	-.87	.386
Number of Crises	.002	.006	.064	.27	.787
Hours of Training	.001	.001	.089	.46	.649
Education	.024	.03	.140	.75	.459
Gender	.067	.06	.467	1.06	.292

Notes: $N = 64$; $R^2 = .33$.

Research Question 4 - How confident do PREPaRE Workshop 2 participants feel about conducting school crisis response and recovery activities in their schools after successfully completing the training curriculum? Is there a significant difference between the levels of confidence of those who have completed the PREPaRE Workshop 2 as compared to those who have not received the training or those who have received other school crisis response training?

To assess level of confidence, responses from survey confidence questions (Q5 & Q6) from both the PREPaRE and non-PREPaRE survey were analyzed. Each of these questions had four likert scale responses (total of eight parts) where participants were asked to what extent they agreed or disagreed with the statements. Participants were asked to respond using a 6-point likert scale ranging from "strongly agree" to "strongly disagree." A Cronbach's Alpha test revealed that the eight parts of the confidence scale were found to have a high level of internal consistency (eight items; alpha = .88). An

overall mean score was calculated for the eight item responses for each survey

respondent and this overall mean score is simply referred to as the "confidence" variable.

An independent-samples t-test was conducted to compare the confidence of the

PREPaRE and non-PREPaRE trained groups. Results demonstrated a significant

difference in the scores for the PREPaRE group (M=4.81, SD=.66) and the non-

PREPaRE group (M=4.27, SD=.94) conditions; t (69)=2.82, p = .006. These results

suggest that having completed the PREPaRE Workshop 2 training has a positive effect on

the participants' levels of confidence.

Table 8. T-test Results for Confidence Scale Comparison

Variable	n	Mean	SD	T-stat	df	P
PREPaRE	35	4.81	.66	2.82	69	.006
Non-PREPaRE	36	4.27	.94			

Level of Confidence

Research Question 5 - Does the number of hours of previous crisis training have

an effect on participants' levels of confidence? Are there other demographic variables

that will significantly impact participants' confidence?

Correlational analyses were carried out for all independent variables that may be

contributing to confidence level. Pearson product-moment correlation coefficients were

computed to assess the strength of these relationships. Results revealed that four factors

were related to a change in knowledge: hours of training, experience, other crisis

training, Workshop 2 completion and education. Results of the Pearson correlation tests

indicated that hours of training and confidence were strongly correlated, $r(69) = .45$, $p<.01$; experience and confidence were moderately correlated, $r(71) = .34$, $p<.01$; other crisis training and confidence were moderately correlated, $r(71) = .33$, $p<.01$; and Workshop 2 completion and confidence were moderately correlated, $r(71) = .32$, $p<.01$; and education and confidence were moderately correlated, $r(68) = .31$, $p<.05$. In other words, the greater the number of hours of training, more years of experience, having received other crisis training, and having completed Workshop 2 are all correlated with a higher level of confidence. Please refer to Table 9 for a summary of correlational analyses.

Table 9. Correlations Among Independent Variables and Confidence

	Confidence	Hours of training	Experience	Other training	Workshop 2	Education
Confidence	___					
Hours of training	.446**	___				
Experience	.339**	.372**	___			
Other training	.328**	.460**	.492**	___		
Workshop 2	.321**	.451**	.039	.126	___	
Education	.308*	.134	.202	-.014	.130	___

**$p < 0.01$ level
*$p < 0.05$ level

A multiple regression analysis was conducted to determine if predictor variables such as hours of crisis training, years of experience, number of other trainings received,

level of education, Workshop 2 completion, number of crises experienced would predict participants' confidence. Results of the regression analysis indicated that there are two predictors that could explain 32% of the variance: hours of training (R_2=.32, $F(55,9)$=2.09, $p<.05$) and education (R_2=.32, $F(55,9)$=2.36, $p<.05$). Based on the regression results, the two variables of hours of training and level of education are the strongest predictors accounting for over 30% of the variance in self-reported confidence levels.

Table 10. Regression Table for Confidence

Variable Name	B	SE	B	t	Sig.
Constant	2.684	.477		5.624	.000
Workshop 2	.209	.215	.123	.972	.335
Hours Of Training	.123	.059	.293	2.086	.041
Education	.286	.121	.267	2.362	.022
Experience	.004	.011	.051	.396	.693
Other Training	.209	.192	.139	1.088	.281
Number of Crises	.007	.022	.034	.305	.762

Notes: $N = 67$; $R^2 = .32$

A closer look at the confidence question responses provided more detailed information about participants' perceptions of their ability to provide crisis interventions. One of the questions asked if they felt they needed additional training. As expected, the first confidence question demonstrates that as the magnitude of the school crisis increases, school psychologist confidence levels decrease. For example, participants

were confident they could best respond to a minimal level response (M=5.80), followed

by a building level response (M=5.71), district level response (M=5.17), and regional

level response (M=4.63). Most participants disagreed to some degree that they would

feel anxious or nervous during an intervention. And lastly, most participants "somewhat

disagreed" that they would need additional training before responding to an actual crisis

situation. In the open-ended textbox following this question, one participant shared that

while they felt confident in a minimal and building level response, they admitted that

they would not feel as confident responding to a district or regional level response. They

shared that even though they had the knowledge to respond to any level, they felt they did

not have enough experience and therefore confidence to respond.

A separate survey question specifically asked if participants felt the need to take a

PREPaRE refresher course or "additional school crisis training prevention and

intervention trainings" for the non-PREPaRE group. All but one (34 out of 35) of the

non-PREPaRE participants said they would like to take additional school crisis training

as compared to only 60% of the PREPaRE people saying they wanted to take a PREPaRE

refresher course. (A statistical comparison was not conducted because both groups were

not asked the exact same question. The "PREPaRE" acronym was deleted from the

question for the non-PREPaRE group.)

Utilization of School Crisis Curriculum

Research Question 6 – Have school psychologist participants applied crisis

response and recovery knowledge when responding in an actual school crisis response?

Is there a significant difference between the utilization of school crisis response

information as compared to those who have not received the training? Does the years of

experience of the participant affect their utilization of PREPaRE interventions following

an actual school crisis?

Table 11. Means and SE for Individual Confidence Scale Likert Responses

Confidence Scale Questions	N	PREPaRE		Non-PREPaRE	
		M	SE	M	SE
I am prepared to participate in a:					
Minimal level crisis response	35	5.80	.07	5.42	.13
Building level crisis response	35	5.71	.08	5.31	.16
District level crisis response	35	5.17	.16	4.72	.21
Regional level crisis response	35	4.63	.19	4.19	.22
I am confident in my ability to respond as part of a school crisis response team.	35	5.74	.08	4.97	.19
I would feel anxious if I were required to conduct a school crisis intervention.	35	3.86	.26	3.17	.24
I feel nervous that I might make a mistake during a school crisis intervention.	35	3.57	.23	3.25	.22
I feel that I would need additional training before responding in an actual crisis situation.	35	4.03	.19	3.11	.25

Note. Ratings were on a six point scale (1 = strongly disagree, 3 somewhat disagree, 4 somewhat agree, and 6 strongly agree).

The first survey item of the utilization section was a global question that asked to

what extent the participant, as well as the school as a whole, generally used response and

recovery strategies in the aftermath of an actual school crisis (Q23). Overall, 50

participants reported that they agreed that they have personally applied response and

recovery strategies in the aftermath of a school crisis as compared to 37 participants that

agreed their school, as a whole, has applied strategies. In addition, T-test results

indicated that there was no difference between groups in self-reported application of

strategies on this survey item (see Table 12).

Table 12. Means and SE for Application Scale Likert Responses

		Overall Sample	
Application Questions	N	M	SE
I have applied PREPaRE response and recovery strategies in the aftermath of an actual school crisis.	62	4.40	1.38
My school has applied PREPaRE response and recovery strategies in the aftermath of an actual school crisis.	61	3.67	1.52

Note. Ratings were on a six point scale (1 = strongly disagree, 3 somewhat disagree, 4 somewhat agree, and 6 strongly agree).

A follow-up question (Q16) was only presented to the PREPaRE trained group.

Participants were asked if their school district had formally adopted the PREPaRE

curriculum. A little over one third of the PREPaRE trained group worked in school

districts where the PREPaRE curriculum was formally adopted (37.1%). Following

PREPaRE training, almost two thirds of the school psychologist participants reported

returning to school districts that do not use collectively utilize PREPaRE.

**Percentage of Participants'
School Districts
that Adopted PREP**a**RE
(PREPaRE Group Only)**

Adopted
PREPaRE
37%

Not
Adopted
PREPaR
E
63%
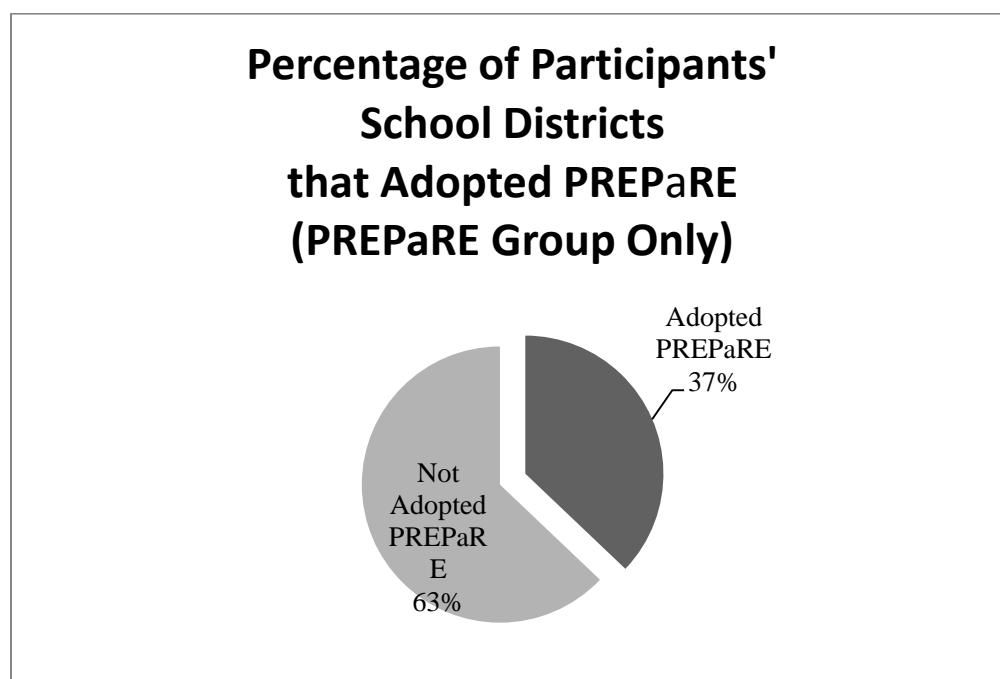
Figure 10. Pie graph of percentage of school districts that ddopted PREP**a**RE (PREP**a**RE group only)

Six scales consisting of a total of 28 likert scale responses measured the

participants' self-reported utilization of school crisis intervention and response strategies

in the aftermath of a school crisis. Examples of the six scales that assessed intervention

and response methods were: reaffirming health & safety, conducting psychological triage,

reestablishing social support systems, providing psychoeducation, administering

psychological interventions, and the use of key informational handouts and forms. All of

the scales were tested for internal consistency and all had acceptable Cronbach alpha

levels ranging from .73 to .93 (see Table 13).

Table 13. Cronbach's Alpha for Utilization Scales

Utilization Scale	Cronbach's Alpha
Reaffirmed Health & Safety	.93
Psychological Triage	.80
Reestablishing Social Support	.93
Psychoeducation	.81
Psychological Interventions	.80
Informational Handouts & Forms	.73

All of the utilization scales used likert scale responses. Participants were asked to consider how often they used any strategies by responding to a 5-point likert scale ranging from "Never" to "Always" and including "Not Applicable." An overall mean score was calculated for each of the six utilization scales. Independent-samples t-tests were conducted on all six of the utilization scales to compare the PREPaRE group and non-PREPaRE group. T-test results revealed no significant differences between the two groups on any of the scales. School psychologists that completed Workshop 2, and those that did not, self-reportedly utilized school crisis intervention and response strategies following an actual school crisis to the same degree. Even though a difference between groups was not found, it was important to investigate how often participants reported using intervention procedures.

School staff reaffirm the health and safety of students, staff, and parents by meeting basic physical needs (food, shelter, etc.) and by facilitating perceptions that the

school environment is safe and secure (Brock et al., 2009). For the "reaffirming" health and safety scale, referred to as the "reaffirming" variable, participants reported that they "sometimes" to "often" ensured students were physically safe and comfortable, provided accurate reassurances to students, taught staff and parents that children watch adult reactions and behaviors, provided facts and adaptive interpretations to reassure and teach students, and provided students with opportunities to take positive action. Participants reported that they "seldom" to "sometimes" minimize crisis exposure, reunite students with caregivers and significant others, and returned students to a safe school environment/routine when the crisis was over.

Table 14. Mean Scores and Standard Errors for Reaffirming Scale for Both Groups

Reaffirming Question Parts 1-8	N	Overall Sample	
		M	SE
1 – I ensured that students are physically safe and comfortable.	69	2.59	.17
2 – I provided accurate reassurances to students.	69	2.81	.16
3 – I taught staff and parents that children will watch adult reactions and behaviors.	69	2.55	.16
4 – I minimized crisis exposure of students.	69	1.93	.19
5 – I reunited students with caregivers and significant others.	69	1.25	.18
6 - I provided facts and adaptive interpretations to reassure and teach students.	68	2.37	.17
7 - I returned students to a safe school environment/routine when the crisis is over.	69	1.80	.21
8 - I provided students with opportunities to take positive action.	68	2.07	.18

Note. Ratings were on a six point scale (1 = strongly disagree, 3 somewhat disagree, 4 somewhat agree, and 6 strongly agree).

Psychological triage is the dynamic process by which persons affected by a traumatic event are identified and evaluated. The likert responses of the psychological triage scale were analyzed to determine how often participants self-reportedly used triage procedures. Participants reported that they informally conducted psychological triage slightly more than "sometimes." A follow-up question assessed how often participants formally conducted psychological triage. The word "formally" denotes whether the participant used forms to track students. Participants reported that they "seldom" use forms when psychologically triaging students. When asked if students were triaged "one time" participants reported slightly more than "seldom." Participants reported slightly less than "seldom" when asked if they triaged affected students "multiple times." The last question was simply a question inserted into this scale to assess reliability. The person was asked if they triaged students using the "E.R.M.S." triage protocol. The "E.R.M.S." triage protocol does not exist. Thirty-one participants replied that they "never" used this nonexistent triage protocol while 38 participants reported that they used it to some degree (M=1.35).

For the "Reestablish" scale, participants were asked how often they reestablished social support systems or reconnected students with parents, caregivers, and peers as an intervention strategy. Participants shared that they reunited students with their parents slightly less than "seldom" as compared to having reunited students with peers and teachers which they tended to do more often. Of all the techniques used to reestablish social support systems, participants reported returning students to their familiar environments and routines as the most common intervention. They reported facilitating

community connections and empowering caregivers with crisis recovery information

slightly more than "seldom."

Table 15. Means and SE for Psychological Triage Scale Responses

Psychological Triage Scale Questions 1-5	Both Groups		
	N	M	SE
Please consider how often you conducted Psychological Triage: I informally conducted psychological triage (assessed which students needed help and provided intervention).	69	2.06	.17
I formally conducted psychological triage (using forms to track students).	69	1.09	.17
I triaged students ONE TIME and followed up with identified students.	69	1.58	.15
I triaged students MULTIPLE TIMES (immediately after the crisis and again at a later time).	69	.96	.16
I triaged students using the E.R.M.S. triage protocol.	69	1.35	.20

Note. Ratings were on a five point scale (0 = never to 4 = always).

Table 16. Mean Scores and Standard Errors for Reestablishing Social Support Scale

Reestablish Question Parts 1-5	Overall Sample		
	N	M	SE
1 – I reunited students with primary caregivers.	69	.96	.17
2 – I reunited students with peers and teachers.	68	1.44	.21
3 – I returned students to familiar environments and routines.	69	2.01	.19
4 – I facilitated community connections.	67	1.39	.18
5 – I empowered caregivers with crisis recovery information.	69	1.68	.19

Note. Ratings were on a five point scale (0 = never to 4 = always).

Psychoeducation is the provision of direct instruction and/or the dissemination of information that helps crisis survivors and their caregivers in understanding, preparing for, and responding to the crisis event (Brock et al., 2009). Survey participants responded that the psychoeducation intervention they used the most was distributing informational documents to staff, students, or parents. The next most utilized psychoeducational intervention was conducting a classroom meeting followed by conducting a psychoeducational group. The least used psychoeducational intervention was conducting a caregiver training.

Table 17. Mean Scores and Standard Errors for Psychoeducation Scale

Psychoeducation Question Parts 1-4	N	Overall Sample	
		M	SE
1 – I distributed informational documents to staff, students, or parents.	69	2.39	.179
2 – I conducted or supported a Classroom meeting.	69	1.52	.178
3 – I conducted a Caregiver training.	69	.64	.131
4 – I conducted a Psychoeducational group.	69	1.17	.160

Note. Ratings were on a five point scale (0 = never to 4 = always).

Psychological interventions are active and direct attempts to facilitate adaptive coping and directly responding to symptoms of traumatic stress. Participants reported using individual crisis intervention the most followed by referring students for Long-term psychotherapeutic treatment. Conducting classroom-based crisis intervention (also called group crisis intervention) was reportedly used the least (see Table 18).

Table 18. Mean Scores and Standard Errors for Psychological Interventions Scale

| Psychological Interventions Question Parts 1-3 | N | Overall Sample | |
		M	SE
1 – I conducted a Classroom-Based Crisis Intervention (also referred to as group crisis intervention).	69	1.25	.16
2 – I conducted an Individual Crisis Intervention (also referred to as individual psychological first aid).	69	1.65	.16
3 – I referred student/s for Long-Term Psychotherapeutic Treatment.	69	1.43	.17

Note. Ratings were on a five point scale (0 = never to 4 = always).

Correlational analyses were computed to assess the strength of the relationship between participants' years of experience and the six various utilization scales. Pearson product-moment correlation coefficients results revealed that years of experience and four of the six utilization scales were correlated to some degree. Results revealed that experience and the Reaffirmed utilization scale were moderately correlated, $r(69) = .46$, $p<.01$; experience and Triage utilization scale were not significantly correlated; experience and Reestablish utilization scale were moderately correlated, $r(69) = .36$, $p<.01$; experience and Psychoeducation were moderately correlated, $r(69) = .33$, $p<.01$; experience and psychological interventions were not significantly correlated; and experience and How Often were moderately correlated, $r(69) = .31$, $p<.01$. In other words, more years of experience in the field of school psychology is moderately correlated with higher levels of self-report utilization of school crisis interventions in the

aftermath of a school crisis (as indicated in four of the six utilization scales). Please refer

to Table 19 for a summary of the correlational analyses.

Table 19. Correlations Among Independent Variables and Application

	Experience	Reaffirmed	Triage	Reestablish	Psycho education	Psychological Interventions	How Often
Experience	___						
Reaffirmed	.458**	___					
Triage	.213	.616**	___				
Reestablish	.364**	.781**	.693**	___			
Psycho education	.329**	.643**	.695**	.699**	___		
Psychological Interventions	.175	.565**	.702**	.664**	.779**	___	
How Often	.306*	.529**	.592**	.569**	.626**	.466**	

One survey question containing eight likert scale items (Q30/Q26) assessed some

of the potential barriers that may prevent the utilization of school crisis response

interventions. T-test results indicated that there were no significant differences found

between the two groups regarding barriers. However, an examination of the barrier

question responses provided information as to what barriers or hurdles potentially prevent

school psychologists from carrying out crisis planning activities and actual response. For

example, lack of time dedicated to being a member of a crisis team (M=4.72) and

working at too many schools (M=4.63) remain significant challenges for the average

school psychologist. This is in contrast to an overwhelming majority of participants

(83.1%) that reported they that they were, in fact, interested in being involved in school

crisis response in their workplace. Sometimes school psychologists cannot participate in school crisis response because there are no open positions on the crisis team. Responses revealed 11.3% strongly agreed, 8.5% agreed, 5.6% somewhat agreed, 1.4% somewhat disagreed, 5.6% disagreed, and 11.3 strongly disagreed. The mean response for open positions on the crisis team was 3.35 with a standard error of .36.

Also, half (51.7%) of the school psychologists responded that they "agreed" to some degree that their district had cut funding for crisis response. While most participants agreed that their administration supported crisis pre-planning and response, this barrier scale confirmed that many barriers to effective response need to be overcome.

Table 20. Potential Barriers to School Crisis Planning

| Barrier Question Parts 1-8 | N | Overall Sample | |
		M	SE
1 - My administration supports school crisis pre-planning.	66	4.47	.16
2 - My administration supports providing interventions following a school crisis.	64	4.80	.15
3 - My district has cut funding for school crisis response training.	29	3.52	.34
4 - My school(s) has school psychologists as members of the crisis response team.	64	4.83	.18
5 - There are no open positions on the crisis response team at this time.	31	3.35	.36
6 - I work at too many different schools to be a crisis team member.	64	4.63	.18
7 - I don't have enough time to be on a school crisis response team.	67	4.72	.16
8 - I choose not to be involved in school crisis response because this is not my interest.	65	5.51	.12

Note. Ratings were on a six point scale (1 = strongly disagree, 3 somewhat disagree, 4 somewhat agree, and 6 strongly agree).

CHAPTER V

DISCUSSION

When parents hug their kids each morning and send them to school, they do so with the expectation that their children will be in safe hands. Parents want their children to learn and they need them to return home safe at the end of the day. Every child and every parent has this expectation, and the school administration and other education professionals responsible for student safety and learning should do everything they can to ensure this happens each school day.

To ensure the safety of students, schools need to engage in preplanning for potential emergencies to prevent them from occurring and/or mitigating the negative effects and outcomes when they do occur. Minimizing psychological trauma could directly affect students by reducing absences, decreasing risk for psychological disturbance, decreasing behavior problems, increasing test scores and overall student academic performance (Ratner et al., 2006; Stuber et al., 2005; Terr, 2003). In the end, this could also help reduce injuries and even save lives.

Unfortunately, the Sandy Hook school massacre took place in December of 2012. While it is a reality that school tragedies take place in America every day, this recent school shooting captured the attention of our nation and the international community. The president of the United States fought to hold back tears when delivering a speech in the days following the loss of 20 children and six adults. This tragedy has brought school

safety, mental health, and the controversial issue of gun control to the forefront. Conversations and national dialogues are being staged and broadcast by the media, professional associations, and people and communities across the nation. In the weeks following the school attack in Connecticut, President Obama put forth a plan to ban high-capacity gun magazines, expand background checks prior to gun sales, and place new limits on assault weapons. His plan also called for providing more incentives for schools to hire police officers in addition to ensuring that states provide more access to mental health care for both teens and young adults. Despite these initiatives, there are people, corporations, organizations, and legislators in direct opposition to the proposed plans. At this point, it is unclear which laws may be passed that will legislatively and financially support measures to make American schools safer for children.

What is clear is that schools need not wait for legislation to be passed. School safety experts and advocates are recommending that schools begin engaging in school crisis prevention planning and preparation now. The literature in the field of school crisis prevention and intervention has expanded rapidly, especially in the last decade (Jimerson, Brock, & Pletcher, 2005). Although time and resources are needed to engage in comprehensive school safety planning, the planning and preparation necessary to increase school safety is not expensive in and of itself. Many resources are available on-line and free of charge. Other resources that are available are not overwhelmingly expensive or out of reach for most schools. With the amount of school planning information and training available to schools, safety planning should not be a passive task but one in which schools should be actively engaged.

The National Association of School Psychologist's PREPaRE Workshop 2 training curriculum was chosen as the object of study for this survey research project because there are no other comprehensive school crisis prevention and intervention models specifically designed for schools (Brock et al., 2009). This dissertation study measured the degree to which the successful completion of the PREPaRE Workshop 2 affects three areas: (1) participants' application of school crisis response knowledge in simulated crisis scenario situations; (2) participants' reported perceptions of confidence responding to school crises; (3) and their self-reported use of school crisis interventions in the school setting. This chapter will serve as a discussion and overview of the research findings of this study. And finally, limitations of this study and future directions for research will also be offered.

Application of Knowledge

Research Question 1- Are PREPaRE Workshop 2 participants able to acquire, retain, and apply key concepts after successfully completing the two-day training? Will PREPaRE Workshop 2 participants have a higher mean score on school crisis scenario survey questions than participants that did not take the PREPaRE Workshop 2 training?

The results of the survey knowledge scale indicated that school psychologists that completed the PREPaRE Workshop 2 curriculum have acquired and retained specific knowledge concepts. One of the key knowledge concepts that was assessed was natural recovery.   Understanding that most children will recovery naturally on their own is a fundamental concept that anyone dealing with a crisis situation needs to understand. In addition, triaging and making decisions on which students to assess is the first step in

identifying those who likely need additional help is important. It is not only important to identify students that were physically proximal or close to a traumatic event but also students that were emotionally proximal. The affected students may begin to show signs of acute stress disorder and some may even require individual crisis interventions. The Incident Command Structure (NIMS) will oversee that all of the necessary duties and functions are being carried out. The ICS makes sure that interventions such as reaffirming health and safety perceptions and reestablishing social support systems are successful and part of the overall effective response (DHS, 2008). All of these concepts are vital to the response process and fit together to create a best practices approach to providing crisis interventions. Overall, the PREPaRE Workshop 2 participants scored higher on the questions that tested these knowledge concepts. In fact, the PREPaRE Workshop 2 trained participants scores were found to be twenty percent higher than those that did not complete PREPaRE.

Not only did the Workshop 2 participants demonstrate a change in knowledge, but the participants were also able to take it one step further and apply this knowledge. The survey questions did not simply require a recall of concepts. Each of the questions presented a simulated school crisis scenario where participants were required to apply their knowledge to the situation. This is reassuring information as the expectation for any of the PREPaRE workshops is not just a change in knowledge but an expectation of utilization of knowledge in the actual school setting.

Research Question 2 - Is there a significant relationship between the length of time following workshop completion and the number of key workshop concepts retained by PREPaRE Workshop 2 participants?

Results from this study found that there was a moderate positive correlation between years since Workshop 2 completion and a change in knowledge. In stark contrast to the original hypothesis, those participants that took Workshop 2 several years ago actually tended to score higher on the knowledge scale than those participants that more recently completed the workshop. A previous study established that PREPaRE Workshop 2 participants had a significant increase in knowledge as measured by workshop pre- and post-test data (Brock et al., 2011). The current study went one step further and tested for a change in knowledge over a period of time ranging from 1 to 7 years. This is the first study to demonstrate that PREPaRE school crisis workshop participants retain knowledge over a significant period of time. In eleven cases, those who recently completed the survey had taken the PREPaRE workshop over four years ago and three people took it over seven years ago. Clearly, Workshop 2 participants have retained the knowledge over time and were able to apply the information they learned.

Although counterintuitive at first, an explanation for this surprising outcome is that participants' original learning may have been reinforced through several years of practice and experience. It is interesting to note that for those that did not take Workshop 2, yet still having experienced multiple crises over multiple years, did not score higher on the knowledge scale. Taking Workshop 2 may provide a framework or lens through which later experience and additional acquired knowledge were added to and improved.

Keeping this in mind, a trained person will tend to use their experiences to improve their future responses. The results of this study seem to suggest that non-trained participants, even ones who repeatedly respond to multiple school crises, may not necessarily be building upon or improving their crisis response skills. Non-trained persons may continue to engage in ineffective practices and not know or understand the implications and impact of their decisions on others. The PREPaRE curriculum emphasizes that every response needs to be framed as a learning experience from which a person can grow and improve upon in the future (Brock et al., 2009). A study by Allen et al. (2002) suggested that school psychologist training should increase exposure to crisis training while also combining this training with actual opportunities to experience crisis interventions. The results of the current survey study confirmed the value of this previous suggestion. This study has demonstrated that a high quality two-day training combined with practical experience in the school setting does indeed lead to more knowledgeable school psychologists that make better decisions in regards to school crisis response.

Research Question 3 - How many hours and what type of school crisis training have both groups of participants received? Does the number of hours of previous crisis training have an effect on school crisis intervention content knowledge? Are there other demographic variables that will significantly impact participants' knowledge?

The total number of hours of training for all participants ranged from 0 to 107 with an average being 25.4. When compared, the PREPaRE trained participants had approximately 20 more hours of crisis training than the non-PREPaRE participants.

The types of training PREPaRE participants received included: CISD training - 14.3% (Mitchell & Everly, 1996), NOVA training - 11.4% (Young, 1998), and REMS training - 11.4%. Non-PREPaRE participants reported slightly less training in CISD and NOVA training. However, it is interesting to note that 0% of the non-PREPaRE participants have ever received REMS training. This is especially surprising given that REMS training is sponsored by the U.S. Department of Education, is available free on-line, and is specific to schools. An attempt to explain the lack of exposure to REMS school crisis training is likely a result of less hours of training, in general, and also a lack of receiving crisis training that is specific to schools, namely PREPaRE.

Correlational analysis demonstrated a significant and positive relationship between knowledge and the following variables: Workshop 2 completion, hours of training, and other crisis training received. Multiple linear regression analysis determined that completion of Workshop 2, by itself, was the only variable that positively impacted knowledge to a statistically significant degree. It is a well-known fact that survey responses can be susceptible to participant bias. Therefore, this series of knowledge application questions served as a more objective set of responses as compared to the confidence scale and utilization scales that all relied completely on self-report.

Level of Confidence

Research Question 4 - How confident do PREPaRE Workshop 2 participants feel about conducting school crisis response and recovery activities in their schools after successfully completing the training curriculum? Is there a significant difference between the levels of confidence of those who have completed the PREPaRE Workshop

2 as compared to those who have not received the training or those who have received other school crisis response training?

A previous study demonstrated that following the completion of the PREPaRE Workshop 2 participants had a self-reported significant decrease in anxiety about providing crisis interventions. Pre and post-workshop results also showed a decrease in fearfulness that participants might make a mistake during a crisis intervention (Brock et al., 2011). Similar to those results, this study also demonstrated that PREPaRE Workshop 2 participants had higher levels of confidence. However, this study was able to demonstrate that PREPaRE Workshop 2 participants had increased levels of confidence, not in comparison to themselves, but compared to a group of participants that had not received Workshop 2 training.

Research Question 5 - Does the number of hours of previous crisis training have an effect on participants' levels of confidence? Are there other demographic variables that will significantly impact participants' confidence?

In contrast to the change in knowledge outcome as previously discussed, there were more variables that contributed to the overall confidence levels. Correlational analysis demonstrated a significant and positive relationship between confidence levels and the following variables: hours of training, experience, other crisis training, Workshop 2 completion and education. Multiple linear regression analysis determined that hours of training and education were the two variables that could best predict confidence levels.

Although the confidence levels are based on reports of self-perception and are more susceptible to participant bias than knowledge scores, per se, they are a valuable

indicator of how willing school psychologists are to providing interventions in potentially stressful situations. A significant increase in knowledge gained from workshop training can be an effective tool to help students in emergency situations provided that a school psychologist feels confident enough to actually deliver the important interventions. The finding that PREPaRE participants were approximately 20% more likely to be members of their school crisis team or safety committee, and 15% more likely to be on their district crisis team, could suggest that participants that have more training and are more confident are also more involved in local level crisis response. It is also interesting to note that nearly 100% of the non-PREPaRE group wanted additional training while only 60% of the PREPaRE group wanted a refresher course. While the two survey questions were not exactly the same, and therefore not completely comparable, results suggest that the PREPaRE group is more confident in their crisis response capabilities.

Utilization of School Crisis Response and Recovery Interventions

Research Question 6 - Have school psychologist participants applied crisis response and recovery knowledge when responding in an actual school crisis response? Is there a significant difference between the utilization of school crisis response information as compared to those who have not received the training? Does the years of experience of the participant affect their utilization of PREPaRE interventions following an actual school crisis?

Contrary to the original hypothesis, survey data revealed that participants from both groups have reported using school crisis training information in schools to the same degree. The utilization scales on the survey were expected to be the most susceptible to a

large self-report bias in the direction of over-reporting actual utilization. However, taking into account the possible bias, it remains important to know that this vital information is being used to some degree in schools. If the utilization scale response data is close to being a true representation, then the school crisis curriculum information is being used to a larger degree than originally hypothesized.

For example, in regards to reaffirming health and safety, people shared that they ensured students were physically safe and comfortable and they provided reassurances to students following a crisis. They also taught staff and parents that children will watch adult reactions and behaviors. This is important as parents are often emotionally impacted in crisis situations and they need reminders that if they are upset or distraught then their children will likely mirror their own reactions. Some of the participants endorsed that they have reunited students with caregivers and significant others following an emergency. Since most school psychologists have not had experience with reunifications, as evidenced by these results, some districts have begun holding annual reunification drills to provide practice. One unexpected result was the fact that participants reported they only "sometimes" provided facts and adaptive interpretations to reassure and teach students. It is routinely recommended that schools provide informational handouts to teachers and parents with information about crisis reactions and how to successfully cope following a disaster (Brock & Jimerson, 2004; Pitcher & Poland, 1992). Nickerson and Zhe (2004) found that more than 90% of school psychologists provided general information about crises. It is often thought that

providing information is one of the most frequently utilized interventions, however, this survey result does not necessarily support that conclusion.

Psychological triage, or the act of sorting and identifying affected students, is a fundamental procedure following a traumatic event. The danger in not doing a thorough and effective job of triaging is that some students' needs will go unmet. This could lead to increased psychological distress and a decline in overall school performance. The low frequency with which psychologists reported having triaged students is concerning. However, it is also conceivable that the act of triaging was carried out by another mental health staff member other than the school psychologist. Taking a closer look, most of the school psychologists also said that they seldom used forms to triage students. These survey results indicate that while triaging is an essential post-crisis tool, most people are not triaging at all, or if they are, they are not doing so thoroughly or in a formal manner.

Additionally, people responded that when they do triage and meet with an identified student they will typically only meet with them one time and not provide additional follow-up meetings. One of the advantages to having school personnel trained in PREPaRE is that they will not leave the school several days or a week after the crisis. School personnel have the advantage of knowing the school's culture and students. They will be around and available to provide follow-up care with individuals in the months, and possibly years, following a crisis. However, this survey data indicates that triage and recommended follow-up care is not typically carried out. Information from the barriers question responses revealed that a lack of time and being in too many schools may be

inhibitors to proper follow-up care. This is one example of the research to practice gap (Brock & Jimerson, 2012) that exists in the field of school crisis intervention.

Taking a closer look at the reestablishing social support systems scale, psychologists responded that they seldom facilitated community connections. This is in line with previous research cited by the U.S. Department of Education that reported that school crisis plans were not coordinated with the community. Less than 50% of school districts with emergency plans involved community partners when developing and updating their plans (U.S. GAO, 2007).

For the psychoeducation scale, school psychologists endorsed that they have conducted or supported a classroom meeting but they do this a little more than "seldom." When asked if they have conducted a psychoeducational group, most responded less than seldom and having conducted a caregiver training for parents or guardians was "almost never." Again, distributing information was the most frequent psychoeducational tool used with most participants that endorsed this item "sometimes" to "often." Similar results were found for the psychological interventions scale. Most psychologists reported that they have "seldom" conducted a classroom-based crisis intervention following a traumatic event. The psychological intervention reportedly utilized the most was individual crisis intervention although this was reported to also occur infrequently following an event. School psychologists also shared that they only refer students for long-term psychotherapeutic treatment a little more than "seldom."

Overall utilization results indicated that PREPaRE trained and non-trained school psychologists are infrequently using recommended interventions following a school

crisis. This is the case even though the average school psychologist reported experiencing more than three significant school crises within the past year alone. Since results have demonstrated that PREPaRE participants retain and can apply knowledge, are confident in their skills, and have experience with crises, there must be other reasons why school psychologists are not utilizing interventions to a greater degree.

One explanation for the infrequent utilization of interventions is the survey data that indicated approximately one third of the PREPaRE participants reported working in districts that have formally adopted the curriculum. Since this study used ex post facto research design, it is unknown to what degree the PREPaRE participants influenced their school district, if at all, to adopt the curriculum. It is not known whether people directly introduced PREPaRE to their district or if their district made a decision to adopt PREPaRE and then sent their psychologists for training. Of course, many school psychologists also complete the workshop at state and national conferences. What we do know from this study is that the majority of people, approximately two thirds, who completed the training returned to a district that had not yet adopted PREPaRE. A school psychologist can have the knowledge, have high levels of confidence, have the motivation to provide effective crisis interventions, but if the school district has not adopted PREPaRE or they do not have a framework for crisis response delivery, then they will not be able to deliver quality crisis services.

Barriers to School Crisis Planning and Response

The U.S. Department of Education has identified that many schools need to continue to develop their school safety programming efforts and to implement federally

recommended practices. However, researchers and practitioners have observed and reported a number of significant barriers to effective school crisis prevention and intervention efforts. Common barriers to crisis planning have been identified as lack of one or more resources: time for planning, time for staff development and training, access to curriculum, money specifically dedicated to crisis prevention planning, etc. (Bischof, 2007; GAO, 2007). In addition, barriers to school crisis planning can affect school crisis response at every stage: pre-planning, planning, response, and evaluation.

One survey study reported that 61% of surveyed school psychologists identified lack of time as the most common barrier to crisis planning followed by not being in the same school every day (50%) as the second most common barrier (Nickerson & Zhe, 2004). The results of this study indicated that most of the school psychologists agreed that their time was limited and that working at too many different schools prevented them from being on the crisis response team at their school district. When the PREPaRE and non-PREPaRE groups were compared, a significant difference between barrier scale results was not found. As expected, these results suggest that both the PREPaRE and non-PREPaRE participants report experiencing barriers to school crisis planning and response to the same degree.

A more detailed analysis of the "barriers" questions revealed additional information about obstacles that need to be overcome to allow for crisis planning and response to take place. First off, it is encouraging that most participants agreed to some degree that their administration supports crisis pre-planning and providing interventions. While this was not the case for each individual participant, as six people said their

administration didn't support them, it is encouraging to see that most of the surveyed psychologists are not experiencing a significant amount of administrative barriers.

Several participants responded to the open textbox item following the barriers questions. Their responses revealed that burnout is potentially a problem as they said there are over 20,000 students in their district and this participant was called upon when any incident occurs. In addition, another participant shared that they are the "go to" person when any misbehavior or incidents occur. Other responses from individual participants indicated financial barriers and one person shared that their "district does not wish to understand PREPaRE." This barrier scale demonstrates the continued need for school psychologists to learn new techniques and strategies to overcome barriers to school crisis prevention and intervention planning and response.

The Need for Additional Training

Most of the school psychologist participants in this study overwhelmingly supported the need for additional training in school crisis planning and response training. The current model of PREPaRE training is to receive one day of training for Workshop 1 and two days of training for Workshop 2. Although the results of this study demonstrated that participants tend to retain the knowledge originally learned, they do forget some key concepts over time and taking a refresher course may be indicated after several years. Nearly one hundred percent of the non-PREPaRE group indicated that they wanted additional training in school crisis intervention and response. Sixty percent of the PREPaRE trained group wanted to take a refresher course. In addition, following national school crisis tragedies, there is a predictable sudden spike in requests for

training. The recent school tragedy in Newtown, Connecticut spurred a great deal of

requests for school crisis training and information about conducting active shooter drills.

It may also be likely that additional federal monies will be made available to schools to

increase safety measures as a result of this tragedy.

PREPaRE trainers have trained thousands of people both nationally and

internationally. It will be important for PREPaRE authors to continue to revise and

update crisis prevention and response materials to accommodate the requests for trainings

and the need for refresher courses. It may be practical for the authors of the PREPaRE

workshop to continue to find alternate or additional means or modalities of delivering the

PREPaRE content and curriculum. For example, the PREPaRE workshops are currently

taught in a traditional presenter/audience workshop format. It may be useful for the

PREPaRE workgroup to create additional on-line modules for people that have already

completed the workshop to be able to remain up-to-date on their training, new research,

and/or a more focused examination of specific topics. Continuing to identify and reach

out to additional organizations and affiliated professional groups to disseminate

PREPaRE workshops and materials to, beyond school psychologists, would also be

advantageous.

Study Limitations

One of the limitations of this study is due to the quasi-experimental (ex post facto)

research design (Creswell, 2005). This study used two pre-existing groups for

comparison that were not randomly assigned like they would be if this were a true

experimental design. In this study, subjects were surveyed after they had already self-

selected themselves to take, or not take, the PREPaRE workshops. Therefore, there may

be a self-selection bias inherent in the school psychologists that sought training versus

those school psychologists that did not seek training.

A second limitation to the current study is the fact that both subgroups selected to

receive the survey are all school psychologists and members of the National Association

of School Psychologists. Being a member of NASP may represent a self-selection bias in

those school psychologists that choose to be members of a national professional

organization versus those who are not. Since one of the main objectives of the NASP

organization is to provide its members with current professional development, those who

are not members could possibly be receiving less professional development opportunities,

decreased exposure to the current literature base, and less opportunities to develop school

crisis prevention and intervention skills. Also, those school psychologists belonging to

their national association may have a higher level of motivation and career achievements

than those who are not members.

Another limitation to this study is the possibility of the survey participants

providing socially desirable responses. The sole data collection tool was a survey

instrument designed by the principal investigator that required participants to self-report

information. The responses to many of the survey items cannot be verified and the

responses also rely on the integrity and memory of the individual respondent. The

respondents may or may not be aware that their responses are biased. The principal

investigator purposefully included knowledge-based crisis scenario questions as part of

the survey so that the entire survey was not based completely on self-report but also on

responses that could be verified more objectively.

And lastly, the relatively low response rate of completed surveys also serves as a

limitation. After the first e-mail was sent out with the survey link, less than three

hundred of the one thousand NASP members that received the e-mail even opened it.

The second reminder e-mail that was sent out increased the overall sample size by adding

an additional 40 survey completions. However, even though the responses provided

allowed for analysis, a greater number of responses would help to improve the statistical

significance of the effects of the PREPaRE Workshop 2 training. Despite some of the

limitations, this study did generate results that could be used to inform future crisis

research and training curricula.

Future Directions

Future studies may expand upon this work by including those that have also

completed PREPaRE Workshop 1. Since this study only included NASP school

psychologists, future studies may also want to look at studying non-school psychologists

that have completed PREPaRE workshops. For example, other professionals that

completed PREPaRE workshops include school administrators, social workers,

counselors, school nurses, teachers, school resource officers, etc.

Since there are very few studies examining the effectiveness of the NASP

PREPaRE curriculum, suggestions for future studies should include examining the actual

application of PREPaRE in school districts. It would be valuable to know how many

schools across the nation have adopted the PREPaRE curriculum, and further, how

schools use PREPaRE to improve crisis plans, safety planning, school crisis response, and implementation of prevention programming.

Since the design of this study was ex post facto research, it was not possible to measure the level of one's involvement prior to the Workshop 2 training. It would be helpful if future studies could obtain a baseline measure of participants' level of involvement, including other pertinent independent variables, and then measure a change in their level of involvement over time following training. Outcome measures could go beyond measuring personal change and self-reported utilization by assessing adoption of PREPaRE in their district. Do PREPaRE trained participants go back to their schools and use the information as an individual or to what degree they are able to initiate programming for the whole school or district? The possibilities range from never using the material at all to convincing a school board to fully adopt and implement PREPaRE across an entire district. The power of one individual to enact large scale programmatic change should not be underestimated. In fact, several persons that were randomly selected in this study do practice at the national level.

Conclusion

There are currently a lack of studies examining and evaluating the effectiveness of crisis response models. The results have the potential to inform future PREPaRE curriculum revisions and workshop presentations of the only comprehensive national school crisis prevention and intervention training available. This survey study will also contribute general knowledge to the school crisis intervention field by studying the impact of the PREPaRE Workshop 2 school crisis response and recovery training upon

workshop participants in terms of the application of knowledge gained, confidence levels, and their use of the school crisis intervention curriculum in the aftermath of an actual school crisis.

The rationale for this study was to examine the effects of PREPaRE Workshop 2 training on individuals. Since PREPaRE is a relatively new curriculum (pilot introduced in 2006), little has been done to examine its efficacy and/or effectiveness. This study was meant to be one of the first among many that will potentially contribute to understanding how the workshop can be improved to most efficiently affect change and increase the crisis preparedness of educators across the United States. The need for research on the PREPaRE curriculum is even greater now that an international curriculum was recently released and is being adopted by other countries throughout the world. At this time, international trainings have occurred in Afghanistan, Cameroon, Canada, Germany, Greece, Jamaica, Japan, Morocco, Netherlands, and Thailand. In addition, Canada and Greece have hosted the most trainings with 237 and 67, respectively.

American schools work hard to be bastions of safety and security. All children have a right to feel safe and protected at their neighborhood school. School safety planning and school crisis prevention and intervention needs to remain a high priority to meet this end. The continuation of school crisis prevention and intervention training for our schools is the key to maintaining the safest schools possible.

APPENDIX A

SURVEY INSTRUMENT – WORKSHOP 2 GROUP

School Crisis Intervention Survey (PREPaRE)

School crises such as those that occurred at Sandy Hook Elementary School, Columbine High School, Chardon High School, and others, all have had a profound impact upon the students, staff, community and nation. The National Association of School Psychologists has worked hard to provide training to schools that are interested in preventing school crises and/or effectively intervening following a significant incident.

We are excited that you may choose to participate in the following online survey examining the effectiveness of the NASP PREPaRE curriculum. The survey will specifically be measuring confidence levels and application of knowledge in the aftermath of an actual school crisis. Some of the survey questions are related to PREPaRE Workshop 2 - Crisis Intervention & Recovery: The Roles of School-Based Mental Health Professionals. Your responses may be used to inform future revisions of the PREPaRE program and will add knowledge to the field of school crisis prevention and response.

This survey will take approximately twenty minutes to complete. If you have questions concerning your rights as a research participant, you may contact the principal investigator: Brian Lazzaro at blazzar@luc.edu (Loyola University Chicago - School of Education). You may also contact the faculty sponsor: Dr. Pamela Fenning at pfennin@luc.edu or 312-915-6803 (School of Education). The Loyola University Chicago Institutional Review Board (IRB) is also available to answer questions by phone at (773)508-2965, or by e-mail at irb@luc.edu.

Confidentiality will be maintained to the degree permitted by the technology used. Your participation in this online survey involves risks similar to a person's everyday use of the Internet. Survey responses will be kept anonymous. Therefore, individual response data cannot be extracted and withdrawn from the database at a later time if requested. By completing the survey you are voluntarily agreeing to participate in the research. You are free to decline to answer any particular questions you do not wish to answer for any reason. At the end of the survey, you will have the option of sending an e-mail to marysatchwell@gmail.com to be entered into a drawing. You will have a chance to win 1 of 5 copies of the following book: School Crisis Prevention and Intervention: The PREPaRE Model. Your survey responses will remain anonymous and will not be connected to the e-mail address you voluntarily provide. Thank you for your time and efforts.

1. I am a member of a:

	YES	NO	Not Sure	Other
School crisis response team	○	○	○	○
District crisis response team	○	○	○	○
School safety committee	○	○	○	○

Other - Please specify:

[   ]

2. My level of involvement in school crisis response is:
(Check all that apply)

☐ At the school level

☐ At the district level

☐ At the state level

☐ At the national level

☐ I do not participate in school crisis response.

☐ Other - Please specify:

[   ]

School Crisis Intervention Survey (PREPaRE)

3. Please indicate which school crises have impacted and/or occurred at your school(s) in the last 12 months?

(Check all that apply)

☐ Domestic violence   ☐ Tornadoes   ☐ Dam failures

☐ Life-threatening illnesses   ☐ Prisoners of war   ☐ Invasions

☐ Sudden fatal illnesses   ☐ Hijackings   ☐ Construction or plant accidents

☐ Fatal accidents   ☐ Hurricanes   ☐ Avalanches or landslides

☐ Human aggression   ☐ Kidnappings   ☐ Volcanic eruptions

☐ Assaults   ☐ Torture   ☐ Tsunamis

☐ Suicide attempts   ☐ Floods   ☐ Terrorist attacks

☐ Suicides   ☐ Earthquakes   ☐ Nuclear accidents

☐ Homicides   ☐ Lightning strikes   ☐ Exposure to noxious agents or toxic waste

☐ Fires or arson   ☐ Hostage taking

☐ Disfigurement and dismemberment

☐ Explosions   ☐ Airline crashes

☐ Road, train, and maritime accidents

☐ Other (please specify)

_____

4. Please estimate the total number of school crises you have experienced in the LAST YEAR?

# of crises

- [▼]

Additonal Comments?

[   ]

Schools vary in the number and intensity of school crises they experience each year. When answering the following questions, please respond thinking of how you have typically responded to a significant school crisis.

School Crisis Intervention Survey (PREPaRE)

5. Please indicate to what extent you agree or disagree with the following statements:

I am prepared to participate in a:

	Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree
MINIMAL level crisis response. (ex.-student breaks arm)	○	○	○	○	○	○
BUILDING level crisis response. (ex.-death of a teacher)	○	○	○	○	○	○
DISTRICT level crisis response. (ex.-gang fight involving 3 schools)	○	○	○	○	○	○
REGIONAL level crisis response. (ex.-school shooting with 12 fatalities)	○	○	○	○	○	○

Additional Comments?

6. Please indicate to what extent you agree or disagree with the following statements:

	Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree
I am confident in my ability to respond as part of a school crisis response team.	○	○	○	○	○	○
I would feel anxious if I were required to conduct a school crisis intervention.	○	○	○	○	○	○
I feel nervous that I might make a mistake during a school crisis intervention.	○	○	○	○	○	○
I feel that I would need additional training before responding in an actual crisis situation.	○	○	○	○	○	○

Additional Comments?

The next 8 questions are related to the application of school crisis intervention concepts.

Please choose the best response.

School Crisis Intervention Survey (PREPaRE)

7. Crisis Scenario:

A school crisis team is meeting to review how they will respond to a significant crisis. Which of the following should the team assess to evaluate student psychological trauma?

- ○ A) Predictability of the event, Intensity, Duration, Consequences
- ○ B) Developmental level, Cultural variations, Early warning signs, Enduring warning signs
- ○ C) Crisis event variables, Risk factors, Warning signs, Reactions
- ○ D) Threat perceptions, Exposure, Vulnerability, Crisis reactions

8. Crisis Scenario:

A student collapsed and died in P.E. class due to a preexisting heart condition. What are the most important factors to consider when trying to determine which students may be significantly affected by this event?

- ○ A) Their physical and mental state
- ○ B) Sensory perception and psychological impact
- ○ C) Emotional and physical proximity
- ○ D) Traumatic and emotional impact potential

9. Crisis Scenario Continued:

The next morning after the death of the student in P.E. class, staff are finding that students are gathering in groups in the hallways and talking about the incident. What action should you take?

- ○ A) Have students return to classes and continue with regularly scheduled classes and exams.
- ○ B) Have students return to class and do not allow students to talk about the death.
- ○ C) Do not allow students to share in hallways to reduce traumatization by sharing specific details.
- ○ D) Allow students to talk with peers so they can reestablish social support systems.

10. Crisis Scenario:

A wildfire has changed direction and is now quickly heading towards Field Elementary School. Which of the following most accurately describes a best practice school crisis response?

- ○ A) The School Operations Chief will coordinate and enact a rapid crisis response.
- ○ B) The Incident Commander will employ a Unified Command response.
- ○ C) The Operations Chief assumes command and will direct an evacuation.
- ○ D) The Superintendent is the Operations Chief and will coordinate the evacuation.

School Crisis Intervention Survey (PREPaRE)

11. Crisis Scenario:

At recess time, four classes of students were on or near the playground when they witnessed a gang-related shooting. Which of the following statements is the most accurate?

- A) The children will require individual psychotherapy from professional therapists.
- B) Most of the children on the playground will be emotionally traumatized while those children who were not present will not display PTSD symptoms.
- C) Most children will recover naturally, however, some will need more intensive services.
- D) Children are generally resilient, however, 25% will typically show signs of Posttraumatic Stress Disorder (PTSD).

12. Crisis Scenario:

An F-4 tornado has ripped through the community that your school resides in while school was in session. When assessing students' crisis reactions in the following days, you are finding that many students are experiencing significant fear, helplessness, emotional numbing, and re-experiencing the trauma. This is best characterized as:

- A) Emotional Proximity
- B) Acute Stress Disorder
- C) Posttraumatic Stress Disorder (PTSD)
- D) Psychosomatic Reaction

13. Crisis Scenario:

George Washington elementary school was recently damaged by a flash flood while school was in session. While most students were not physically harmed it was later revealed that one student did drown.

What are the first steps that need to be taken as students return to school?

- A) Evaluate how teachers are coping so they can help their students.
- B) Examine how many children have been emotionally affected and begin group debriefings.
- C) Reaffirm the students' physical health, and ensure perceptions of safety and security.
- D) Communicate with parents as soon as possible so they know how to support their child.

School Crisis Intervention Survey (PREPaRE)

14. Crisis Scenario:

Johnny was physically injured when a bullet grazed his arm after a lone gunman began shooting at students. Several days later, school mental health staff are beginning to create groups for intervention. It is important that Johnny should:

○ A) Be referred to school mental health staff to receive individual crisis intervention

○ B) Be placed in a classroom-based group to allow Johnny to share his trauma story

○ C) Be placed in a classroom-based group only with students that were physically proximal to the event

○ D) Be referred to a psychiatrist since Johnny will begin to show symptoms of PTSD

15. Please indicate to what extent you agree or disagree with the following statements:

	Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree
In general, my school is prepared to handle a significant school crisis.	○	○	○	○	○	○
Our school(s) staff needs additional training in school crisis response.	○	○	○	○	○	○
My school's administration values school crisis response planning.	○	○	○	○	○	○

Additional Comments?

[   ]

16. My school district has formally adopted the PREPaRE curriculum:

○ YES

○ NO

○ I don't know

○ Other - (Please specify)

[   ]

School Crisis Intervention Survey (PREPaRE)

17. I have been trained in the following crisis prevention/intervention models: (Check all that apply)

☐ Crisis Incident Stress Debriefing Model (CISD - Jeffrey Mitchell Model)

☐ NASP PREPaRE Model (Workshop 1 and/or Workshop 2)

☐ N.O.V.A. Model (National Organization for Victim Assistance)

☐ REMS Training (Readiness and Emergency Management for Schools)

☐ I have never received formal crisis response training.

☐ I have received crisis response training but it was informal.

☐ Other school crisis prevention/intervention training? (please specify)

18. Please estimate the total number of hours of school crisis prevention and intervention training you have had:

○ 0 hours

○ 1-10 hours

○ 11-20 hours

○ 21-30 hours

○ 31-40 hours

○ 41-50 hours

○ 51-75 hours

○ 76-100 hours

○ 101+ hours

○ Other - Please specify:

19. I have completed the NASP PREPaRE workshop #1 training (Crisis Prevention & Preparedness: The Comprehensive School Crisis Team):

○ YES

○ NO

School Crisis Intervention Survey (PREPaRE)

20. I have completed the NASP PREPaRE workshop #2 (Crisis Intervention & Recovery: The Roles of School-Based Mental Health Professionals):

○ YES

○ NO

21. I feel I need to take a PREPaRE refresher course?

○ YES

○ NO

Why or why not?
_____

22. What year and month did you complete PREPaRE Workshop #2?

	Year?	Month?
-	▼	▼

The next 8 questions are related to your use and frequency of applying school crisis interventions. We do not expect survey participants to have used all interventions. Please estimate to the best of your recollection how often you use the following interventions, if at all:

23. Please indicate to what extent you agree or disagree with the following statements:

	Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Not Applicable
I have applied PREPaRE response and recovery strategies in the aftermath of an actual school crisis.	○	○	○	○	○	○	○
My school has applied PREPaRE response and recovery strategies in the aftermath of an actual school crisis.	○	○	○	○	○	○	○

Additional Comments?
_____

School Crisis Intervention Survey (PREPaRE)

24. School staff can Reaffirm the Health and Safety of students, staff, and parents by meeting basic physical needs (food, shelter, etc.) and by facilitating perceptions that the school environment is safe and secure.

Please consider how often, if at all, you REAFFIRMED HEALTH & SAFETY following a school crisis:

	Always	Often	Sometimes	Seldom	Never	Not Applicable
I ensured that students are physically safe and comfortable.	○	○	○	○	○	○
I provided accurate reassurances to students.	○	○	○	○	○	○
I taught staff and parents that children will watch adult reactions and behaviors.	○	○	○	○	○	○
I minimized crisis exposure of students.	○	○	○	○	○	○
I reunited students with caregivers and significant others.	○	○	○	○	○	○
I provided facts and adaptive interpretations to reassure and teach students.	○	○	○	○	○	○
I returned students to a safe school environment/routine when the crisis was over.	○	○	○	○	○	○
I provided students with opportunities to take positive action.	○	○	○	○	○	○

Additional Comments?

School Crisis Intervention Survey (PREPaRE)

25. Psychological triage is a dynamic process of identifying and evaluating persons affected by a traumatic event.

Please consider how often, if at all, you conducted PSYCHOLOGICAL TRIAGE following a school crisis:

	Always	Often	Sometimes	Seldom	Never	Not Applicable
I informally conducted psychological triage (assessed which students needed help and provided interventions).	○	○	○	○	○	○
I formally conducted psychological triage (using forms to track students).	○	○	○	○	○	○
I triaged students ONE TIME and followed up with identified students.	○	○	○	○	○	○
I triaged students MULTIPLE TIMES (immediately after the crisis and again at a later time).	○	○	○	○	○	○
I triaged students using the E.R.M.S. triage protocol.	○	○	○	○	○	○

Additional Comments?

School Crisis Intervention Survey (PREPaRE)

26. Reestablishing social support systems or reconnecting students with parents, caregivers, and peers is an intervention strategy that promotes adaptive coping and increases feelings of safety and security.

Please consider how often, if at all, you engaged in REESTABLISHING SOCIAL SUPPORT SYSTEMS following a school crisis:

	Always	Often	Sometimes	Seldom	Never	Not Applicable
I reunited students with primary caregivers.	○	○	○	○	○	○
I reunited students with peers and teachers.	○	○	○	○	○	○
I returned students to familiar environments and routines.	○	○	○	○	○	○
I facilitated community connections.	○	○	○	○	○	○
I empowered caregivers with crisis recovery information.	○	○	○	○	○	○

Additional Comments?

27. Psychoeducation is the provision of direct instruction and/or the dissemination of information that helps crisis survivors and their caregivers in understanding, preparing for, and responding to the crisis event, and the problems and reactions it generates (both in oneself and among others).

Please consider how often, if at all, you conducted PSYCHOEDUCATION following a school crisis:

	Always	Often	Sometimes	Seldom	Never	Not Applicable
I distributed informational documents to staff, students, or parents.	○	○	○	○	○	○
I conducted or supported a Classroom meeting.	○	○	○	○	○	○
I conducted a Caregiver training.	○	○	○	○	○	○
I conducted a Psychoeducational Group.	○	○	○	○	○	○

Additional Comments?

School Crisis Intervention Survey (PREPaRE)

28. Psychological interventions are active and direct attempts to facilitate adaptive coping and directly responding to symptoms of traumatic stress. The aim is to reestablish immediate coping (not necessarily crisis resolution) and/or facilitate access to more intensive psychotherapeutic treatment.

Please indicate how often, if at all, you have conducted the following PSYCHOLOGICAL INTERVENTIONS following a school crisis:

	Always	Often	Sometimes	Seldom	Never	Not Applicable
I conducted a Classroom-Based Crisis Intervention (also referred to as group crisis intervention).	○	○	○	○	○	○
I conducted an Individual Crisis Intervention (also referred to as individual psychological first aid).	○	○	○	○	○	○
I referred student/s for Long-Term Psychotherapeutic Treatment.	○	○	○	○	○	○

Additional Comments?

29. Please indicate how often, if at all, you have done the following:

	Always	Often	Sometimes	Seldom	Never	Not Applicable
I have used PREPaRE workshop Handouts/forms following a school crisis.	○	○	○	○	○	○
I have used PREPaRE workshop Handouts/forms during times of non-crisis (throughout the school year).	○	○	○	○	○	○
In general, my school is prepared to handle a significant school crisis.	○	○	○	○	○	○

Additional Comments?

School Crisis Intervention Survey (PREPaRE)

30. Some school psychologists experience "barriers" that make it difficult for them to be actively involved in a school crisis response.

Please indicate to what extent you agree or disagree with the following statements:

	Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Don't Know
My ADMINISTRATION supports school crisis PRE-PLANNING.	○	○	○	○	○	○	○
My ADMINISTRATION supports PROVIDING INTERVENTIONS following a school crisis.	○	○	○	○	○	○	○
My District has cut funding for school crisis response training.	○	○	○	○	○	○	○
My school(s) has school psychologists as members of the crisis response team.	○	○	○	○	○	○	○
There are no open positions on the crisis response team at this time.	○	○	○	○	○	○	○
I work at too many different schools to be a crisis team member.	○	○	○	○	○	○	○
I don't have enough time to be on a school crisis response team.	○	○	○	○	○	○	○
I choose not to be involved in school crisis response because this is not my interest.	○	○	○	○	○	○	○

Additional Comments?

School Crisis Intervention Survey (PREPaRE)

31. The school I work at is a(n):

- ☐ Early Childhood Program
- ☐ Pre-school
- ☐ Elementary School
- ☐ Middle School or Junior High
- ☐ High School
- ☐ College or University
- ☐ Other - Please specify:

32. In what type of school do you work?

- ○ Public
- ○ Private
- ○ Other?

33. Which of the following best describes the location of your school?

- ○ Suburban
- ○ Urban
- ○ Rural
- ○ Mixed
- ○ Other - Please explain:

34. In how many schools do you work?

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ If more, please specify:

School Crisis Intervention Survey (PREPaRE)

35. Are you currently practicing in a school as a full-time certified school psychologist?

○ Yes

○ No, I am not practicing at all.

○ No, I am part-time. (Please specify below the # of hours you are working per week.)

Hours working per week:

36. What is your highest level of training in school psychology?

○ Practicum Student

○ Current Intern

○ Masters

○ Specialist

○ Doctorate

○ Other - Please specify special situations:

37. Are you a nationally certified school psychologist (NCSP)?

○ YES

○ NO

38. How many years experience do you have as a certified full-time school psychologist?

○ 0 (I am currently a practicum student.)

○ 0 (I am currently an intern.)

○ 0 (I am a first-year school psychologist.)

○ 1-5

○ 6-10

○ 11-15

○ 16-20

○ 21-25

○ 26-30

○ 31-35+

○ Other - Please specify:

School Crisis Intervention Survey (PREPaRE)

39. What is your gender?

- ○ Male

- ○ Female

- ○ Other - Please specify:

40. Please feel free to share any additional

THOUGHTS or COMMENTS:

YOU HAVE COMPLETED THIS SURVEY

THANK YOU FOR YOUR PARTICIPATION!

Please send an e-mail to marysatchwell@gmail.com with your first name in the Subject Line if you would like to voluntarily be entered into the random drawing to win 1 of 5 "School Crisis Prevention and Intervention: The PREPaRE Model" books. Your e-mail address will be stored separately from your survey responses. Your survey responses will remain anonymous. Thank you.

APPENDIX B

SURVEY INSTRUMENT – NON-PREP<u>a</u>RE GROUP

School Crisis Intervention Survey

School crises such as those that occurred at Sandy Hook Elementary School, Columbine High School, Chardon High School, and others, all have had a profound impact upon the students, staff, community and nation. The National Association of School Psychologists has worked hard to provide training to schools that are interested in preventing school crises and/or effectively intervening following a significant incident.

We are excited that you may choose to participate in the following online survey examining the effectiveness of the NASP PREPaRE curriculum. The survey will specifically be measuring confidence levels and application of knowledge in the aftermath of an actual school crisis. Please note - Having received PREPaRE training is not required to complete this survey.

This survey will take approximately twenty minutes to complete. If you have questions concerning your rights as a research participant, you may contact the principal investigator: Brian Lazzaro at blazzar@luc.edu (Loyola University Chicago - School of Education). You may also contact the faculty sponsor: Dr. Pamela Fenning at pfennin@luc.edu or 312-915-6803 (School of Education). The Loyola University Chicago Institutional Review Board (IRB) is also available to answer questions by phone at (773)508-2965, or by e-mail at irb@luc.edu.

Confidentiality will be maintained to the degree permitted by the technology used. Your participation in this online survey involves risks similar to a person's everyday use of the Internet. Survey responses will be kept anonymous. Therefore, individual response data cannot be extracted and withdrawn from the database at a later time if requested. By completing the survey you are voluntarily agreeing to participate in the research. You are free to decline to answer any particular questions you do not wish to answer for any reason. At the end of the survey, you will have the option of sending an e-mail to marysatchwell@gmail.com to be entered into a drawing. You will have a chance to win 1 of 5 copies of the following book: School Crisis Prevention and Intervention: The PREPaRE Model. Your survey responses will remain anonymous and will not be connected to the e-mail address you voluntarily provide. Thank you for your time and efforts.

1. I am a member of a:

	YES	NO	Not Sure	Other
School crisis response team	○	○	○	○
District crisis response team	○	○	○	○
School safety committee	○	○	○	○

Other - Please specify:

[ ]

2. My level of involvement in school crisis response is:

(Check all that apply)

☐ At the school level

☐ At the district level

☐ At the state level

☐ At the national level

☐ I do not participate in school crisis response.

☐ Other - Please specify:

[ ]

School Crisis Intervention Survey

3. Please indicate which school crises have impacted and/or occurred at your school(s) in the last 12 months?

(Check all that apply)

☐ Domestic violence	☐ Tornadoes	☐ Dam failures
☐ Life-threatening illnesses	☐ Prisoners of war	☐ Invasions
☐ Sudden fatal illnesses	☐ Hijackings	☐ Construction or plant accidents
☐ Fatal accidents	☐ Hurricanes	☐ Avalanches or landslides
☐ Human aggression	☐ Kidnappings	☐ Volcanic eruptions
☐ Assaults	☐ Torture	☐ Tsunamis
☐ Suicide attempts	☐ Floods	☐ Terrorist attacks
☐ Suicides	☐ Earthquakes	☐ Nuclear accidents
☐ Homicides	☐ Lightning strikes	☐ Exposure to noxious agents or toxic waste
☐ Fires or arson	☐ Hostage taking	
☐ Explosions	☐ Airline crashes	☐ Disfigurement and dismemberment
		☐ Road, train, and maritime accidents

☐ Other - Please specify:

_____

4. Please estimate the total number of school crises you have experienced in the LAST YEAR?

# of crises

- [▼]

Additonal Comments?

[   ]

Schools vary in the number and intensity of school crises they experience each year. When answering the following questions, please respond thinking of how you have typically responded to a significant school crisis.

School Crisis Intervention Survey

5. Please indicate to what extent you agree or disagree with the following statements:

I am prepared to participate in a:

	Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree
MINIMAL level crisis response. (ex.-student breaks arm)	○	○	○	○	○	○
BUILDING level crisis response. (ex.-death of a teacher)	○	○	○	○	○	○
DISTRICT level crisis response. (ex.-gang fight involving 3 schools)	○	○	○	○	○	○
REGIONAL level crisis response. (ex.-school shooting with 12 fatalities)	○	○	○	○	○	○

Additional Comments?

6. Please indicate to what extent you agree or disagree with the following statements:

	Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree
I am confident in my ability to respond as part of a school crisis response team.	○	○	○	○	○	○
I would feel anxious if I were required to conduct a school crisis intervention.	○	○	○	○	○	○
I feel nervous that I might make a mistake during a school crisis intervention.	○	○	○	○	○	○
I feel that I would need additional training before responding in an actual crisis situation.	○	○	○	○	○	○

Additional Comments?

The next 8 questions are related to the application of school crisis intervention concepts. Please choose the best answer.

School Crisis Intervention Survey

7. Crisis Scenario:

A school crisis team is meeting to review how they will respond to a significant crisis. Which of the following should the team assess to evaluate student psychological trauma?

- ○ A) Predictability of the event, Intensity, Duration, Consequences
- ○ B) Developmental level, Cultural variations, Early warning signs, Enduring warning signs
- ○ C) Crisis event variables, Risk factors, Warning signs, Reactions
- ○ D) Threat perceptions, Exposure, Vulnerability, Crisis reactions

8. Crisis Scenario:

A student collapsed and died in P.E. class due to a preexisting heart condition. What are the most important factors to consider when trying to determine which students may be significantly affected by this event?

- ○ A) Their physical and mental state
- ○ B) Sensory perception and psychological impact
- ○ C) Emotional and physical proximity
- ○ D) Traumatic and emotional impact potential

9. Crisis Scenario Continued:

The next morning after the death of the student in P.E. class, staff are finding that students are gathering in groups in the hallways and talking about the incident. What action should you take?

- ○ A) Have students return to classes and continue with regularly scheduled classes and exams.
- ○ B) Have students return to class and do not allow students to talk about the death.
- ○ C) Do not allow students to share in hallways to reduce traumatization by sharing specific details.
- ○ D) Allow students to talk with peers so they can reestablish social support systems.

10. Crisis Scenario:

A wildfire has changed direction and is now quickly heading towards Field Elementary School. Which of the following most accurately describes a best practice school crisis response:

- ○ A) The School Operations Chief will coordinate and enact a rapid crisis response.
- ○ B) The Incident Commander will employ a Unified Command response.
- ○ C) The Operations Chief assumes command and will direct an evacuation.
- ○ D) The Superintendent is the Operations Chief and will coordinate the evacuation.

School Crisis Intervention Survey

11. Crisis Scenario:

At recess time, four classes of students were on or near the playground when they witnessed a gang-related shooting. Which of the following statements is the most accurate?

○ A) The children will require individual psychotherapy from professional therapists.

○ B) Most of the children on the playground will be emotionally traumatized while those children who were not present will not display PTSD symptoms.

○ C) Most children will recover naturally, however, some will need more intensive services.

○ D) Children are generally resilient, however, 25% will typically show signs of Posttraumatic Stress Disorder (PTSD).

12. Crisis Scenario:

An F-4 tornado has ripped through the community that your school resides in while school was in session. When assessing students' crisis reactions in the following days, you are finding that many students are experiencing significant fear, helplessness, emotional numbing, and re-experiencing the trauma. This is best characterized as:

○ A) Emotional Proximity

○ B) Acute Stress Disorder

○ C) Posttraumatic Stress Disorder (PTSD)

○ D) Psychosomatic Reaction

13. Crisis Scenario:

George Washington elementary school was recently damaged by a flash flood while school was in session. While most students were not physically harmed it was later revealed that one student did drown.

What are the first steps that need to be taken as students return to school?

○ A) Evaluate how teachers are coping so they can help their students.

○ B) Examine how many children have been emotionally affected and begin group debriefings.

○ C) Reaffirm the students' physical health, and ensure perceptions of safety and security.

○ D) Communicate with parents as soon as possible so they know how to support their child.

School Crisis Intervention Survey

14. Crisis Scenario:

Johnny was physically injured when a bullet grazed his arm after a lone gunman began shooting at students. Several days later, school mental health staff are beginning to create groups for intervention. It is important that Johnny should:

○ A) Be referred to school mental health staff to receive individual crisis intervention

○ B) Be placed in a classroom-based group to allow Johnny to share his trauma story

○ C) Be placed in a classroom-based group only with students that were physically proximal to the event

○ D) Be referred to a psychiatrist since Johnny will begin to show symptoms of PTSD

15. Please indicate to what extent you agree or disagree with the following statements:

	Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree
In general, my school is prepared to handle a significant school crisis.	○	○	○	○	○	○
Our school(s) staff needs additional training in school crisis response.	○	○	○	○	○	○
My school's administration values school crisis response planning.	○	○	○	○	○	○

Additional Comments?

[   ]

16. I have been trained in the following crisis prevention/intervention models: (Check all that apply)

☐ Crisis Incident Stress Debriefing Model (CISD - Jeffrey Mitchell Model)

☐ NASP PREPaRE Model (Workshop 1 and/or Workshop 2)

☐ N.O.V.A. Model (National Organization for Victim Assistance)

☐ REMS Training (Readiness and Emergency Management for Schools)

☐ I have never received formal crisis response training.

☐ I have received crisis response training but it was informal.

☐ Other school crisis prevention/intervention training? (please specify)

[   ]

School Crisis Intervention Survey

17. Please estimate the total number of hours of school crisis prevention and intervention training you have had:

- ○ 0 hours
- ○ 1-10 hours
- ○ 11-20 hours
- ○ 21-30 hours
- ○ 31-40 hours
- ○ 41-50 hours
- ○ 51-75 hours
- ○ 76-100 hours
- ○ 101+ hours
- ○ Other (please specify)

_____

18. I feel I need to attend additional school crisis prevention and intervention trainings:

- ○ YES
- ○ NO

Why or why not?

_____

The next 8 questions are related to your use and frequency of applying school crisis interventions. We do not expect survey participants to have used all interventions. Please estimate to the best of your recollection how often you use the following interventions, if at all:

19. Please indicate to what extent you agree or disagree with the following statements:

	Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree
I have applied school crisis response and recovery strategies in the aftermath of an actual school crisis.	○	○	○	○	○	○
My school has applied school crisis response and recovery strategies in the aftermath of an actual school crisis.	○	○	○	○	○	○

Additional Comments?

_____

School Crisis Intervention Survey

20. School staff can Reaffirm the Health and Safety of students, staff, and parents by meeting basic physical needs (food, shelter, etc.) and by facilitating perceptions that the school environment is safe and secure.

Please consider how often, if at all, you REAFFIRMED HEALTH & SAFETY following a school crisis:

	Always	Often	Sometimes	Seldom	Never	Not Applicable
I ensured that students are physically safe and comfortable.	○	○	○	○	○	○
I provided accurate reassurances to students.	○	○	○	○	○	○
I taught staff and parents that children will watch adult reactions and behaviors.	○	○	○	○	○	○
I minimized crisis exposure of students.	○	○	○	○	○	○
I reunited students with caregivers and significant others.	○	○	○	○	○	○
I provided facts and adaptive interpretations to reassure and teach students.	○	○	○	○	○	○
I returned students to a safe school environment/routine when the crisis was over.	○	○	○	○	○	○
I provided students with opportunities to take positive action.	○	○	○	○	○	○

Additional Comments?

School Crisis Intervention Survey

21. Psychological triage is a dynamic process of identifying and evaluating persons affected by a traumatic event.

Please consider how often, if at all, you conducted PSYCHOLOGICAL TRIAGE following a school crisis:

	Always	Often	Sometimes	Seldom	Never	Not Applicable
I informally conducted psychological triage (assessed which students needed help and provided interventions).	○	○	○	○	○	○
I formally conducted psychological triage (using forms to track students).	○	○	○	○	○	○
I triaged students ONE TIME and followed up with identified students.	○	○	○	○	○	○
I triaged students MULTIPLE TIMES (immediately after the crisis and again at a later time).	○	○	○	○	○	○
I triaged students using the E.R.M.S. triage protocol.	○	○	○	○	○	○

Additional Comments?

School Crisis Intervention Survey

22. Reestablishing social support systems or reconnecting students with parents, caregivers, and peers is an intervention strategy that promotes adaptive coping and increases feelings of safety and security.

Please consider how often, if at all, you engaged in REESTABLISHING SOCIAL SUPPORT SYSTEMS following a school crisis:

	Always	Often	Sometimes	Seldom	Never	Not Applicable
I reunited students with primary caregivers.	○	○	○	○	○	○
I reunited students with peers and teachers.	○	○	○	○	○	○
I returned students to familiar environments and routines.	○	○	○	○	○	○
I facilitated community connections.	○	○	○	○	○	○
I empowered caregivers with crisis recovery information.	○	○	○	○	○	○

Additional Comments?

[   ]

23. Psychoeducation is the provision of direct instruction and/or the dissemination of information that helps crisis survivors and their caregivers in understanding, preparing for, and responding to the crisis event, and the problems and reactions it generates (both in oneself and among others).

Please consider how often, if at all, you conducted PSYCHOEDUCATION following a school crisis:

	Always	Often	Sometimes	Seldom	Never	Not Applicable
I distributed informational documents to staff, students, or parents.	○	○	○	○	○	○
I conducted or supported a Classroom meeting.	○	○	○	○	○	○
I conducted a Caregiver training.	○	○	○	○	○	○
I conducted a Psychoeducational Group.	○	○	○	○	○	○

Additional Comments?

[   ]

School Crisis Intervention Survey

24. Psychological interventions are active and direct attempts to facilitate adaptive coping and directly responding to symptoms of traumatic stress. The aim is to reestablish immediate coping (not necessarily crisis resolution) and/or facilitate access to more intensive psychotherapeutic treatment.

Please indicate how often, if at all, you have conducted the following PSYCHOLOGICAL INTERVENTIONS following a school crisis:

	Always	Often	Sometimes	Seldom	Never	Not Applicable
I conducted a Classroom-Based Crisis Intervention (also referred to as group crisis intervention).	○	○	○	○	○	○
I conducted an Individual Crisis Intervention (also referred to as individual psychological first aid).	○	○	○	○	○	○
I referred student/s for Long-Term Psychotherapeutic Treatment.	○	○	○	○	○	○

Additional Comments?

[   ]

25. Please indicate to what extent you agree or disagree with the following statements:

	Always	Often	Sometimes	Seldom	Never	Not Applicable
I have used school crisis handouts/forms following a school crisis.	○	○	○	○	○	○
I have used school crisis handouts/forms during times of non-crisis (throughout the school year).	○	○	○	○	○	○
In general, my school is prepared to handle a significant school crisis.	○	○	○	○	○	○

Additional Comments?

[   ]

School Crisis Intervention Survey

26. Some school psychologists experience "barriers" that make it difficult for them to be actively involved in a school crisis response.

Please indicate to what extent you agree or disagree with the following statements:

	Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Don't Know
My ADMINISTRATION supports school crisis PRE-PLANNING.	○	○	○	○	○	○	○
My ADMINISTRATION supports PROVIDING INTERVENTIONS following a school crisis.	○	○	○	○	○	○	○
My District has cut funding for school crisis response training.	○	○	○	○	○	○	○
My school(s) has school psychologists as members of the crisis response team.	○	○	○	○	○	○	○
There are no open positions on the crisis response team at this time.	○	○	○	○	○	○	○
I work at too many different schools to be a crisis team member.	○	○	○	○	○	○	○
I don't have enough time to be on a school crisis response team.	○	○	○	○	○	○	○
I choose not to be involved in school crisis response because this is not my interest.	○	○	○	○	○	○	○

Additional Comments?

School Crisis Intervention Survey

27. The school I work at is a(n):

☐ Early Childhood Program

☐ Pre-school

☐ Elementary School

☐ Middle School or Junior High

☐ High School

☐ College or University

☐ Other - Please specify:

_____

28. In what type of school do you work?

○ Public

○ Private

○ Other?

_____

29. Which of the following best describes the location of your school?

○ Suburban

○ Urban

○ Rural

○ Mixed

○ Other - Please specify:

_____

30. In how many schools do you work?

○ 1

○ 2

○ 3

○ 4

○ 5

○ If more, please specify:

_____

School Crisis Intervention Survey

31. Are you currently practicing in a school as a full-time certified school psychologist?

- ○ Yes
- ○ No, I am not practicing at all.
- ○ No, I am part-time. (Please specify below the # of hours you are working per week.)

32. What is your highest level of training in school psychology?

- ○ Practicum Student
- ○ Current Intern
- ○ Masters
- ○ Specialist
- ○ Doctorate
- ○ Other - Please specify special situations:

33. Are you a nationally certified school psychologist (NCSP)?

- ○ YES
- ○ NO

34. How many years experience do you have as a certified full-time school psychologist?

- ○ 0 (I am currently a practicum student.)
- ○ 0 (I am currently an intern.)
- ○ 0 (I am a first-year school psychologist.)
- ○ 1-5
- ○ 6-10
- ○ 11-15
- ○ 16-20
- ○ 21-25
- ○ 26-30
- ○ 31-35+
- ○ Other - Please specify:

School Crisis Intervention Survey

35. What is your gender?

○ Male

○ Female

○ Other - Please specify:

36. Please feel free to share any additional

THOUGHTS or COMMENTS:

YOU HAVE COMPLETED THIS SURVEY

THANK YOU FOR YOUR PARTICIPATION!

Please send an e-mail to marysatchwell@gmail.com with your first name in the Subject Line if you would like to voluntarily be entered into the random drawing to win 1 of 5 "School Crisis Prevention and Intervention: The PREPaRE Model" books. Your e-mail address will be stored separately from your survey responses. Your survey responses will remain anonymous. Thank you.

APPENDIX C

INITIAL E-MAIL TO PROSPECTIVE PARTICIPANTS

NATIONAL ASSOCIATION OF SCHOOL PSYCHOL

Helping children achieve their best. *In school. At home. In life.*

›› Visit the NASP Website

Dear NASP Member:

The PREPaRE Workgroup of the National Association of School Psychologists invites you to participate in a survey on school crisis prevention and intervention. This study is being conducted in partnership with Brian Lazzaro of Loyola University of Chicago.

Your survey responses will be used to inform revisions of the PREPaRE program and will add to the knowledge base of school crisis prevention and response. Participation in this anonymous survey is completely voluntary and is anticipated to take approximately 20 minutes. We hope that you will take the time to participate in this important study.

Upon completion of the survey, you will have the option to enter a drawing to win one of five copies of the book, *School Crisis Prevention and Intervention: The PREPaRE Model.* The random drawing will be handled by an independent third party so that your e-mail address will not be connected to your results. If you have questions concerning your rights as a research participant, you may contact the principal investigator, Brian Lazzaro, by e-mail. You may also contact the faculty sponsor, Dr. Pamela Fenning (Loyola University of Chicago - School of Education), by e-mail or (312) 915-6803. The Loyola University Chicago Institutional Review Board (IRB) is also available to answer questions by e-mail or phone at (773) 508-2965.

Please click here to begin the survey.

Cordially,
Melissa Reeves, PhD, NCSP
PREPaRE Workgroup
Brian Lazzaro
Loyola University of Chicago - School of Education

APPENDIX D

REMINDER E-MAIL TO PROSPECTIVE PARTICIPANTS

NATIONAL ASSOCIATION OF SCHOOL PSYCHOLOGISTS

Helping children achieve their best. *In school. At home. In life.*

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Please click here to begin the survey.

Cordially,

Melissa Reeves, PhD, NCSP

PREPaRE Workgroup

Brian Lazzaro

Loyola University of Chicago - School of Education

National Association of School Psychologists, 4340 East West Highway Suite 402, Bethesda, MD 20814
Phone: (301) 657-0270 | Toll Free: (866) 331-NASP | Fax: (301) 657-0275 | TTY: (301) 657-4155

APPENDIX E

ADDITIONAL DEMOGRAPHIC DATA (EXPANDED)

Type of school program: early childhood program, pre-school, elementary school, middle school or junior high, high school, college/university, or other. For type of school, 15.5% (n=11) worked in an early childhood program, 23.9% (n=17) worked in a pre-school, 62.0% (n=44) worked in an elementary school, 43.7% (n=31) worked in a middle school or junior high, 53.5% (n=38) worked in a high school, 1.4% (n=1) worked in a university, and 12.7% (n=9) chose "other" as their response. Type of school worked in for PREPaRE and non-PREPaRE participants are as follows, respectively: early childhood program 17.1% (n=6) and 13.9% (n=5); pre-school 20% (n=7) and 27.8% (n=10); elementary school 62.9% (n=22) and 61.1% (n=22); middle school or junior high 48.6% (n=17) and 38.9% (n=14); high school 34.3% (n=12) and 72.2% (n=26); university 2.9% (n=1) and 0%; and 8.6% (n=3) and 16.7% (n=6) chose "other."

Public or Private school setting: For school setting, 94.4% (n=67) work in a public school setting, and 2.8% (n=2) work in a different or "other" setting (neither public school nor private school). Similar demographic results were found within each of the comparison groups. PREPaRE participants reported that 91.4% (n=32) worked in public schools and 5.7% (2) were either retired and did not work in a school or they worked in a Department of Defense (DoD) school. Of the non-PREPaRE participants, everyone reported working in a public school 97.2% (n=35). None of the survey respondents that answered this question endorsed working in a private school setting.

Location setting of their school: For the location setting, 43.7% (n=31) specified suburban, 22.5% (n=16) specified urban, 16.9% (n=12) specified rural, and 14.1% (n=10) specified mixed. For PREPaRE and non-PREPaRE participants respectively: 57.1%

(n=20) and 30.6% (n=11) specified suburban, 22.9% (n=8) and 22.2% (n=8) specified

urban, 5.7% (n=2) and 27.8% (n=10) specified rural, 11.4% (n=4) and 16.7% (n=6)

specified mixed.

Number of Schools Worked at: For the number of schools, 4.2% (n=3) don't

work at a school, 26.8% (n=19) worked at 1 school, 31% (n=22) worked at 2 schools,

14.1% (n=10) worked at 3 schools, 7.0% (n=5) worked at 4 schools, 4.2% (n=3) worked

at 5 schools, 1.4% (n=1) worked at 6 schools, 2.8% (n=2) worked at 7 schools, 1.4%

(n=1) worked at 8 schools, 1.4% (n=1) worked at 9 schools, and 2.8% (n=2) worked at 10

or more schools. For PREPaRE and non-PREPaRE participants, respectively: 5.7%

(n=2) and 2.8% (n=1) did not work at a school, 25.7% (n=9) and 27.8% (n=10) worked at

1 school, 40% (n=14) and 22.2% (n=8) worked at 2 schools, 8.6% (n=3) and 19.4% (n=7)

worked at 3 schools, 8.6% (n=3) and 5.6% (n=2) worked at 4 schools, and 8.6% (n=3)

and 19.5% (n=7) worked at 5 or more schools.

Full-time or part-time basis: For current work status, 78.9% (n=56) reported

being full-time status, 11.3% (n=8) reported being part-time status, and 7.0% (n=5)

reported that they were not currently practicing in a school. For PREPaRE and non-

PREPaRE participants, respectively: 82.9% (n=29) and 75% (n=27) reported being full-

time status, 8.6% (n=3) and 13.9% (n=5) reported being part-time status, and 5.7% (n=2)

and 8.3% (n=3) reported that they were not currently practicing in a school.

Level of Education: For education level, 2.8% (n=2) were practicum students,

1.4% (n=1) were in an internship, 12.7% (n=9) reported holding a Masters degrees,

62.0% (n=44) reported holding Specialist degrees, and 16.9% (n=12) reported holding

Doctoral degrees. For PREPaRE and non-PREPaRE participants, respectively: 2.9% (n=1) and 2.8% (n=1) were practicum students, 0% (n=0) and 2.8% (n=1) were in an internship, 11.4% (n=4) and 13.9% (n=5) reported holding a Masters degrees, 60% (n=21) and 63.9% (n=23) reported holding Specialist degrees, and 22.9% (n=8) and 11.1% (n=4) reported holding Doctoral degrees.

Nationally Certified School Psychologist (NCSP) status: NCSP is a credential awarded through the National Association of School Psychologists. Of those asked, 62% (n=44) hold the NCSP credential. PREPaRE participants reported that 68.6% hold the NCSP while 55.6% of non-PREPaRE participants reported holding the NCSP credential.

Years of Experience: 14.1% (n=10) had 0 years, 16.9% (n=12) had 1-5 years, 19.7% (n=14) had 6-10 years, 11.3% (n=8) had 11-15 years, 14.1% (n=10) had 16-20 years, 5.6% (n=4) had 21-25 years, 9.9% (n=7) had 26-30 years, and 5.6% (n=4) had 31 or more years of experience. For PREPaRE and non-PREPaRE participants, respectively: 5.7% (n=2) and 22.2% had 0 years of experience, 25.7% (n=9) and 8.3% (n=) had 1-5 years, 17.1% (n=6) and 22.2% (n=) had 6-10 years, 11.4% (n=4) and 11.1% (n=) had 11-15 years, 17.1% (n=6) and 11.1% (n=) had 16-20 years, 5.7% (n=2) and 5.6% (n=) had 21-25 years, 5.7% (n=2) and 11.1% (n=) had 26-30 years, and 8.6% (n=3) and 5.6% (n=) had 31 or more years of experience.

Male or Female: Of the 71 participants, 67.6% (n=48) were female and 29.6% (n=21) were male. For the two comparison groups, 71.4% (n=25) of the PREPaRE group are female, 25.7% are male (n=9), and the non-PREPaRE group, 63.9% (n=23) are female and 33.3 (n=12) are male.

APPENDIX F

PREP<u>a</u>RE BROCHURE

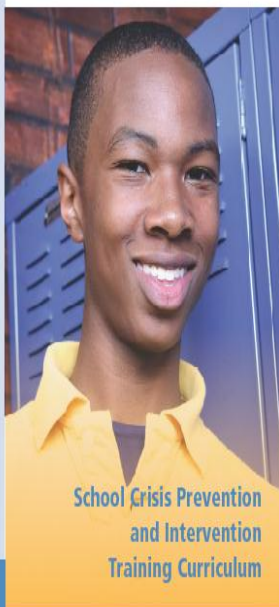## The PREPaRE School Crisis Prevention & Intervention Curriculum

The NASP PREPaRE Curriculum provides school-based mental health professionals and other school personnel comprehensive training on how to establish and serve on school safety and crisis teams. Revised in 2011, the second edition of the curriculum integrates the roles of existing school staff and community providers in terms of the four stages of crisis management (prevention, preparedness, response, and recovery), and grounds them in ongoing school safety efforts. The curriculum incorporates basic principles articulated by the U.S. Departments of Education (2007) and Homeland Security (2008), as well as the incident command structure delineated by the National Incident Management System (NIMS).

The PREPaRE model emphasizes the following hierarchical and sequential set of activities:

P—Prevent and prepare for psychological trauma

R—Reaffirm physical health and perceptions of security and safety

E—Evaluate psychological trauma risk

P—Provide interventions

a—and

R—Respond to psychological needs

E—Examine the effectiveness of crisis prevention and intervention

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PREPaRE
Prevent Reaffirm Evaluate Provide and Respond Examine

School Crisis Prevention and Intervention Training Curriculum

Helping schools improve their school safety and crisis management capacity using existing resources.

School Crisis Response

The PREPaRE curriculum has been developed by the National Association of School Psychologists (NASP) as part of NASP's long-term leadership in supporting and developing school crisis prevention and response capabilities at the local level. Schools play a critical role in meeting the needs of students, staff, families, and often the local community during times of crisis. They must have crisis plans and trained teams in place to serve this function effectively within the unique context of the school culture. Ideally, crisis response efforts should be embedded within comprehensive school climate and safety initiatives.

PREPaRE is the only comprehensive curriculum developed by school-based professionals with firsthand experience and formal training. The curriculum builds on existing personnel, resources, and programs; provides for sustainability; and can be adapted to individual school needs and size.

The PREPaRE model has been implemented by local school districts across the country and has begun to be used internationally, and has proven highly effective for schools committed to improving and strengthening their school safety and crisis management capacities.

For more information or to have your school district or organization arrange for PREPaRE training, contact the NASP PREPaRE Coordinator at prepare@naspweb.org, by phone at (866) 331-NASP or visit www.nasponline.org/prepare.

"The training has allowed our district and its 29 schools the opportunity to speak the same language when it comes to crisis prevention and preparedness."

Dennis Rastatter, Director of Student Outreach, Thompson School District, Loveland, Colorado

The PREPaRE training curriculum includes two core workshops—(1) Prevention and Preparedness and (2) Crisis Intervention and Recovery—as well as two training of trainer (ToT) workshops. Workshops 1 and 2 can be taken separately and are prerequisites to ToT participation.

"There is no longer any excuse for 'winging it' in a school crisis response. The PREPaRE curriculum provides an evidence-based approach to meeting the mental-health needs of students in a time of crisis."

Richard J. Erdlen Jr., PhD, Supervisor of School Psychology Services, Lincoln Intermediate Unit No. 12, New Oxford, Pennsylvania

WORKSHOP 1
Crisis Prevention and Preparedness: Comprehensive School Safety Planning

This 1-day workshop provides school-based mental health professionals, administrators, security professionals, and other educators the knowledge and resources to help them establish and sustain comprehensive school safety and crisis prevention and preparedness efforts. With updated research and strategies, this workshop makes a clear connection between ongoing school safety and crisis preparedness. It emphasizes the unique needs and functions of school teams and the steps involved in developing these teams, including a model that integrates school personnel and community provider roles. The workshop also explores how to prepare for school crises by developing, exercising, and evaluating safety and crisis plans.

WORKSHOP 2
Crisis Intervention and Recovery: The Roles of School-Based Mental Health Professionals

This 2-day workshop provides school-based mental health professionals and other school crisis intervention team members with the knowledge necessary to meet the mental health needs of students and staff following a school-associated crisis event. With updated research and crisis intervention strategies, this workshop teaches participants how to prevent and prepare for psychological trauma, helps to reaffirm both the physical health of members of the school community and students' perceptions that they are safe and secure, evaluates the degree of psychological trauma, responds to the psychological needs of members of the school community, and examines the effectiveness of school crisis intervention and recovery efforts. This workshop is an excellent course for all mental health professionals in your district who provide mental health crisis intervention services.

TRAINING OF TRAINERS WORKSHOPS 1 & 2

PREPaRE Training of Trainers Workshops are designed to provide workshop participants with the information and practice needed to become NASP PREPaRE workshop trainers. The Training of Trainers model has built local capacity both internationally and nationally by training local school professionals who can then independently offer the PREPaRE workshops. *Participants are required to have completed the corresponding core workshop before completing either ToT workshop.* All participants will receive workshop presentation materials and a certificate of completion. ToT workshops being offered include:

WORKSHOP 1 Training of Trainers (TOT):
Crisis Prevention and Preparedness: Comprehensive School Safety Planning
5-hour session

WORKSHOP 2 Training of Trainers (TOT):
Crisis Intervention and Recovery: The Roles of School-Based Mental Health Professionals
11-hour session

(A list of individuals who have completed ToT workshops is available through NASP.)

PREPaRE Developers/Core Trainers

PREPaRE curriculum developers/core trainers are leading national experts in school crisis prevention and response. In addition to formal training, core PREPaRE trainers have direct experience designing and implementing crisis plans and responding to crises ranging from school shootings and suicide to terrorism and natural disasters. PREPaRE developers include: *Stephen E. Brock, California State University Sacramento, CA; Christina N. Conolly-Wilson, Waukegan Public Schools, IL; Ted Feinberg, Eagle, ID; Shane R. Jimerson, University of California, Santa Barbara; Brian R. Lazzaro, Township High School District 211, IL and Loyola University Chicago; Richard A. Lieberman, Los Angeles Unified School District, CA; Amanda B. Nickerson, University at Buffalo, SUNY, NY; Rosario C. Pesce, Loyola University Chicago, IL; Melissa A. Reeves, Winthrop University, SC; and Melinda K. Susan, Sonoma County Office of Education, CA.*

"We feel confident that the strategies in the PREPaRE model represent state-of-the-art best practices. This material has become a key component of our district's approach to emergency response and crisis management."

Martha J. Rosen, PhD, Manager of Psychological Services, Minneapolis Public Schools

PREPaRE Materials

Workshop participants receive a set of curriculum materials provided in booklet and CD format. Participants may use these resources for informal inservice staff training but may not represent them as formal "PREPaRE" training unless they have successfully completed the Training of Trainers workshop(s).

Extensive program evaluation reveals that workshop participants improve both their knowledge about and confidence in providing crisis prevention and intervention services. (See evaluation summaries at *http://www.nasponline.org/prepare/evaluations*)
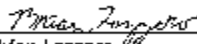
APPENDIX G

NASP RESEARCH PARTNERSHIP AGREEMENT
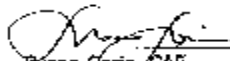
Research Partnership Agreement
Between
Mr. Brian Lazzaro and the National Association of School Psychologists (NASP)

This Research Partnership Agreement defines the rights and responsibilities of the two parties in the conduct of the research project, *A Survey Study of PREPaRE Workshop Participant's Application of Knowledge, Confidence Levels, and Utilization of School Crisis Response and Recovery Training Curriculum*. This Agreement is supplemental to the Agreement to Abide by the Policies and Procedures of the National Association of School Psychologists and the proposal submitted to NASP under the above title. The two parties agree to these conditions:

1. NASP will randomly select the study research samples from the NASP Membership Database.

2. NASP will send invitations to participate in the study via e-mail to the samples.

3. NASP will send follow-up e-mails to the samples approximately three weeks after the initial invitations.

4. NASP will provide five copies of *School Crisis Prevention and Intervention: The PREPaRE Model* to be used as incentives for participation in the study.

5. NASP will report to the investigators details about the e-mail invitations (e.g., number of e-mails sent, number of recipients that opened the e-mail).

6. Mr. Lazzaro will collect and analyze the data and share the results with NASP in a written report.

7. NASP and Mr. Lazzaro will share ownership of the data collected. Mr. Lazzaro agrees to provide NASP with access to the data in the event that NASP wishes to conduct additional analyses beyond those described in this study.

8. Authorship of publications that result from the study, with the exception of Mr. Lazzaro's dissertation, will be determined by agreement between Mr. Lazzaro and the chairs of the NASP PREPaRE Workgroup. At a minimum, all publications will include acknowledgement of NASP's contributions.

Brian Lazzaro
Doctoral Degree Candidate
Loyola University Chicago
Date: 12/31/12

Susan Gorin, CAE
Executive Director
National Association of School Psychologists
Date:

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VITA

Brian R. Lazzaro was born, raised, and currently lives with his family in Park Ridge, Illinois. Before attending Loyola University Chicago, he attended the University of Illinois, Champaign-Urbana, where he earned a Bachelor's of Science degree in Psychology in 1998. From 1998 To 2001, he completed a Master of Education degree in School Psychology at Loyola University Chicago.

Brian contributes to the field of education as a National Association of School Psychologists Leader and member of the NASP PREPaRE Workgroup. Brian is also a co-author of the PREPaRE curriculum which is a national and international curriculum for educators wishing to strengthen their school crisis prevention, preparedness, emergency response, and recovery capacities.

Currently, Brian works as a school psychologist for Township High School District 211 located in Palatine, Illinois.